entsog
european network
of transmission system operators
for gas

Ten-Year Network Development Plan
2013-2022

Infrastructure Projects

Annex A

A fair partner to all

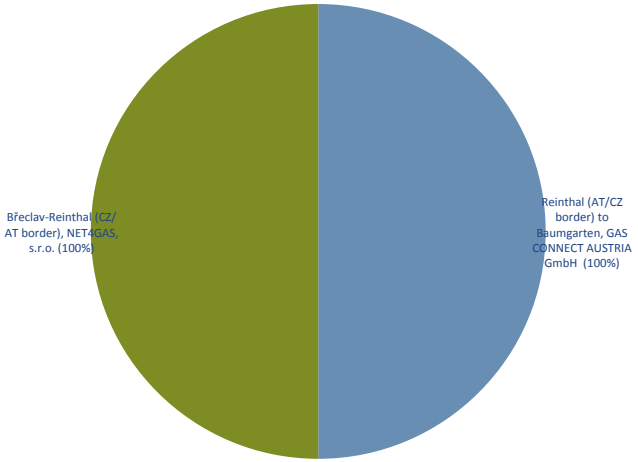
Austria

Kassel
Allmenhausen
Kirchheiligen
Bad Lauchstädt
Leipzig
Lasów
Jeleniów
Behringen
Reckrod
Olbernhau
Deutschneudorf
Hora Svaté Kateřiny
Wroclaw
GAZELLE
PRAGUE
Kourim
Eschenfelden
Waidhaus
MEGAL
Háje
VOB
VHP NCG-H
CZECH REP
Lobodice
Uhřice
Kralice
Stuttgart
Veselí nad Lužnicí
Hostim
Dolní Dunajovice
Břeclav
Oberkappel
Reinthal
Tallesbrunn
Bierwang
Burghausen
München
Linz
Wolfersberg
Überackern
Schönkirchen / Reyersdorf
VIENNA
Inzenham-West
Thann
Schmidthausen
Puchkirchen
Lindau
Pfronten
Kiefersfelden
Breitbrunn
Aigelsbrunn
CEGH
Kittsee
Haidach*
7 Fields
Innsbrück
AUSTRIA
Graz
Weltendorf
Arnoldstein
Klagenfurt
Murfeld
Tarvisio
Cersak
South Stream
Trento
Collalto
Rogatec
Sempeter
Sergnano
Gorizia
LJUBLJANA
Venezia
Zaule LNG
SLOVENIA
ZAGREB
Lučko
Okoli
Karlovac
Porto Levante
Umag
Cotignola & San Potito
Rijeka
Omisalj
LNG RV
CROATIA
Porto Viro
Krk
Vodnjan
from Qatar
Pula
Ravenna
Minerbio
Bologna
Sabbioncello
Banja Luka
Gospič
ITALY

TRA-N-133	Bidirectional Austrian Czech Interconnection (BACI, formerly LBL project)	Non-FID

Pipeline including CS

SPONSORS

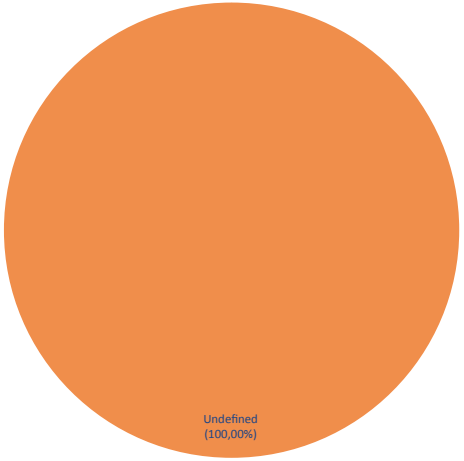


GENERAL INFORMATION

Promoter	NET4GAS, s.r.o.
Operator	NET4GAS, s.r.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	

TEN-E Requests	Date of Request	Year Funding Granted
	27/02/12	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2019
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+58,00
Total Compressor Power (MW)	+24,00
Maximum Capacity (GWh/d)	+254,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Reinthal - Bidirectional Austrian-Czech Interconnector	Yes	exit	254,00	Hub Czech Republic	Hub Austria
	Yes	entry	254,00	Hub Austria	Hub Czech Republic

DESCRIPTION OF THE PROJECT

The BACI will be a new infrastructure directly connecting the Austrian and Czech market. It will be connected to the existing Czech transmission system via CS Břeclav (NET4GAS, s.r.o.) and to the Austrian transmission system via Baumgarten (GAS CONNECT AUSTRIA GmbH). The BACI will enable capacity transmission for the first time between these two member states and it will facilitate better market integration and security of gas supply also for adjacent countries like Hungary, Poland, Germany, Italy, France, Slovenia, Croatia and Slovakia due to the creation of additional transportation opportunities. The project will also increase the overall flexibility of the Czech, Austrian and also Polish system by diversification of gas supply routes and by connecting UGS in the Czech Republic and Austria.

EXPECTED BENEFITS

Security of Supply, Market integration (CEE Region), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (CZ, AT), N-1 Regional (CEE Region), Back-up for renewables, Power-to-gas, Biogas

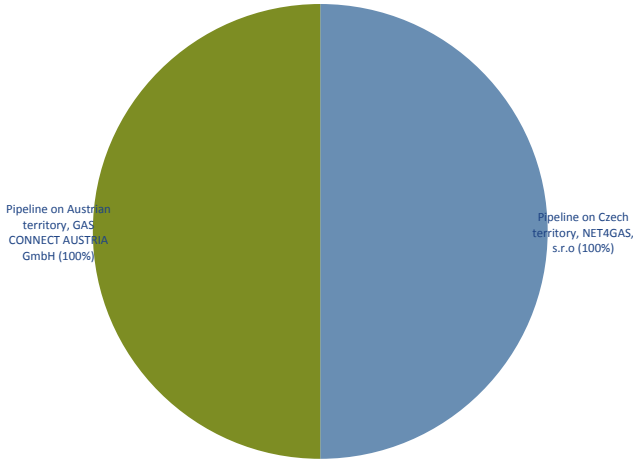
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-021	Bidirectional Austrian-Czech Interconnector (BACI, formerly LBL project)	Non-FID

Pipeline including CS

SPONSORS

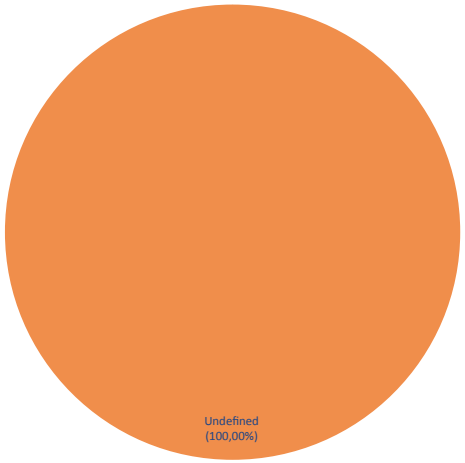


GENERAL INFORMATION

Promoter	Gas Connect Austria GmbH
Operator	Gas Connect Austria GmbH
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	

TEN-E Requests	Date of Request	Year Funding Granted
	27/02/12	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2019
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+58,00
Total Compressor Power (MW)	+24,00
Maximum Capacity (GWh/d)	+255,13
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Reinthal - Bidirectional Austrian-Czech Interconnector	Yes	exit	255,13	Hub Austria	Hub Czech Republic
	Yes	entry	255,13	Hub Czech Republic	Hub Austria

DESCRIPTION OF THE PROJECT

The first pipeline connecting the Austrian and the Czech Markets

EXPECTED BENEFITS

Security of Supply, Market integration (Austrian Market, Czech Market), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Austria, Czech Republic), N-1 Regional (CEE Region), Extension of transport capacity of Russian gas to the West,
Integration of Nord Stream off- and on-Shore in the European gas infrastructure

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

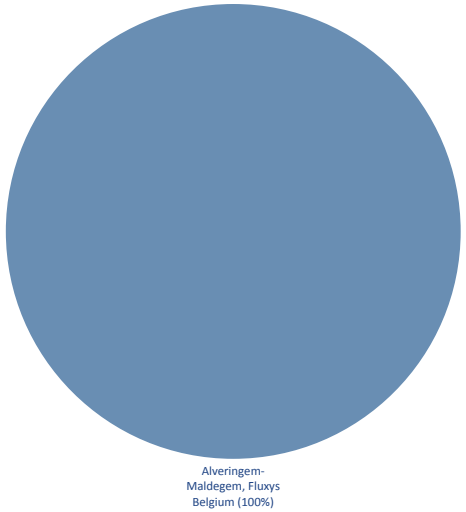
Belgium

Julianadorp
Norg
Bergermeer
Alkmaar
Vlieghuis
Amsterdam
Maasvlakte
Maasvlakte
Gate Term
Rotterdam
TTF
Zevenaar
Winterswijk
THE NETHERLANDS
Zeebrugge
Hilvarenbeek
Xanten
Poppel
Essen
Zelzate
Zandvliet
Alveringem
Loenhout
Obbicht
Dilsen
Lille
BRUSSELS
's-Gravenvoeren
Stolberg
Eynatten
Raeren/Lichtenbusch
BRETELLA
Quévy
Taisnières
Blaregnies
BELGIUM
Bras
TENP
Gournay-sur-Aronde
Petange
LUX
PEG NORD
Remich
Germigny-sous-Coulombs
MEGAL
Obergailbach
25
Trois Fontaines
Cerville
Dierrey-Saint-Julien

TRA-F-205	Alveringem-Maldegem	FID

Pipeline including CS

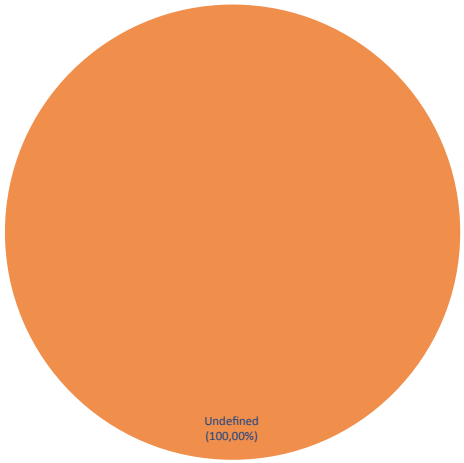
SPONSORS



GENERAL INFORMATION

Promoter	Fluxys Belgium
Operator	Fluxys Belgium
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.fluxys.com/nl-BE/services/transmission_1/openseasons/~/media/files/services/transmission/openseasonfrancebelgium/bindingphase/informationmemorandum%20pdf.ashx

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014 Q3
FID	2012 Q2
Construction	2015 Q1
Commissioning	2015 Q4
Last completed Phase :	

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+74,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+270,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
New IP FR-BE (FR) / Alveringem-Maldegem (BE)	Yes	entry	270,00	Hub France(PEG North)	Hub Belgium

DESCRIPTION OF THE PROJECT

A new interconnection point between GRTgaz and Fluxys near Veurne (Alveringem) to allow firm physical capacity with non-odorized gas from France to Belgium. Thanks to this new connection, the terminal of Dunkirk will be linked with the IPs of the zone of Zeebrugge (IZT/HUB, ZPT and LNG terminal) and the North-West European market through the virtual hub ZTP.

EXPECTED BENEFITS

Security of Supply, Market integration (This project gives a connection from the LNG terminal of Dunkirk and the PEG-Nord to Belgium and the international markets of North-West Europe.)
Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Belgium), N-1 Regional (NW Europe), Back-up for renewables

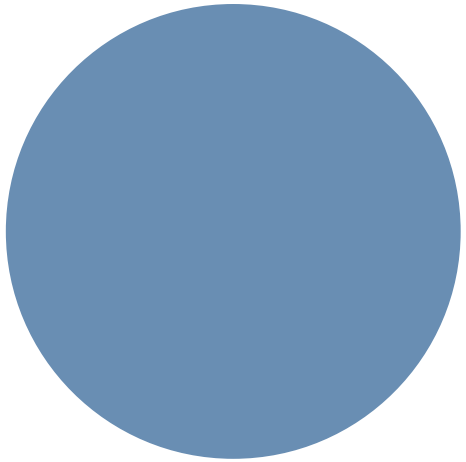
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-270	Zeebrugge Compression Project	Non-FID

Pipeline including CS

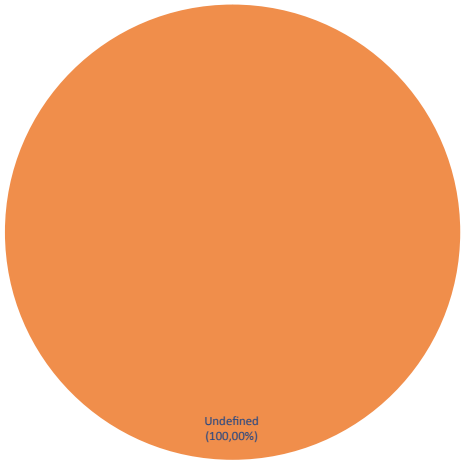
SPONSORS



GENERAL INFORMATION

Promoter	Fluxys Belgium
Operator	Fluxys Belgium
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2014 Q1
Construction	2014 Q3
Commissioning	2016 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+30,00
Maximum Capacity (GWh/d)	+540,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Zeebrugge ZPT	Yes	entry	55,00	Supplier Norway	Hub Belgium

DESCRIPTION OF THE PROJECT

A compressor station downstream of the ZPT terminal to compress the gas from the Zeepipe. This will allow to reduce the outlet pressure of the ZPT terminal, thus increasing the Zeepipe capacity.

EXPECTED BENEFITS

Security of Supply

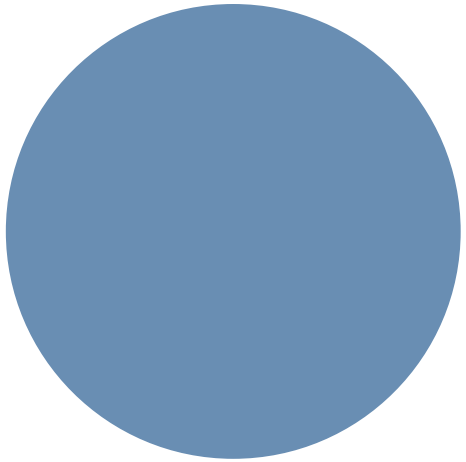
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-206	Luxembourg Pipeline	Non-FID

Pipeline including CS

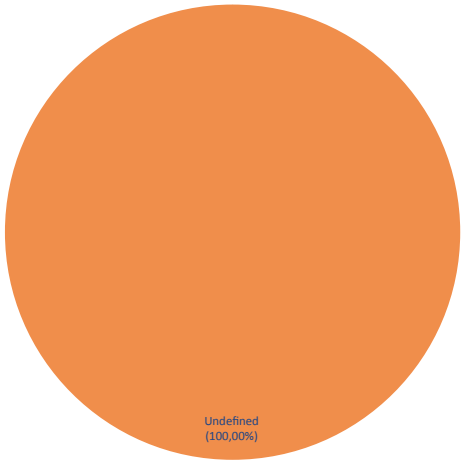
SPONSORS



GENERAL INFORMATION

Promoter	Fluxys Belgium / Creos
Operator	Fluxys Belgium
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2016
Last completed Phase :	

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+50,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+10,85
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Pipeline upgrade to increase capacity from Belgium to Luxembourg by reinforcing the current DN300 section from Bras to Petange by DN500. It results in a capacity increase of 10.85 GWh/d on Creos side due to higher delivery pressure from Fluxys network.

EXPECTED BENEFITS

Security of Supply, Market integration (BE/LUX), Diversification of sources, Diversification of routes, N-1 National (Luxembourg), Back-up for renewables

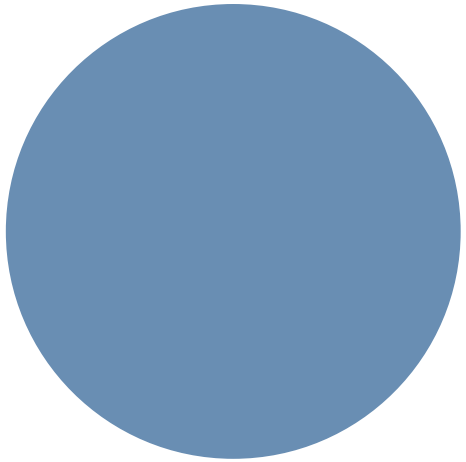
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-056	Zeebrugge Compression Project	Non-FID

Pipeline including CS

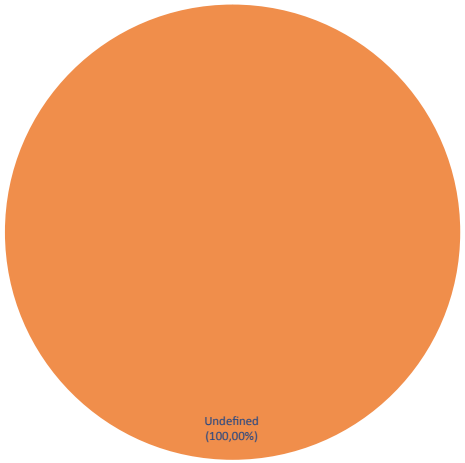
SPONSORS



GENERAL INFORMATION

Promoter	Gassco AS
Operator	Gassco AS
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	
Considered Tariff Regime	
Applied for Exemption ?	
Exemption granted ?	
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2014 Q1
Construction	
Commissioning	2016 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Zeebrugge ZPT	Yes	exit	52,80	Supplier Norway	Hub Belgium

DESCRIPTION OF THE PROJECT

Main scope in installation of a new compressor at the Zeebrugge Terminal to increase exit capacity from Gassled .

EXPECTED BENEFITS

Security of Supply, Extension of transport capacity of Russian gas to the West, Integration of Nord Stream off- and on-Shore in the European gas infrastructure

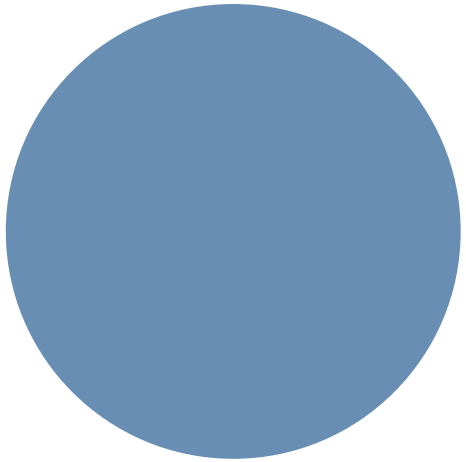
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-229	LNG Terminal Zeebrugge - Capacity Extension & 2nd Jetty	Non-FID

LNG Terminal

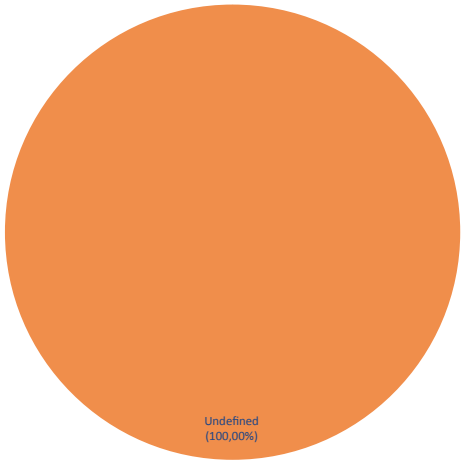
SPONSORS



GENERAL INFORMATION

Promoter	Fluxys LNG
Operator	Fluxys LNG
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2017
Last completed Phase :	

TECHNICAL INFORMATION

Regasification facility	LNG Terminal Zeebrugge
Expected volume (bcm/y)	+3,00
Storage capacity (m3)	+180.000,00
Send-out (mcm/d)	+10,80
Ship size (m3)	
Reloading ability ?	Yes

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Zeebrugge LNG	Yes	exit	118,80	LNG Terminals Belgium	Hub Belgium

DESCRIPTION OF THE PROJECT

Construction of a second jetty for berthing of LNG ships with a capacity from approximately 3500 m³ LNG up to 217000 m³ LNG.

Construction of an additional storage tank with a capacity of 180000 m³ LNG.

Construction of additional send-out capacity of 450000 m³(n)/h

EXPECTED BENEFITS

Security of Supply, Market integration (The increase of capacity will contribute to the integration of market areas in North-West Europe. The overall flexibility of the system is enhanced by the additional LNG storage and the send-out capacity.), Diversification of sources, Diversification of routes, N-1 National (Belgium), N-1 Regional (NW Europe), Back-up for renewables, Higher Flexibility for the market due to enhanced reloading capacity

COMMENTS ABOUT THE PROJECT FINANCING

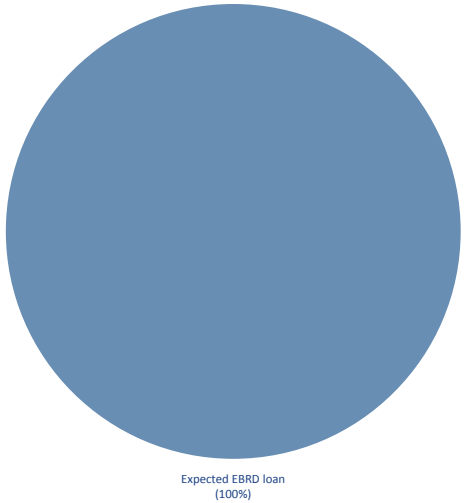
Public financing	Private financing	Multilateral financing

Bosnia Herzegovina

TRA-N-224	Gaspipeline Zenica - Brod	Non-FID

Pipeline including CS

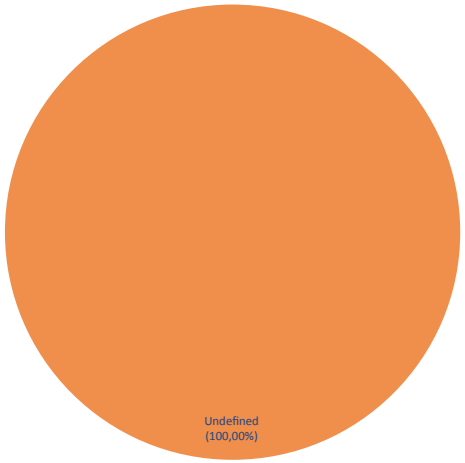
SPONSORS



GENERAL INFORMATION

Promoter	BH Gas d.o.o.
Operator	BH Gas d.o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+130,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+0,02
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

The starting point of the Bosanski Brod – Zenica gas pipeline is in close vicinity of Bosanski Brod where it should be connected to the high-pressure gas pipeline leading from Zagreb via Kutina to Slavonski Brod (TSO – Plinacro) in the Republic of Croatia. Point of interconnection between Croatian and BiH natural gas transmission network is Bosanski Brod/Slavonski Brod.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 Regional, Power-to-gas

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

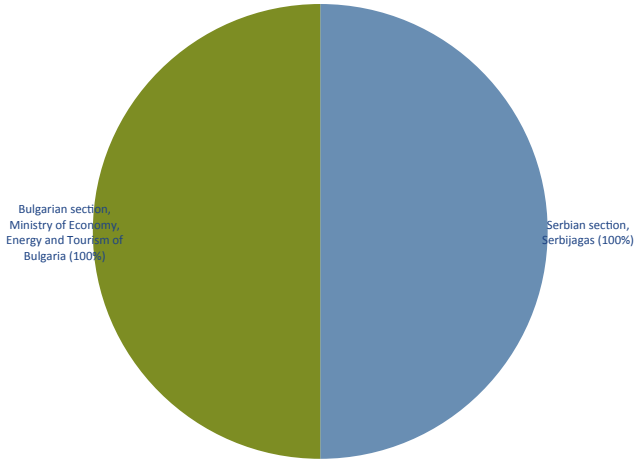
Bulgaria

ROMANIA
Brasov
Isaccea
Bilciuresti
Urziceni
Horezu
Balaceanca
Constanta
Mehedinti
BUCHAREST
Nabucco-West
Ghercesti
Silistra
Negru Voda
Giurgiu
IBR
Ruse
Dobrich
South Stream
Kozloduy
Oryahovo
Varna
Black Sea CNG
Pleven
Chiren
Nabucco-West
SOFIA
BULGARIA
Burgas
Dupnitsa
ITB
Malkoclar
Stara Zagora
South Stream
Zidilovo
Marmara Ereglisi
IGB
Petrich
Kula
Tekirdag
Sidirokastron
Xanthi
Drama
Kipi
Marmara Ereglisi
Komotini
Kilkis
Alexandropoulis
Kavala
Alexandropoulis LNG
Aegean LNG
Thessaloniki
Canakkale
Çan
Katerini
Ezine
Balikesir
Larissa
Aegean Sea
Volos
Aliaga
Manisa

TRA-N-137	Interconnection Bulgaria - Serbia	Non-FID

Pipeline including CS

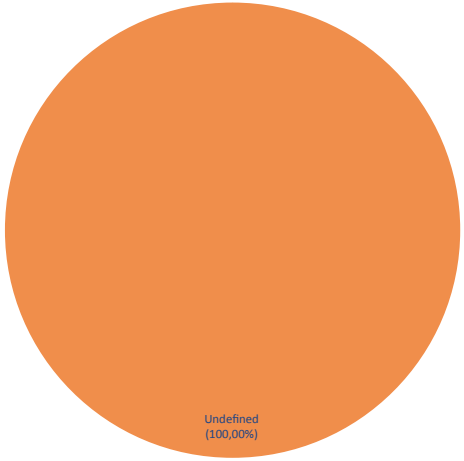
SPONSORS



GENERAL INFORMATION

Promoter	Bulgarian Ministry of Economy, energy and tourism (MEET)
Operator	Bulgartransgaz EAD
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	2
Web Link	www.bulgartransgaz.bg

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	2015
Commissioning	2015
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+155,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+51,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Interconnector BG RS	Yes	entry	51,00	Hub Serbia	Hub Bulgaria
	Yes	exit	51,00	Hub Bulgaria	Hub Serbia

DESCRIPTION OF THE PROJECT

This is the first interconnection between the gas transmission systems of Serbia and Bulgaria. The project establishes a connection between the Bulgarian and Serbian gas markets that currently are not connected.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional, The projects listed above should enhance the system flexibility and contribute to the security of supply within the region (increased interconnection between Bulgaria and Serbia)

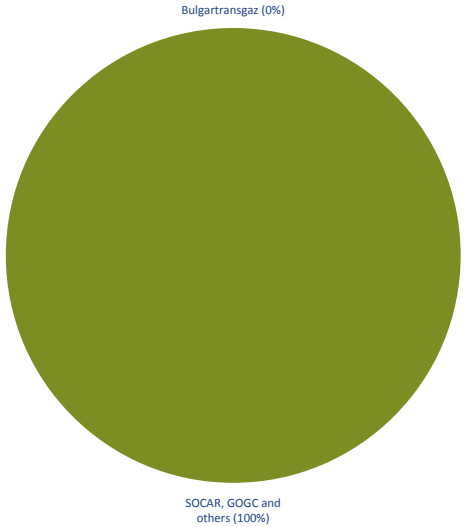
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-145	Black Sea CNG	Non-FID

Pipeline including CS

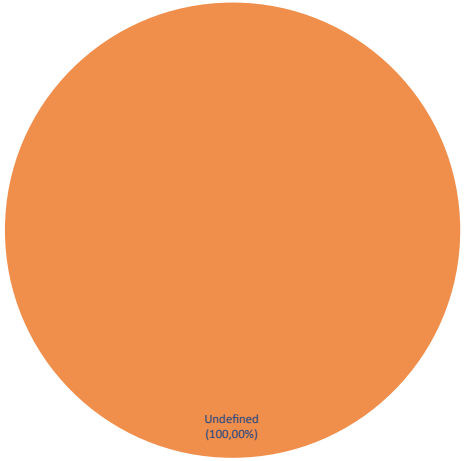
SPONSORS



GENERAL INFORMATION

Promoter	Bulgartransgaz EAD
Operator	Bulgartransgaz EAD
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	2
Web Link	www.bulgartransgaz.bg/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2015
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Project for delivery of compressed natural gas (CNG) through Black Sea. The realization of the project depends on the progress of the Southern Gas Corridor projects.

EXPECTED BENEFITS

Security of Supply, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional
The CNG project is a direct connection of the EU with the gas sources of the Caucasus and Caspian regions through the Black Sea eliminating certain transit risks. The project will establish competition between suppliers in the country and the SEE Region (gas-to-gas competition) and will promote the real liberalisation of the national and regional gas market and market integration. CNG will help for the fulfilment of the requirements of Regulation 994/2010 for security of gas supply for Bulgaria and the SEE region.

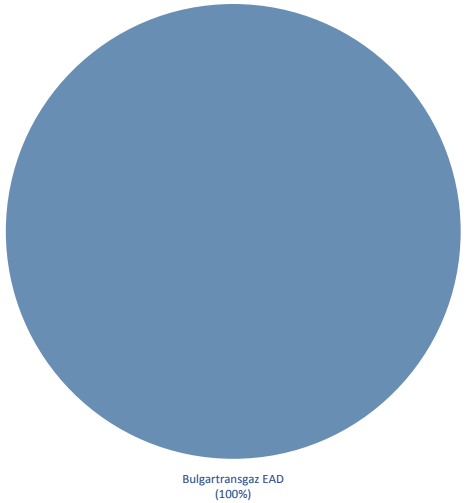
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-141	Construction of new gas storage facility on the territory of Bulgaria	Non-FID

Storage Facility

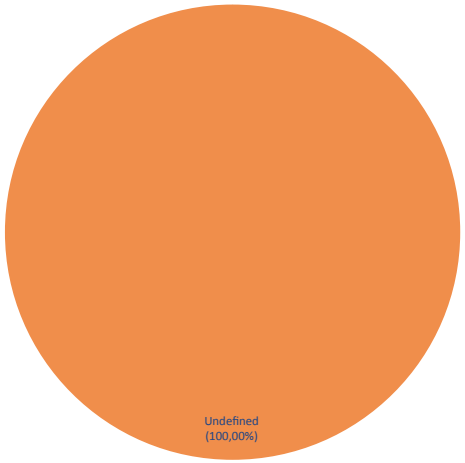
SPONSORS



GENERAL INFORMATION

Promoter	Bulgartransgaz EAD
Operator	Bulgartransgaz EAD
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.bulgartransgaz.bg/index.php

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	2020
Commissioning	2020
Last completed Phase :	Planned

TECHNICAL INFORMATION

Storage facility	new gas storage facility on the territory of Bulgaria
Working volume (mcm)	
Injectability (mcm/d)	
Deliverability (mcm/d)	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Under considerations are several option for construction of new gas storage facility on the territory of Bulgaria – depleted gas field (onshore or offshore), salt cavern or aquifer.

The new gas storage facility will be interconnected with the existing gas transmission system on the territory of Bulgaria.

Construction of new gas storage facility on the territory of Bulgaria is very important in order to enhance the level of the security of gas supply and to fulfil the requirements of Regulation 994/2010.

EXPECTED BENEFITS

Security of Supply, N-1 National, N-1 Regional

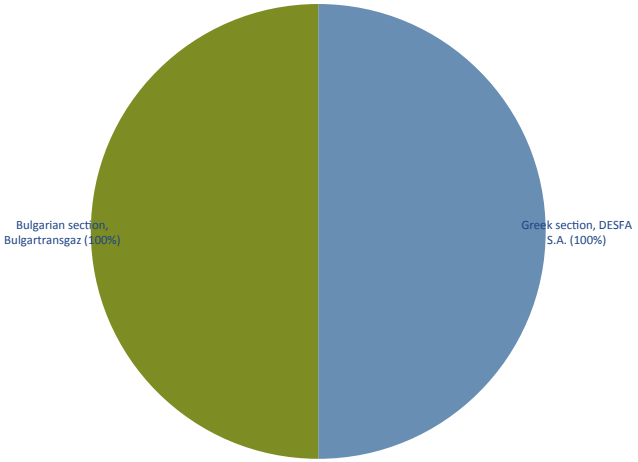
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-143	Enabling permanent bi-directional capacity in the existing interconnection point between Bulgaria and Greece	FID

Pipeline including CS

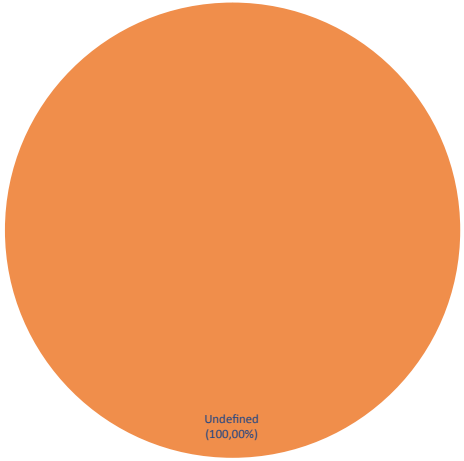
SPONSORS



GENERAL INFORMATION

Promoter	Bulgartransgaz EAD
Operator	Bulgartransgaz EAD
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.bulgartransgaz.bg/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2013
Last completed Phase :	Market test

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Kula (BG) / Sidirokastron (GR)	Yes	entry	38,50	Hub Greece	Hub Bulgaria

DESCRIPTION OF THE PROJECT

In line with the provisions of Regulation (EC) 994/2010 to enable permanent bi-directional capacity in the existing interconnection points between Member States, Bulgartransgaz EAD envisages enabling permanent bi-directional capacity in the interconnection point with Greece: Kula/Sirirokastro amounting to 3.5 mcm/day. The capacity figures indicated in this project are provisional and may be subject to changes once a final agreement with the Greek TSO is signed.

EXPECTED BENEFITS

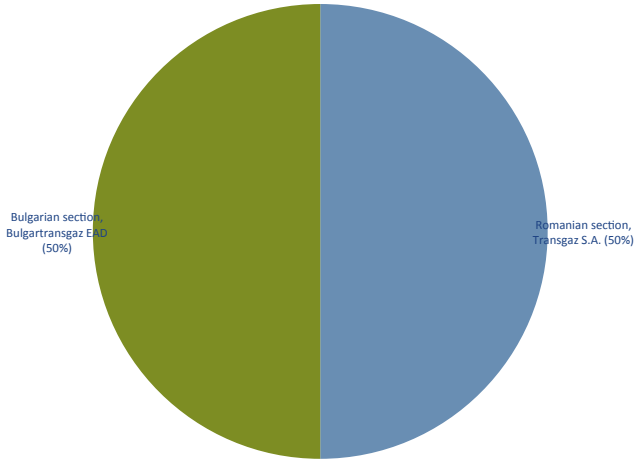
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-144	Enabling permanent bi-directional capacity in the interconnection points between Bulgaria and Romania – Negru Voda 1, 2 and 3	FID

Pipeline including CS

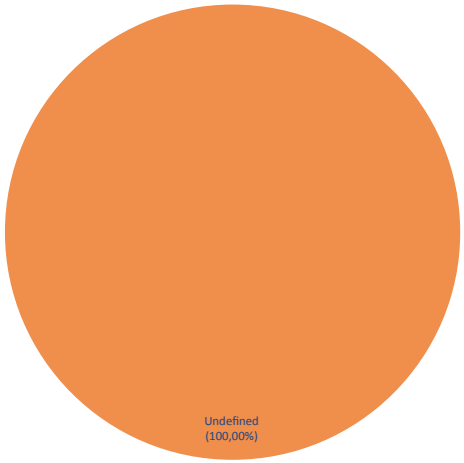
SPONSORS



GENERAL INFORMATION

Promoter	Bulgartransgaz EAD
Operator	Bulgartransgaz EAD
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.bulgartransgaz.bg/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2013
Last completed Phase :	Market test

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Negru Voda I	Yes	exit	132,00	Hub Bulgaria	Interconnector Trans-Balkan Pipeline

DESCRIPTION OF THE PROJECT

In line with the provisions of Regulation (EC) 994/2010 to enable permanent bi-directional capacity in the existing interconnection points between Member States, Bulgartransgaz EAD envisages to enable capacity in the direction from Bulgaria to Romania in the interconnection points – Negru Voda 1, 2 and 3.The capacity figures indicated in this project are provisional and may be subject to changes once a final agreement with the Romanian TSO is reached.

EXPECTED BENEFITS

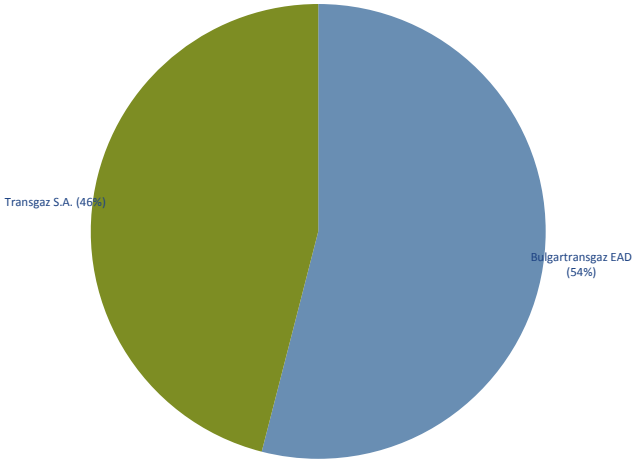
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-057	Interconnection Bulgaria–Romania	FID

Pipeline including CS

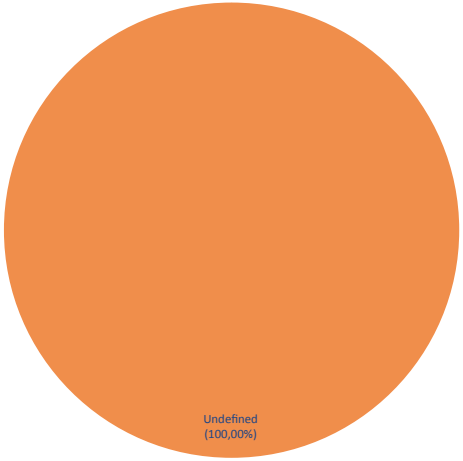
SPONSORS



GENERAL INFORMATION

Promoter	Bulgartransgaz EAD
Operator	Bulgartransgaz EAD
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.bulgartransgaz.bg

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2011 Q4
FID	2010 Q4
Construction	2013 Q2
Commissioning	2013 Q2
Last completed Phase :	Supply contract

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	3
Total Pipeline Length (km)	+25,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+42,40
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Interconnector Bulgaria-Romania (IBR)	Yes	entry	42,40	Hub Romania	Hub Bulgaria
	Yes	exit	42,40	Hub Bulgaria	Hub Romania

DESCRIPTION OF THE PROJECT

The reverse interconnection Bulgaria–Romania aims at connecting the national gas transmission networks of Bulgaria and Romania. The implementation of the project is in line with the EU policy aimed at providing interconnections between Member States like Bulgaria having a limited number of sources and routes for gas imports.

The gas pipeline is being designed to function in a reverse mode, which will create conditions for the mitigation of potential supply crises on Bulgarian and Romanian territory.

The implementation of the project will result in increasing the degree of interconnectivity between the gas transmission systems of Bulgaria and Romania. The project will offer additional transmission capacity.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional

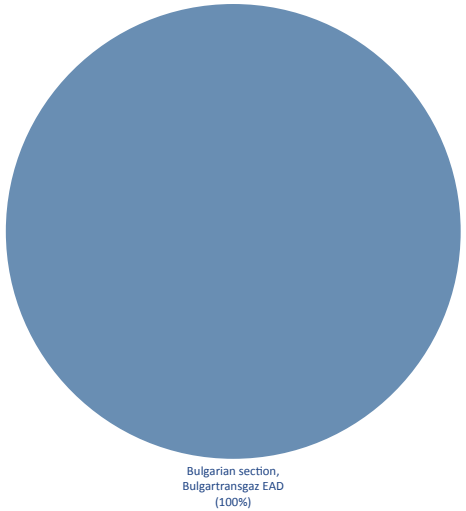
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-140	Interconnection Turkey-Bulgaria	Non-FID

Pipeline including CS

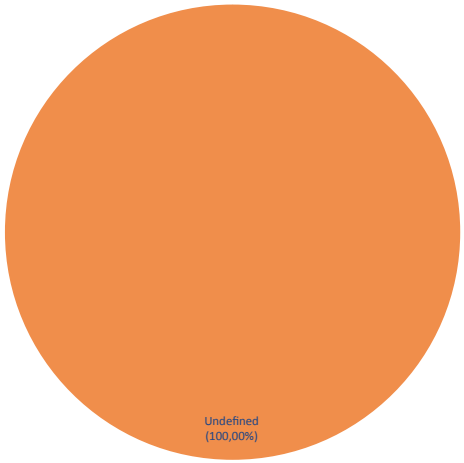
SPONSORS



GENERAL INFORMATION

Promoter	Bulgartransgaz EAD
Operator	Bulgartransgaz EAD
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	2
Web Link	www.bulgartransgaz.bg/index.php

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	2014
Commissioning	2014
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+200,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+85,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Interconnector ITB (Turkey - Bulgaria)	Yes	entry	85,00	Hub Turkey	Hub Bulgaria
	Yes	exit	85,00	Hub Bulgaria	Hub Turkey

DESCRIPTION OF THE PROJECT

The interconnection Turkey-Bulgaria is a key project whose realization shall lead to the increase of the security of supply and the opportunity for diversification of gas supply not only to Bulgaria, but to the Central and South-Eastern Europe region as well. The interconnection is expected to be constructed as a development of the existing interconnection of the systems of Bulgartransgaz EAD and Botaş S.A. - Turkey, through the creation of technical capability for provision of capacity for simultaneous bi-directional physical natural gas flow between the two systems.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional

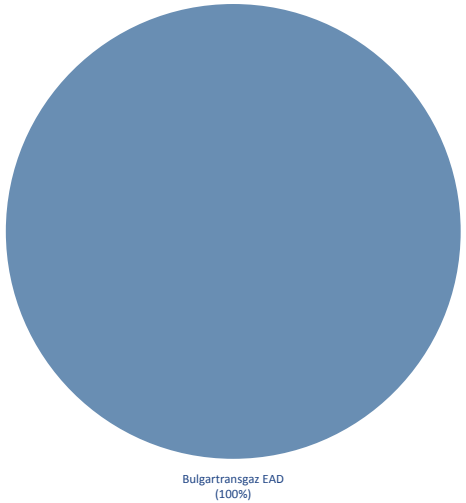
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-138	UGS Chiren Expansion	Non-FID

Storage Facility

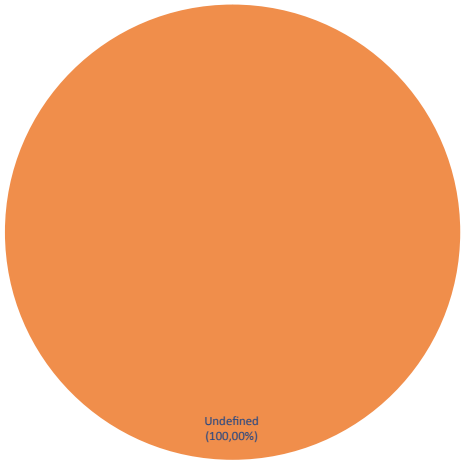
SPONSORS



GENERAL INFORMATION

Promoter	Bulgartransgaz EAD
Operator	Bulgartransgaz EAD
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.bulgartransgaz.bg

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2020
Construction	
Commissioning	2016
Last completed Phase :	Planned

TECHNICAL INFORMATION

Storage facility	UGS Chiren
Working volume (mcm)	
Injectability (mcm/d)	+6,00
Deliverability (mcm/d)	+6,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
UGS - BG - Bulgartransgaz	Yes	entry	60,53	Hub Bulgaria	Storage Bulgaria
	Yes	exit	60,53	Storage Bulgaria	Hub Bulgaria

DESCRIPTION OF THE PROJECT

UGS Chiren is the only underground storage in the country. It covers mainly seasonal fluctuations in the consumption in the country and ensures supply security. The expansion of the UGS is very important for the implementation of the Infrastructure Standard N-1. The project will contribute to the increase of storage capacity in Bulgaria and in the region.

EXPECTED BENEFITS

Security of Supply, N-1 National, N-1 Regional

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

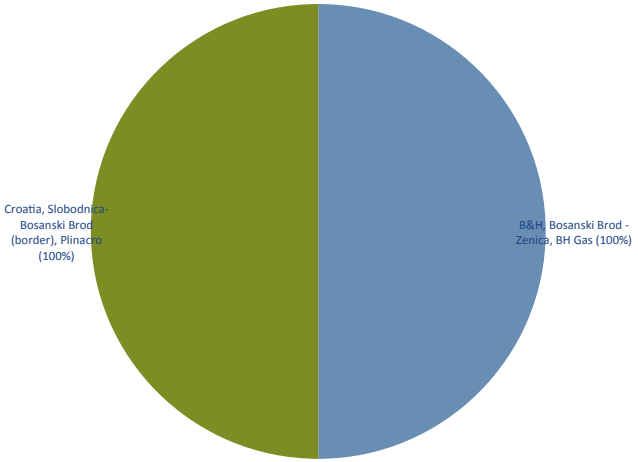
Croatia

Aigelsbrunn
Haidach*
CEGH
Mosonmagyarovar
BUDAPEST
Győr
South Stream
Százhalombatta
Csepel
Ercsi
Adony
Graz
Weitendorf
Murfeld
Klagenfurt
Cersak
Pusztaederics
HUNGARY
Nabucco-West
Rogatec
MGP
Zsana-Nord
Sempeter
Gorizia
LJUBLJANA
ZAGREB
SLOVENIA
Lučko
Dravaszerdahely
Donji Miholac
Sombor
Okoli
Benicanci
Karlovac
Osijek
Umag
Rijeka
Omisalj
LNG RV
CROATIA
Sotin
Slobodnica
Vodnjan
Krk
Pula
Brod
Banja Luka
Gospič
BOSNIA
HERZEGOVINA
Zvornik
Zadar
Knin
Zenica
Benkovac
Ancona
SARAJEVO
Split
Adriatic Sea
Ploče
IAP
PODGORICA
Fiume Treste
Campobasso

TRA-N-066	Interconnection Croatia/Bosnia and Herzegovina (Slobodnica- Bosanski Brod-Zenica)	Non-FID

Pipeline including CS

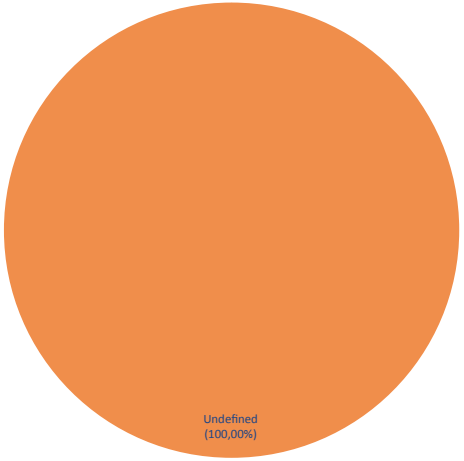
SPONSORS



GENERAL INFORMATION

Promoter	Plinacro Ltd
Operator	Plinacro Ltd
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	2
Web Link	www.plinacro.hr

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	0
Considered Tariff Regime	0
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2013
Construction	
Commissioning	2015
Last completed Phase :	Construction

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+6,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+44,00
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Slobodnica- Bosanski Brod-Zenica	Yes	exit	44,00	Hub Croatia	Hub Bosnia Herzegovina

DESCRIPTION OF THE PROJECT

The pipeline covers the countries Croatia and Bosnia and Herzegovina and it will be the part of Energy Community Ring. The pipeline goes from Slavonski Brod (Slobodnica) in Croatia, it will cross the Sava river to Bosanski Brod in Bosnia and Herzegovina with furter extension to Zenica.

EXPECTED BENEFITS

Market integration, Reverse Flows, N-1 Regional (For Bosnia and Herzegovina), Back-up for renewables, It will be new entry point and transmission route for the needs of B&H;

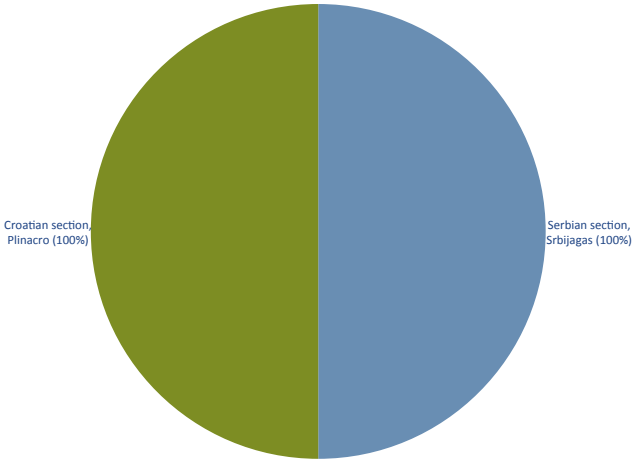
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-070	Interconnection Croatia/Serbia Slobdnica - Sotin (Croatia) - Bačko Novo Selo (Serbia)	Non-FID

Pipeline including CS

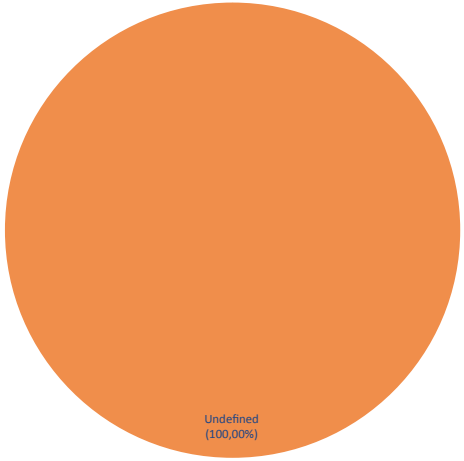
SPONSORS



GENERAL INFORMATION

Promoter	Plinacro Ltd
Operator	Plinacro Ltd
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinacro.hr

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	0
Considered Tariff Regime	0
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2015
Construction	
Commissioning	2022*
Last completed Phase :	Construction

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+100,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+176,00
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Sotin- Bačko Novo Selo	No	exit	176,00	Hub Croatia	Hub Serbia

DESCRIPTION OF THE PROJECT

Covering Croatia and Serbia, connecting the Croatian gas transmission system to the Serbian gas transmission system Slobodnica - Sotin (Croatia) - Bačko Novo Selo (Serbia)

EXPECTED BENEFITS

Market integration, Reverse Flows, Diversification of routes, N-1 Regional (For Serbia), Back-up for renewables, It will be new entry point and transmission route for the needs of B&H;

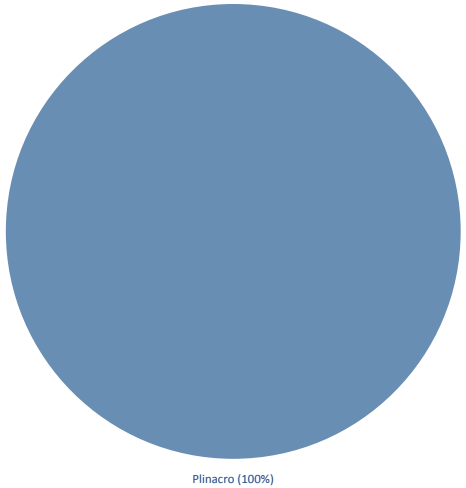
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-086	Interconnection Croatia/Slovenia (Bosiljevo - Karlovac - Lučko - Zabok - Rogatec)	Non-FID

Pipeline including CS

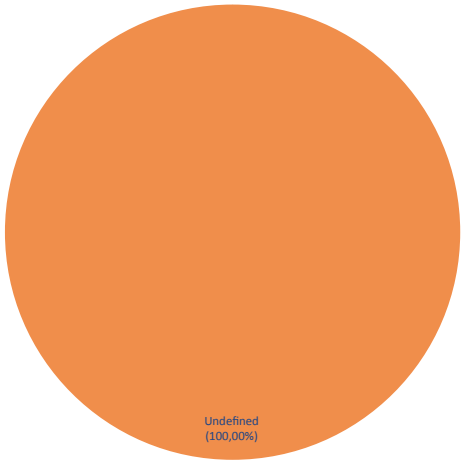
SPONSORS



GENERAL INFORMATION

Promoter	Plinacro Ltd
Operator	Plinacro Ltd
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinacro.hr

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	0
Considered Tariff Regime	0
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2014
Construction	
Commissioning	2022*
Last completed Phase :	Construction

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+150,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+165,00
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Rogatec	No	exit	165,00	Hub Croatia	Hub Slovenia

DESCRIPTION OF THE PROJECT

Covering Croatia and Slovenia, from the gas node Bosiljevo via Karlovac, Lučko and Zabok in Croatia to the Croatian / Slovenian border (to be connected to the gas node Rogatec on the Slovenian side)

EXPECTED BENEFITS

Security of Supply, Market integration (croatian market and the markets in CEE region), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (for Croatia and Slovenia), N-1 Regional, Back-up for renewables, It will be significantly increase the capacity of the interconnection of the Croatian and Slovenian gas transmission systems in this direction. It will increase the capacity along the route, provide enhanced access to Baumgarten and Italien gas market.

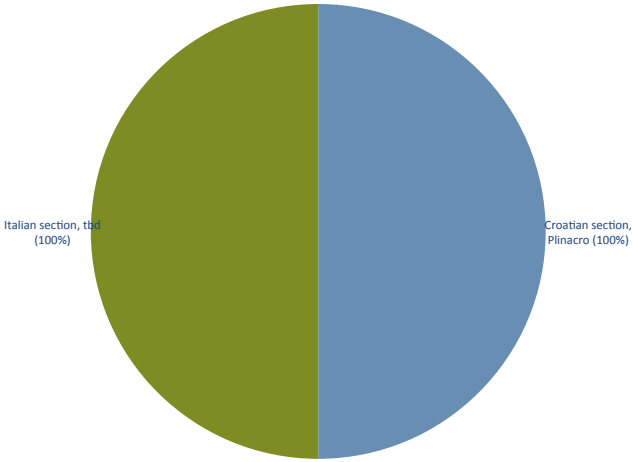
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-083	International Pipeline Omišalj - Casal Borsetti	Non-FID

Pipeline including CS

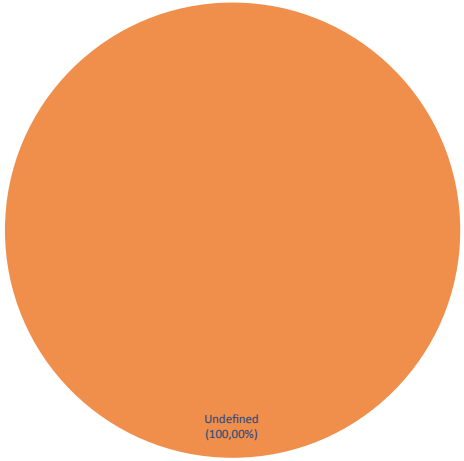
SPONSORS



GENERAL INFORMATION

Promoter	Plinacro Ltd
Operator	Plinacro Ltd
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinacro.hr

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	0
Considered Tariff Regime	0
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2018
Last completed Phase :	Construction

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+220,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+506,00
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Casalborsetti	Yes	exit	506,00	Hub Croatia	Hub Italia

DESCRIPTION OF THE PROJECT

Covering the therritory from the gas node Omišalj on the island of Krk (Croatian Gas Transmission System) via Adriatic Sea to Casal Borsetti (Italian Gas Transmission System)

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (For Croatia), N-1 Regional, Back-up for renewables, It will be new cross border transmission between Croatia and Italy; fits in the idea of Adriatic Gas Ring

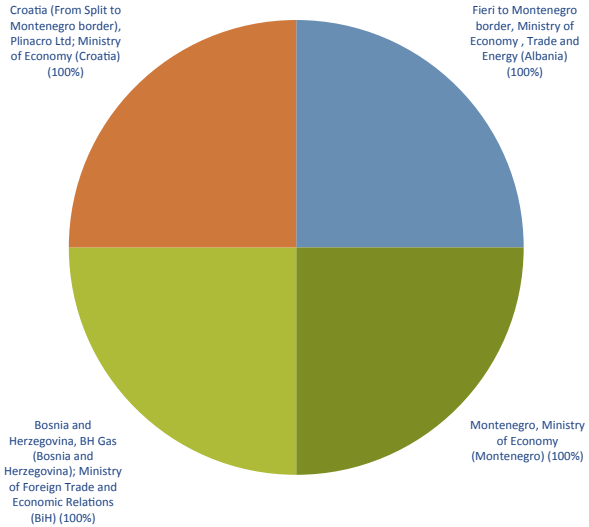
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-068	Ionian Adriatic Pipeline	Non-FID

Pipeline including CS

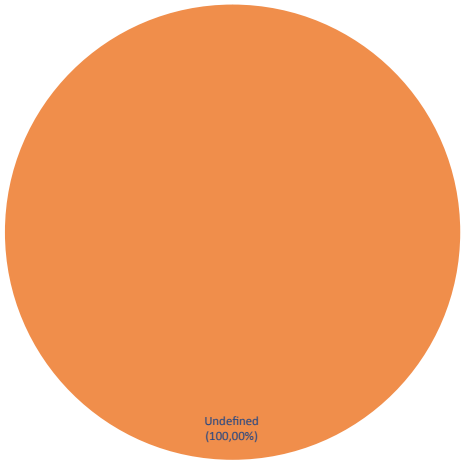
SPONSORS



GENERAL INFORMATION

Promoter	Plinacro Ltd
Operator	Plinacro Ltd
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	2
Web Link	www.plinacro.hr

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	0
Considered Tariff Regime	0
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2014
Construction	
Commissioning	2018
Last completed Phase :	Construction

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	3
Total Pipeline Length (km)	+540,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+75,34
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Ionic-Adriatic Pipeline - IAP / Split - HR	Yes	entry	75,00	Interconnector Ionic-Adriatic Pipeline	Hub Croatia
Ionic-Adriatic Pipeline - IAP / BH	Yes	exit	30,00	Interconnector Ionic-Adriatic Pipeline	Hub Bosnia Herzegovina
Ionic-Adriatic Pipeline - IAP / ME	Yes	exit	15,00	Interconnector Ionic-Adriatic Pipeline	Hub Montenegro
Ionic-Adriatic Pipeline - IAP / AB	Yes	exit	30,00	Interconnector Ionic-Adriatic Pipeline	Hub Albania
Trans-Adriatic Pipeline - TAP / Ionic-Adriatic Pipeline - IAP	Yes	entry	150,00	Interconnector Trans-Adriatic Pipeline	Interconnector Ionic-Adriatic Pipeline

DESCRIPTION OF THE PROJECT

The pipeline will cross the territory along the Adriatic coast from Fieri in Albania via Montenegro to Split in Croatia and will be linked to the existing Croatian gas transmission system (main direction Bosiljevo – Split). The Ionian-Adriatic Pipeline is considered a part of the Energy Community Gas Ring, which is the concept of gasification for the entire region, proposed by the WB Study and accepted by the Gas Fora of the Energy Community.

EXPECTED BENEFITS

Security of Supply, Market integration (Market Integration benefits for Croatia
and the region (Albania, Montenegro, Bosnia and Herzegovina and neighbouring countries), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional (Balkan region), Back-up for renewables

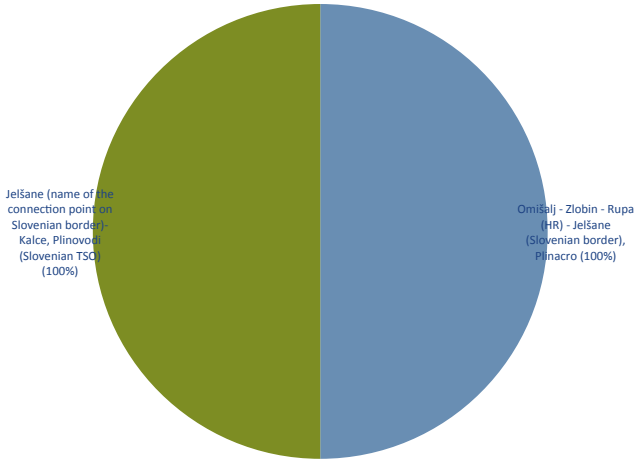
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-090	LNG evacuation pipeline Omišalj - Zlobin (Croatia) - Rupa (Slovenia)	Non-FID

Pipeline including CS

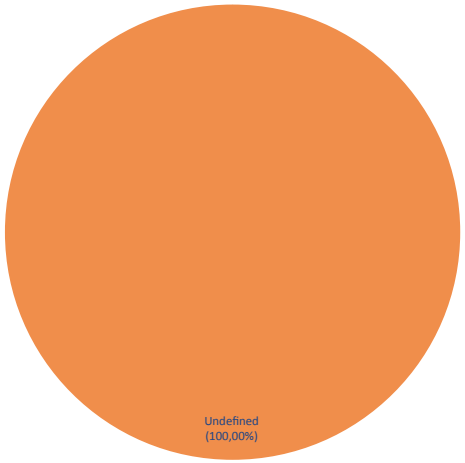
SPONSORS



GENERAL INFORMATION

Promoter	Plinacro Ltd
Operator	Plinacro Ltd
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	1
Web Link	www.plinacro.hr

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	0
Considered Tariff Regime	0
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2013
Construction	
Commissioning	2015
Last completed Phase :	Construction

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+55,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+506,00
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Zlobin (Croatia) - Rupa (Slovenia)	Yes	exit	506,00	Hub Croatia	Hub Slovenia

DESCRIPTION OF THE PROJECT

The pipeline will cross the territory from the LNG solution in Omišalj on the island of Krk to Rupa in Slovenia and will be linked to the Slovenian gas transmission system.

EXPECTED BENEFITS

Security of Supply, Market integration (croatian market, slovenian market and the markets in CEE region and Italy), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (for Croatia and Slovenia), N-1 Regional, Back-up for renewables, It will be significantly increase the capacity of the interconnection of the Croatian and Slovenian gas transmission systems in this direction. It will increase the capacity along the route, provide enhanced access to Baumgarten and Italien gas market. The project will significantly increase the flexibillity of the system for Croatia.

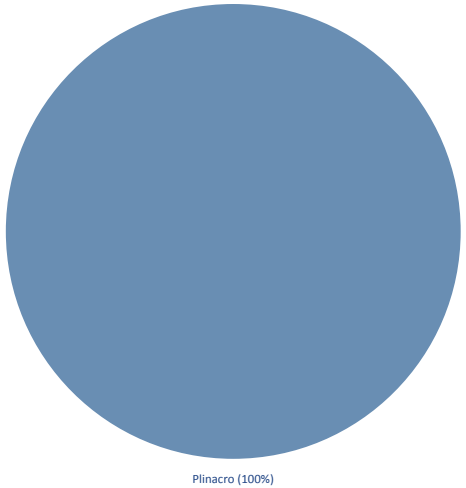
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-075	LNG main gas transit pipeline (Part of North-South Gas Corridor) Zlobin-Bosiljevo-Sisak-Kozarac-Slobodnica	Non-FID

Pipeline including CS

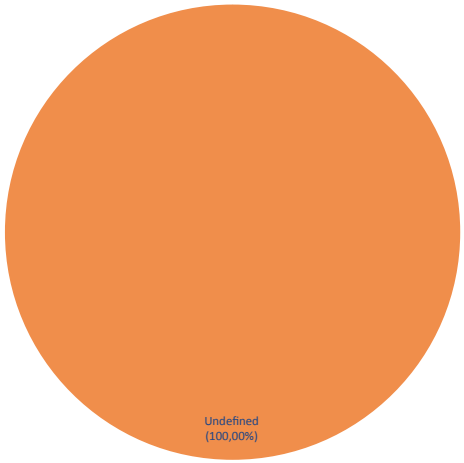
SPONSORS



GENERAL INFORMATION

Promoter	Plinacro Ltd
Operator	Plinacro Ltd
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinacro.hr

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	0
Considered Tariff Regime	0
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2015
Construction	
Commissioning	2022*
Last completed Phase :	Construction

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+308,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+330,00
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

The pipeline will be construted on the territory of Croatia from the gas node Zlobin via Bosiljevo, Sisak, the gas node Kozarac to Slobodnica

EXPECTED BENEFITS

Security of Supply, Market integration (Croatia, Hungary, Bosnia and Herzegovina, Serbia), Reverse Flows, Diversification of routes, N-1 National (for Croatia), Back-up for renewables, This main transit gas pipeline is the future strategic gas transmission connector of great significance and is an integral part of the North – South European Corridor designated the North-South (Baltic – Adriatic) Gas Connection. Its purpose is linking the Polish and Croatian LNG (Liquefied Natural Gas) solutions under the umbrella of the European Commission (EC). This project is foreseen under the Gas Forum administered by the Energy Community Secretariat, and although in Croatia, is regionally significant. The main transit gas pipeline Zlobin-Bosiljevo-Sisak-Kozarac-Slobodnica:
- is a continuation of the existing Hungarian – Croatian interconnection (gas pipeline Varosföld-Dravaszerdahely-Donji Miholjac-Slobodnica)
- will be connected to the future Ionian Adriatic Pipeline (IAP)
- will be connected to the future LNG solution in Omišalj.

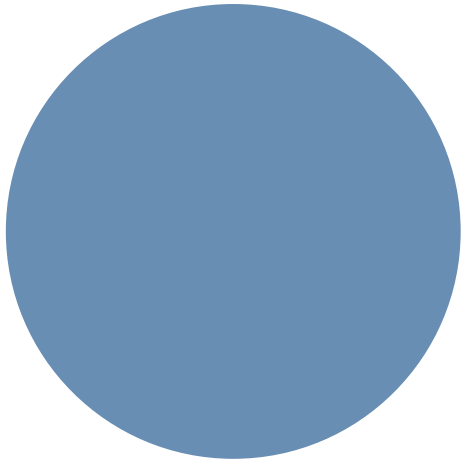
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-082	LNGRV	Non-FID

LNG Terminal

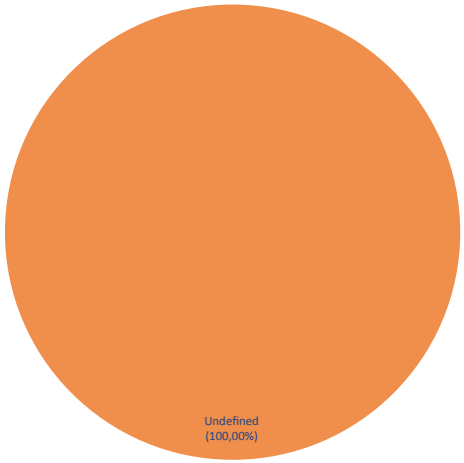
SPONSORS



GENERAL INFORMATION

Promoter	Plinacro Ltd
Operator	Plinacro Ltd
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinacro.hr

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	0
Considered Tariff Regime	0
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2013
Construction	
Commissioning	2015
Last completed Phase :	Construction

TECHNICAL INFORMATION

Regasification facility	LNG RV Croatia
Expected volume (bcm/y)	+2,00
Storage capacity (m3)	
Send-out (mcm/d)	+5,50
Ship size (m3)	
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
LNG RV (Regasification Vessel) to Croatia	Yes	entry	60,50	LNG Terminals Croatia	Hub Croatia

DESCRIPTION OF THE PROJECT

The LNG RV will be situated in Omišalj on the island of Krk, Republic of Croatia.

It is considered a part of the Energy Community Gas Ring, which is the concept of gasification for the entire region, proposed by the WB Study and accepted by the Gas Fora of the Energy Community.

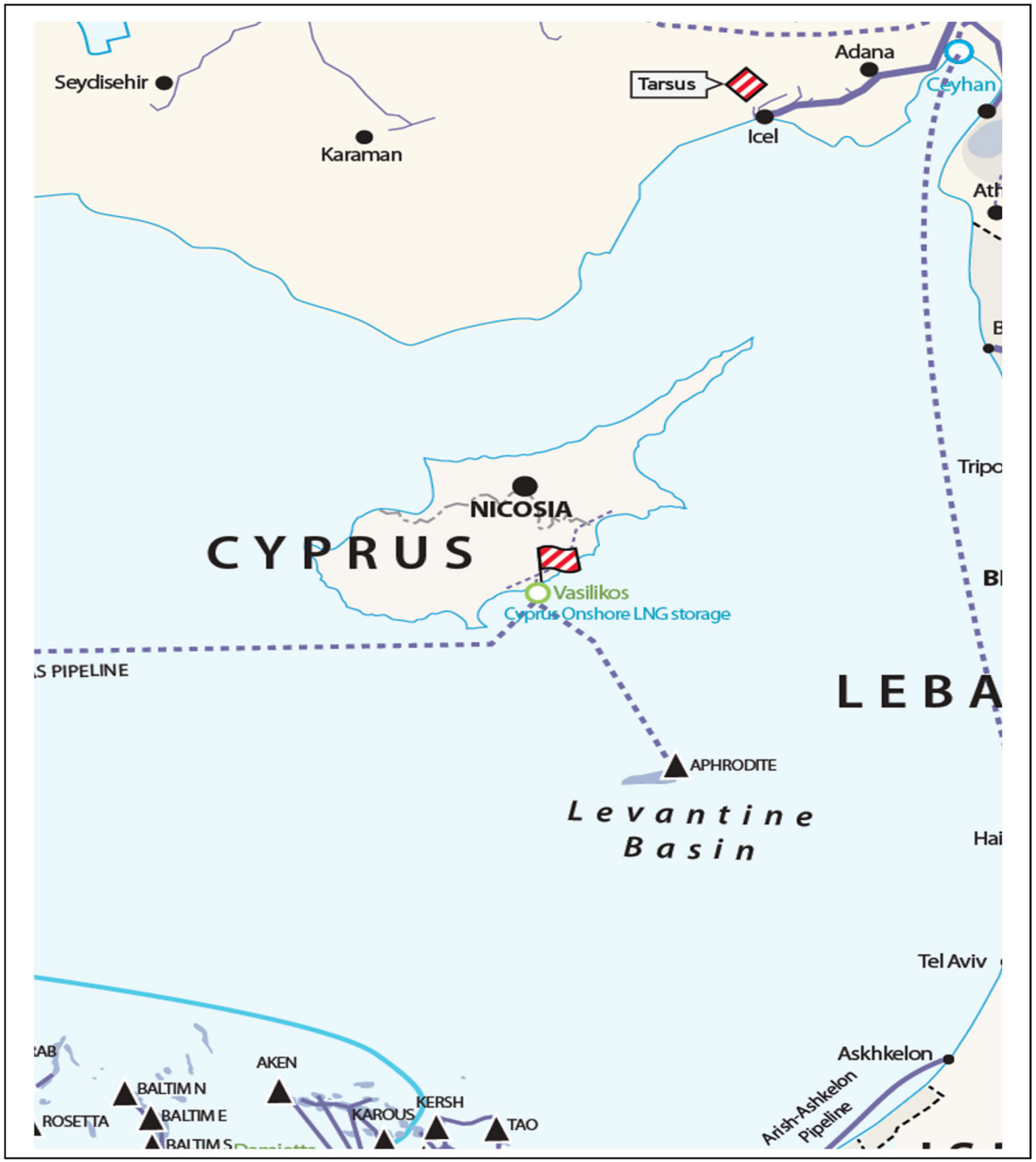
EXPECTED BENEFITS

Security of Supply, Market integration (Croatia, markets of Central and Western Europe (Austria, Slovenia, Hungary, Slovakia, Check Republic) as well as the Balkan countries (Serbia, B&H, Montenegro)), Diversification of sources, Diversification of routes, N-1 National (for Croatia), N-1 Regional, Back-up for renewables

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

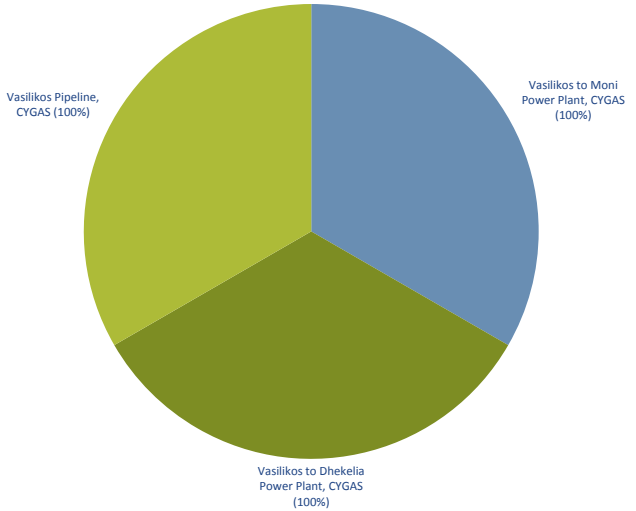
Cyprus


Seydisehir
Karaman
Tarsus
Icel
Adana
Ceyhan
NICOSIA
CYPRUS
Vasilikos
Cyprus Onshore LNG storage
APHRODITE
Levantine
Basin
Tel Aviv
Askhkelon
Arish-Ashkelon
Pipeline
AKEN
BALTIM N
BALTIM E
ROSETTA
KAROUS
KERSH
TAO

POW-N-073	Internal Gas Pipeline Network	Non-FID

Interconnection with a gas-fired power plant

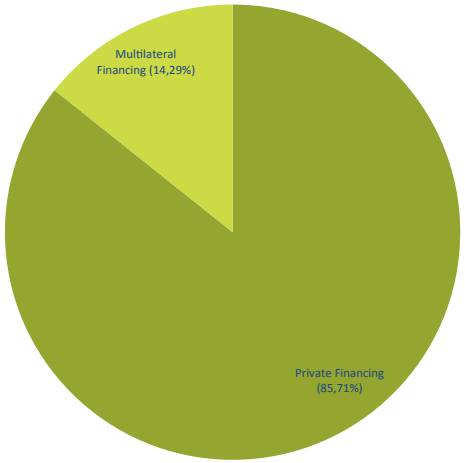
SPONSORS



GENERAL INFORMATION

Promoter	Ministry of Cyprus
Operator	Cygas
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	2
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2013 Q2
FID	2013 Q2
Construction	2014 Q4
Commissioning	2015 Q1
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	3
Total Pipeline Length (km)	+77,50
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+85,15
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Development of a gas pipeline network that will, initially, supply natural gas to the three power stations operated by the Electricity Authority of Cyprus. It is expected that in the future the gas network will be further developed to supply other power producers as well as industrial, commercial and domestic potential customers.

EXPECTED BENEFITS

Security of Supply, Diversification of sources, Biogas

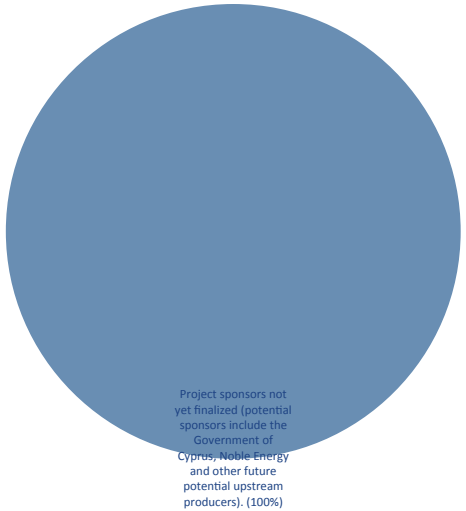
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
		EEPR Funds

UGS-N-067	Mediterranean Gas Storage	Non-FID

Storage Facility

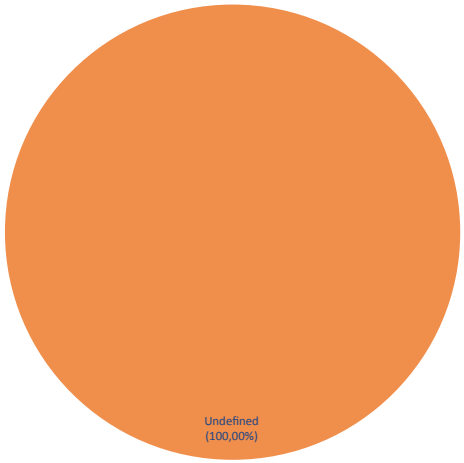
SPONSORS



GENERAL INFORMATION

Promoter	Ministry of Cyprus
Operator	Future Cypriot Producer
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2015 Q1
FID	2015 Q1
Construction	2018 Q4
Commissioning	2019 Q1
Last completed Phase :	Market test

TECHNICAL INFORMATION

Storage facility	Cyprus Onshore LNG storage
Working volume (mcm)	+109,62
Injectability (mcm/d)	+18,10
Deliverability (mcm/d)	+18,10

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Mediterranean Gas Storage (CY)	Yes	exit	199,10		LNG Terminals Cyprus
	Yes	entry	199,10	LNG Terminals Cyprus	

DESCRIPTION OF THE PROJECT

LNG storage and export facilities located in Cyprus, to transport gas from the Levantine Basin to LNG Regasification Terminals located in the Mediterranean Sea (i.e. in Greece, France, Italy, Spain).

Gas could then be further transmitted through the national gas transmission system of those countries (using existing or new/upgraded transmission networks/pipelines) to the Central Eastern and South Eastern Europe (not part of current project).

The proposed gas storage and export facilities comprise of initially one LNG storage tank (in total three LNG tanks will gradually be built) and related export facilities, which will be capable of exporting 5mtpa of LNG (the exporting capacity will gradually be expanded to 15mtpa).

EXPECTED BENEFITS

Security of Supply, Diversification of sources, Diversification of routes, N-1 Regional (Mediterranean), Biogas, With the implementation of this project additional capacity will become available (offering additional flexibility, through an additional route, source and counterpart), and gas could be transported where necessary and when necessary (provided there is an LNG Receiving and Regasification Terminal at the destination), thus able to also cover daily peak demand. Additional available capacity could also cover part of the annual demand.

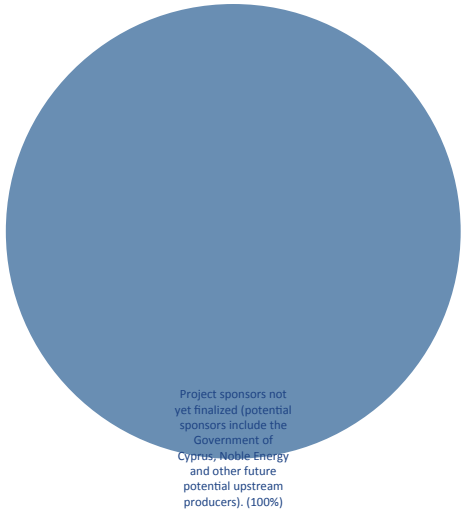
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Project Financing structure not yet finalized	Project Financing structure not yet finalized	Project Financing structure not yet finalized

PRD-N-055	Mediterranean LNG Export Terminal	Non-FID

Production Facility

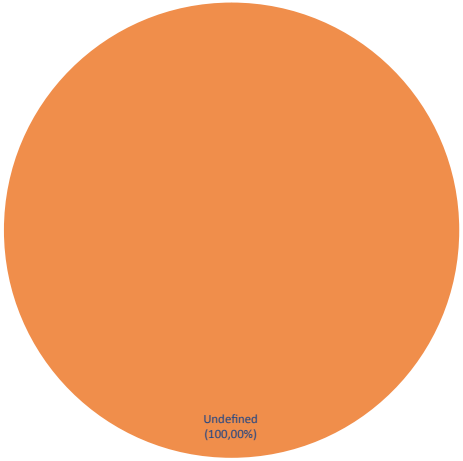
SPONSORS



GENERAL INFORMATION

Promoter	Ministry of Cyprus
Operator	Future Cypriot Producer
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2015 Q1
FID	2015 Q1
Construction	2018 Q4
Commissioning	2019 Q1
Last completed Phase :	Market test

TECHNICAL INFORMATION

Production facility	Vasilikos LNG Plant
Expected volume (bcm/y)	+6,60
Technical Capacity (bcm/y)	+7,59

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Vasilikos LNG Plant (CY)	Yes	exit	211,00		LNG Terminals Cyprus

DESCRIPTION OF THE PROJECT

LNG Export Terminal for the liquefaction of natural gas produced in upstream fields, which will be capable of producing 5mtpa of LNG (the exporting capacity will gradually be expanded to 15mtpa).

EXPECTED BENEFITS

Security of Supply, Diversification of sources, Diversification of routes, N-1 Regional (Mediterranean), Biogas

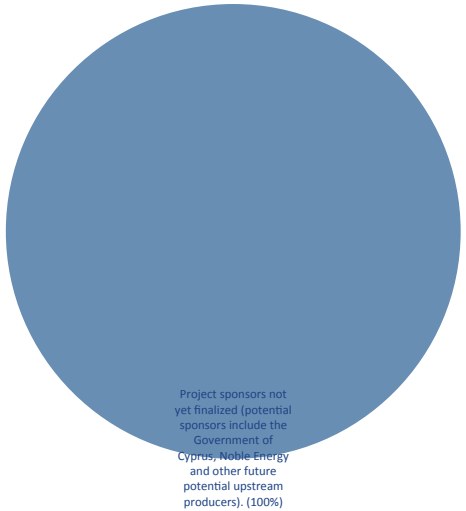
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Project Financing structure not yet finalized	Project Financing structure not yet finalized	Project Financing structure not yet finalized

TRA-N-054	Trans-Mediterranean Gas Pipeline	Non-FID

Pipeline including CS

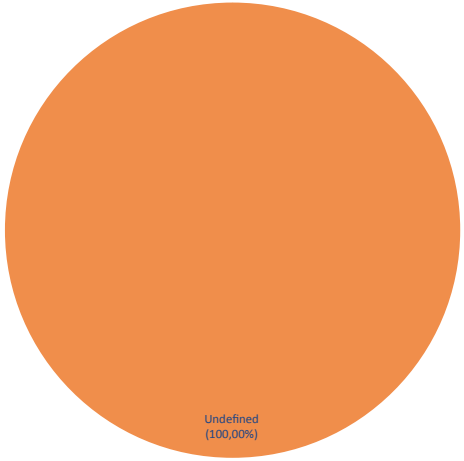
SPONSORS



GENERAL INFORMATION

Promoter	Ministry of Cyprus
Operator	Cygas
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	2
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2015 Q1
FID	2015 Q1
Construction	2018 Q1
Commissioning	2018 Q2
Last completed Phase :	Market test

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+1.400,00
Total Compressor Power (MW)	+111,00
Maximum Capacity (GWh/d)	+254,27
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Interconnector CY-GR (Trans-Med)	Yes	entry	47,68	Hub Greece	Hub Cyprus
	Yes	exit	222,49	Hub Cyprus	Hub Greece

DESCRIPTION OF THE PROJECT

Transmission pipeline for the transport of natural gas from the Levantine Basin into Greece's National Gas Transmission System, through Cyprus.

Gas could be then transported, using existing or new/upgraded transmission networks/pipelines, through mainland Greece to the Central Eastern and South Eastern Europe (not part of current project).

The proposed gas transmission pipeline will have a total length of around 1,400km and could allow for reverse flow. Other relevant project infrastructure (facilities) includes three compressor stations – one located onshore Cyprus, the second onshore Crete (Greece) and the third onshore mainland Greece.

EXPECTED BENEFITS

Security of Supply, Market integration (Mediterranean and South-Eastern Europe), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Cyprus), N-1 Regional (South-Eastern Europe), Biogas, Project has significant impact on cross-border transmission capacity between Greece and Cyprus.
Project establishes a new connection and contributes to the interconnection of Cyprus with the European Grid, through Greece, thus also eliminating the isolation of Cyprus from the Internal Energy Market (by allowing for reverse flow).
Project provides for additional capacity able to cover peak demand and daily demand, as well as for reverse flow.
Enhanced flexibility is also offered since the project involves gas transmission through an additional route, source and counterpart.

COMMENTS ABOUT THE PROJECT FINANCING

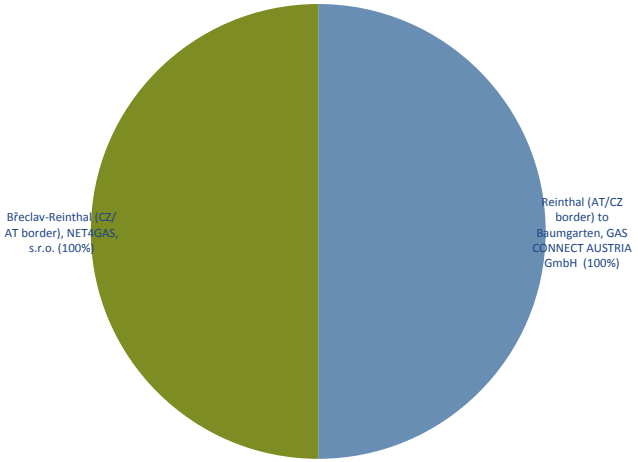
Public financing	Private financing	Multilateral financing
Project Financing structure not yet finalized	Project Financing structure not yet finalized	Project Financing structure not yet finalized

Czech Republic

TRA-N-133	Bidirectional Austrian Czech Interconnection (BACI, formerly LBL project)	Non-FID

Pipeline including CS

SPONSORS

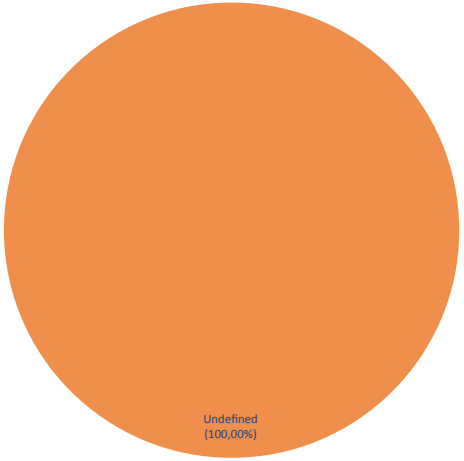


GENERAL INFORMATION

Promoter	NET4GAS, s.r.o.
Operator	NET4GAS, s.r.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	

TEN-E Requests	Date of Request	Year Funding Granted
	27/02/12	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2019
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+58,00
Total Compressor Power (MW)	+24,00
Maximum Capacity (GWh/d)	+254,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Reinthal - Bidirectional Austrian-Czech Interconnector	Yes	exit	254,00	Hub Czech Republic	Hub Austria
	Yes	entry	254,00	Hub Austria	Hub Czech Republic

DESCRIPTION OF THE PROJECT

The BACI will be a new infrastructure directly connecting the Austrian and Czech market. It will be connected to the existing Czech transmission system via CS Břeclav (NET4GAS, s.r.o.) and to the Austrian transmission system via Baumgarten (GAS CONNECT AUSTRIA GmbH). The BACI will enable capacity transmission for the first time between these two member states and it will facilitate better market integration and security of gas supply also for adjacent countries like Hungary, Poland, Germany, Italy, France, Slovenia, Croatia and Slovakia due to the creation of additional transportation opportunities. The project will also increase the overall flexibility of the Czech, Austrian and also Polish system by diversification of gas supply routes and by connecting UGS in the Czech Republic and Austria.

EXPECTED BENEFITS

Security of Supply, Market integration (CEE Region), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (CZ, AT), N-1 Regional (CEE Region), Back-up for renewables, Power-to-gas, Biogas

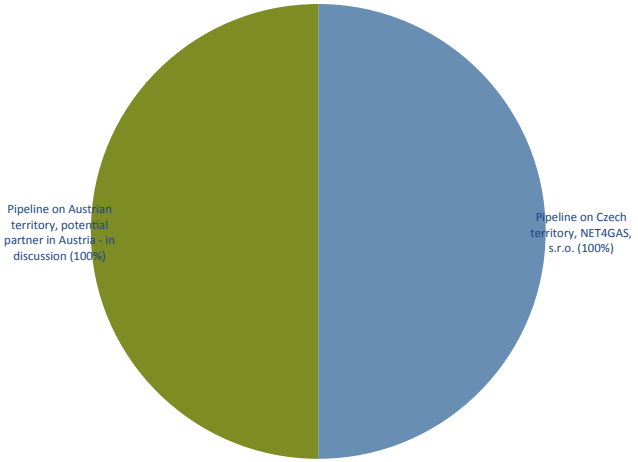
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-135	Connection to Oberkappel	Non-FID

Pipeline including CS

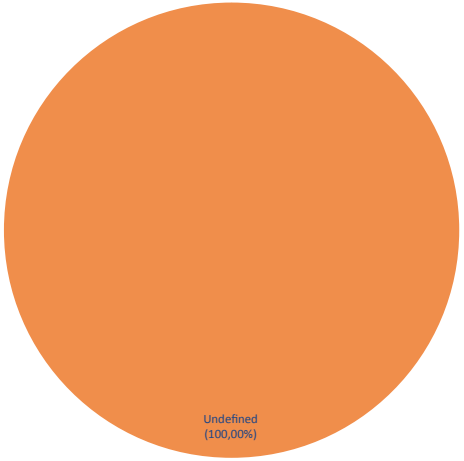
SPONSORS



GENERAL INFORMATION

Promoter	NET4GAS, s.r.o.
Operator	NET4GAS, s.r.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.tauerngasleitung.at/5GL

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+110,00
Total Compressor Power (MW)	+2,00
Maximum Capacity (GWh/d)	+55,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
	No	exit	55,00	Hub Czech Republic	Hub Austria
	No	entry	55,00	Hub Austria	Hub Czech Republic

DESCRIPTION OF THE PROJECT

The project will interconnect the existing transmission pipelines in the Czech Republic with AT/DE border at Oberkappel. It will be the first interconnection between these states and it will be connected to Penta West as well as WAG pipeline (AT) and to the Southern branch of the N4G transmission system (CZ). Connection to Oberkappel is a part of the "5 Gas-market Link - 5GL" of the partners Tauerngasleitung GmbH (AT), Bayernets GmbH (DE), Plinovodi s.r.o. (SLO) and NET4GAS, s.r.o. (CZ). As part of the 5GL Project the Oberkappel project would be interconnected indirectly also to the TGL pipeline project, the storages 7Fields and Haidach (AT) as well as to the gas grid in Southern Germany at Haiming/Burghausen.

EXPECTED BENEFITS

Security of Supply, Market integration (CEE Region), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (CZ, AT), N-1 Regional (CEE Region), Back-up for renewables, Power-to-gas, Biogas

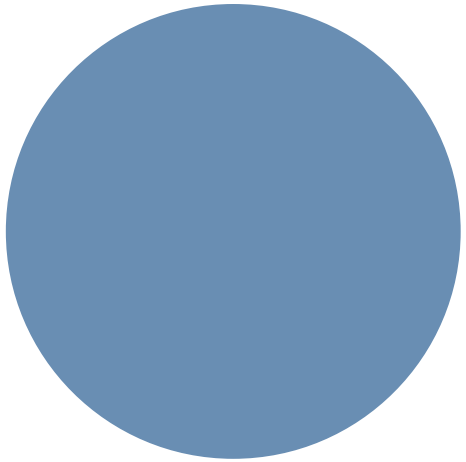
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-134	GAZELLE project	FID

Pipeline including CS

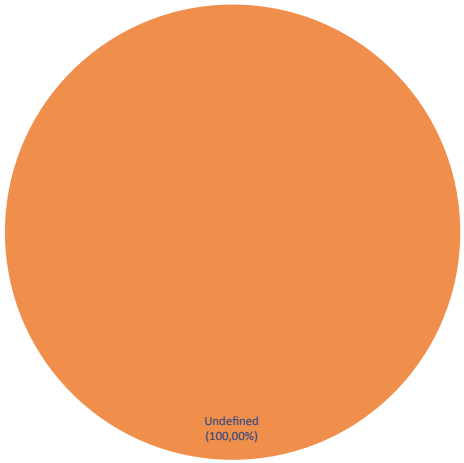
SPONSORS



GENERAL INFORMATION

Promoter	NET4GAS, s.r.o.
Operator	NET4GAS, s.r.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.net4gas.cz/en/projekt-gazela/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Yes
Exemption granted ?	Yes
% Exemption in entry direction	100%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2012
FID	
Construction	2012
Commissioning	2013
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+158,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+218,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Opal (DE)/Brandov (CZ)	Yes	entry	960,00	Interconnector OPAL	

DESCRIPTION OF THE PROJECT

The project creates together with the projects Nord Stream and OPAL the so called Northern Route for Russian gas supplies to Europe and it has important influence on increasing security of supply through the diversification of gas routes.

EXPECTED BENEFITS

Security of Supply, Market integration (CEE Region), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (the Czech Republic), N-1 Regional (CEE Region), Back-up for renewables, Power-to-gas, Biogas

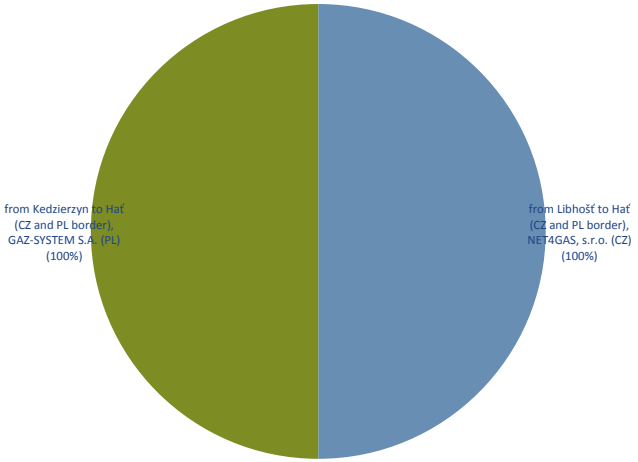
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-136	Poland-Czech Republic Interconnection within the North-South Corridor (STORK II)	Non-FID

Pipeline including CS

SPONSORS

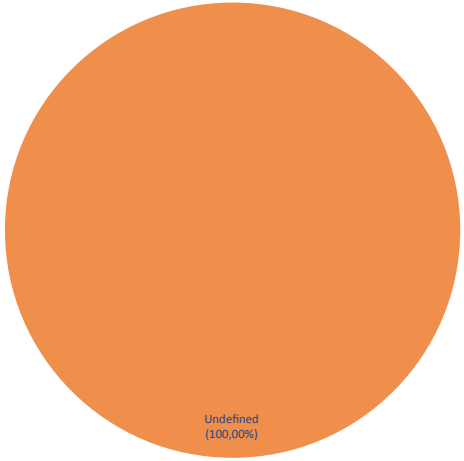


GENERAL INFORMATION

Promoter	NET4GAS, s.r.o.
Operator	NET4GAS, s.r.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	

TEN-E Requests	Date of Request	Year Funding Granted
	1/02/11	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2017
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+107,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+218,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Interconnector CZ-PL	Yes	entry	153,40	Hub Poland	Hub Czech Republic
	Yes	exit	220,50	Hub Czech Republic	Hub Poland

DESCRIPTION OF THE PROJECT

The STORK II interconnector pipeline will be part of the Czech and Polish transmission system and will increase cross-border capacity between these two countries by establishing a large transportation corridor that will allow flexible transport of gas in Central Europe in direction North-South.The development of the physical interconnection between Poland and Czech Republic will contribute to reinforcement of the effective operation of the gas transmission systems, efficient gas exchange between the markets, as well as increase of the security of supply not only for Poland and Czech Republic, but also for the CEE region by enabling the supply link with the European gas market (NCG, CEGH Baumgarten, Gas Pool) and global LNG market via the Terminal in Świnoujście.

EXPECTED BENEFITS

Security of Supply, Market integration (CEE Region (mainly CZ, PL)), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (CZ, PL), N-1 Regional (CEE Region), Back-up for renewables, Power-to-gas, Biogas

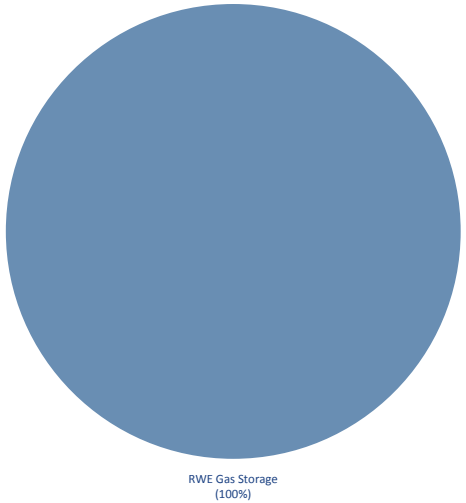
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-074	Expansion of the virtual storage operated by RWE Gas Storage	Non-FID

Storage Facility

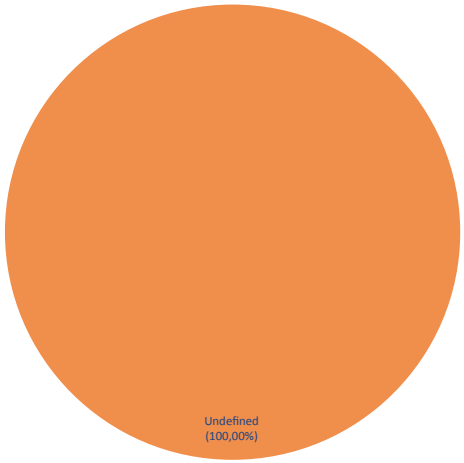
SPONSORS



GENERAL INFORMATION

Promoter	RWE Gas Storage, s.r.o.
Operator	RWE Gas Storage, s.r.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.rwe-gasstorage.cz/en/capacity-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2015
FID	2013
Construction	2016
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

Storage facility	RWE Gas Storage Virtual Storage
Working volume (mcm)	+587,40
Injectability (mcm/d)	+9,50
Deliverability (mcm/d)	+16,10

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
UGS - CZ - Net4Gas/RWE Gas Storage	Yes	exit	177,10	Storage Czech Republic	Hub Czech Republic
	Yes	entry	104,50	Hub Czech Republic	Storage Czech Republic

DESCRIPTION OF THE PROJECT

RWE Gas Storage operates its six UGS facilities as virtual storage. The project involves expansion of a number of facilities.

EXPECTED BENEFITS

Market integration, Back-up for renewables, Project will increase security of supply. Project will facilitate liberalisation of the Czech gas market.
The new gas storage capacity will both increase the ratio between storage capacity and gas consumption in the Czech Republic, thus increasing SoS, and contribute to the gas market liberalisation by providing an additional source of flexibility.

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

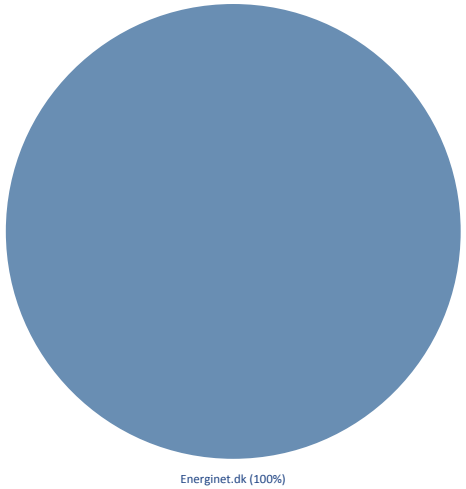
Denmark

Stenungsu
Vallby Kile
Göteborg LNG
Göteborg
Aalborg
Varberg
Lille Torup
NPTF
GTF
DENMARK
Halmstad
Nybro
Egtved
COPENHAGEN
Stenlille
Avedore
Ellund
DEUDAN
Kiel-Rönne
Quarnstedt
Etzel*
Ohrensen
NEL
Harsefeld
Kraak
Wardenburg
Oldenburg
RHG
Hamburg Reitbrook
Bremen-Lesum

TRA-F-015	Ellund-Egtved	FID

Pipeline including CS

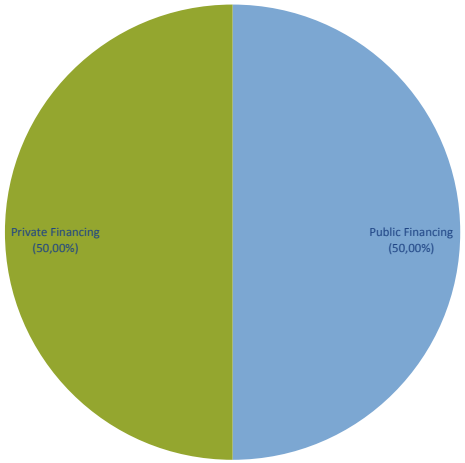
SPONSORS



GENERAL INFORMATION

Promoter	Energinet.dk
Operator	Energinet.dk
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	energinet.dk/EN/ANLAEG-OG-PROJEKTER/Anlaegsprojekter-gas/Ellund-Egtved/Sider/Ellund-Egtved.aspx

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2011
FID	2010 Q2
Construction	2013
Commissioning	2013 Q4
Last completed Phase :	FID

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+94,00
Total Compressor Power (MW)	+20,00
Maximum Capacity (GWh/d)	+184,80
Expected Load Factor	55,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Ellund	Yes	entry	184,80	Hub Germany	Hub Denmark
Dragør	Yes	exit	13,20	Hub Denmark	Hub Sweden
Ellund	Yes	exit	44,00	Hub Denmark	

DESCRIPTION OF THE PROJECT

Pipeline looping Ellund-Egtved. Four unit Compressor Station in Egtved. Increases capacity in Ellund and Dragør Interconnection Points.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional, Back-up for renewables, Biogas, The project will ensure supply of gas to the Danish and Swedish markets when the gas production from the Danish North Sea is declining. The project also ensures integration with the gas market in Germany. Furthermore, the project will enhance security of supply also in emergency situations by providing diversification of sources and routes.

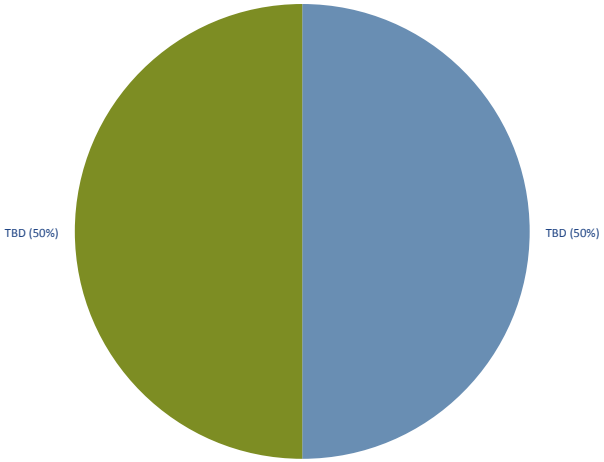
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
50% European Economic Recovery Programme – expected co-financing of 100 million EUR.	50% Financed by Energinet.dk	

TRA-N-218	Tie-in of Norwegian off-shore natural gas transmission system to Danish off-shore natural gas infrastructure	Non-FID

Pipeline including CS

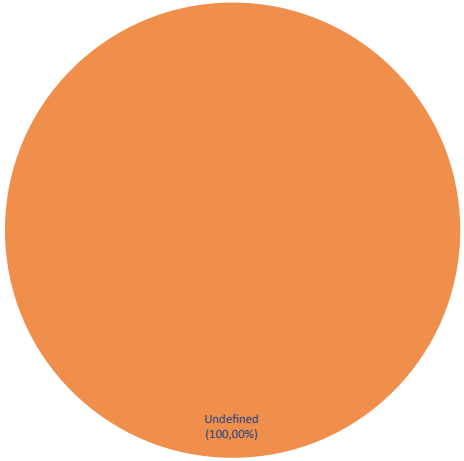
SPONSORS



GENERAL INFORMATION

Promoter	Maersk Oil and Gas A/S
Operator	Maersk Oil and Gas A/S
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	2013
Commissioning	2014 Q4
Last completed Phase :	FEED

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+175,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+100,00
Expected Load Factor	80,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Statpipe - NO / Harald platform - DK	Yes	entry	100,00	Supplier Norway	NP Send-out Denmark

DESCRIPTION OF THE PROJECT

To connect the Norwegian off shore natural gas infrastructure (Statpipe) with the Danish off-shore natural gas infrastructure

(Harald platform).

EXPECTED BENEFITS

Security of Supply, Market integration (Norwegian off shore system and Danish/Swedish/German market), Diversification of sources, Diversification of routes, N-1 National (Denmark), Back-up for renewables

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

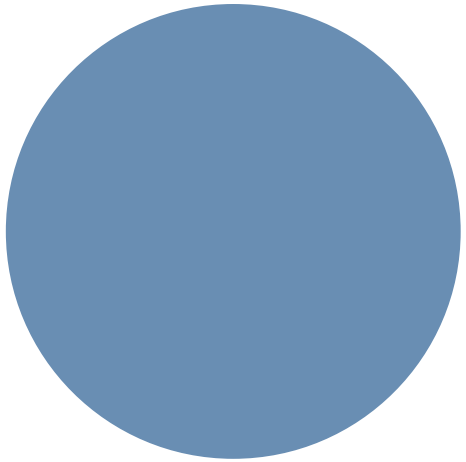
Estonia

FINLAND
Kyroskoski
Tampere
Nokia
Hameenlinna
Lahti
Lappeenranta
Imatra
Vyborg
Pansio LNG
Turku
Mantsala
Kotka
Lohja
HELSINKI
Vuosaari
Espoo
Finngulf
Hanko
Primorsk
Baltic LNG
BALTICONNECTOR
Tallinn LNG
Narva
Paldiski
TALLINN
ESTONIA
Pärnu
Karksi
Värska
Pskov
Misso
Izborsk
Korneti
Inčukalns
Riga
RIGA
LATVIA
Rezekne
Iecava
Kiemėnai
Daugavpils
Šiauliai

LNG-N-079	Paldiski LNG Terminal	Non-FID

LNG Terminal

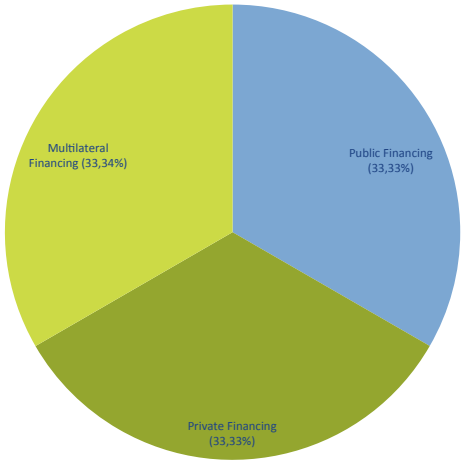
SPONSORS



GENERAL INFORMATION

Promoter	Balti Gaas plc
Operator	Balti Gaas plc
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.baltigaas.eu

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not Relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2012 Q4
FID	2013 Q1
Construction	2015 Q2
Commissioning	2015 Q3
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Paldiski LNG Terminal
Expected volume (bcm/y)	+2,60
Storage capacity (m3)	+180.000,00
Send-out (mcm/d)	+25,00
Ship size (m3)	160.000,00
Reloading ability ?	Yes

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Paldiski LNG	Yes	exit	275,00	LNG Terminals Estonia	Hub Estonia

DESCRIPTION OF THE PROJECT

LNG regasification terminal for regional use on the Pakri peninsula on the Easern coast of the Baltic Sea

EXPECTED BENEFITS

Security of Supply, Market integration (Estonia, Latvia, Finland with Balticconnector), Diversification of sources, N-1 National (Estonia), N-1 Regional (Baltics and Finland with Balticconnector), Back-up for renewables

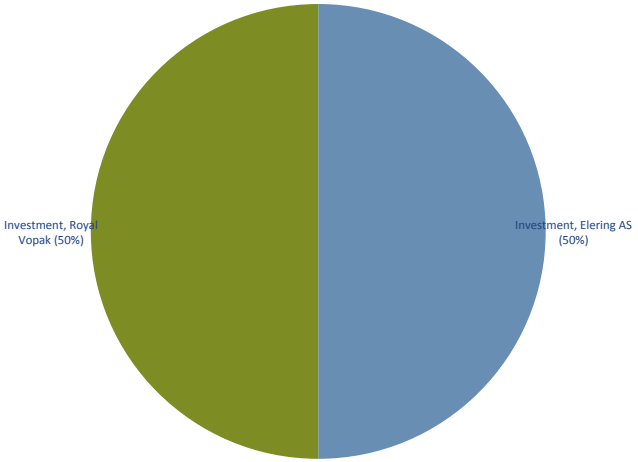
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-146	Tallinn LNG Terminal	Non-FID

LNG Terminal

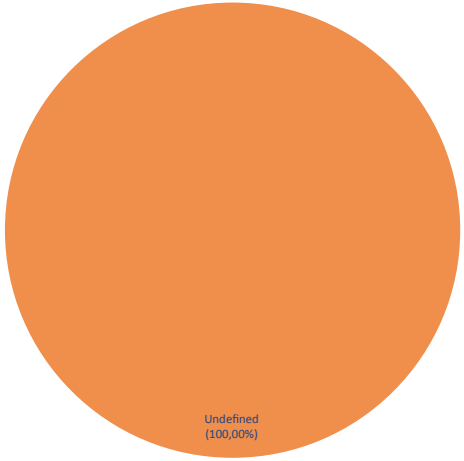
SPONSORS



GENERAL INFORMATION

Promoter	Elering
Operator	Vopak / Elering
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2015 Q2
FID	2015 Q2
Construction	2017 Q3
Commissioning	2017 Q4
Last completed Phase :	Permitting

TECHNICAL INFORMATION

Regasification facility	Tallinn LNG terminal
Expected volume (bcm/y)	+2,90
Storage capacity (m3)	+90.000,00
Send-out (mcm/d)	+8,00
Ship size (m3)	75.000,00
Reloading ability ?	Yes

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Tallinn LNG	Yes	exit	88,00	LNG Terminals Estonia	Hub Estonia

DESCRIPTION OF THE PROJECT

Conventional LNG import terminal for improving Baltic as well as Finnish security of sypply nad serving commercial customers.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Estonia), N-1 Regional (Baltic + Finland), Back-up for renewables, Power-to-gas, Biogas, As Tallinn LNG terminal includes facilities for bunkering, it contributes for ECA regulation implementation

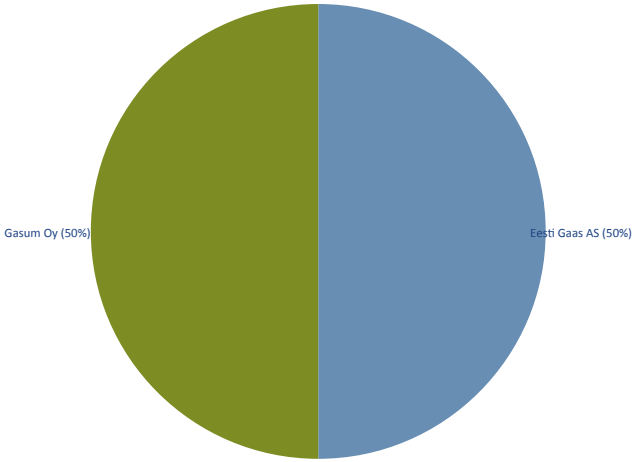
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-072	Balticconnector (Including CS)	Non-FID

Pipeline including CS

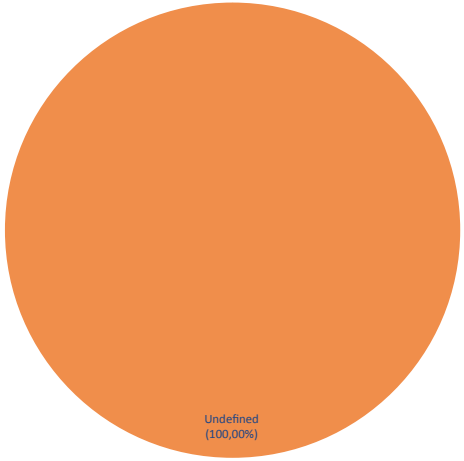
SPONSORS



GENERAL INFORMATION

Promoter	Vörguteenus
Operator	Vörguteenus
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2013 Q4
FID	2014 Q1
Construction	2014 Q3
Commissioning	2016 Q1
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+127,00
Total Compressor Power (MW)	+35,00
Maximum Capacity (GWh/d)	+79,80
Expected Load Factor	70,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Inkoo (FI) / Undetermined (EE) - Balticconnector	Yes	entry	79,80	Hub Finland	Hub Estonia
	Yes	exit	79,80	Hub Estonia	Hub Finland

DESCRIPTION OF THE PROJECT

The project will establish the first interconnection between Finland and Estonia.

EXPECTED BENEFITS

Security of Supply, Market integration (Estonia, Finland), Reverse Flows, Diversification of sources, N-1 National (Estonia, Finland), Market integration through connecting the Estonian and Finnish market

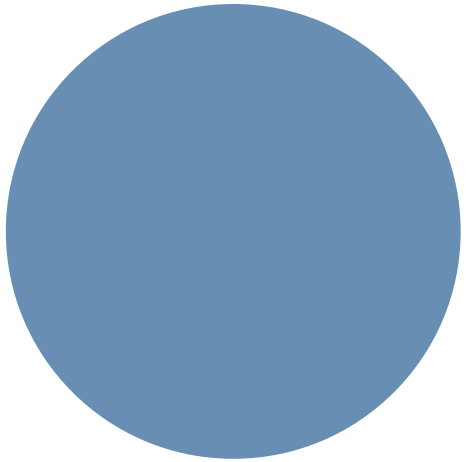
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-084	Karksi GMS	Non-FID

Pipeline including CS

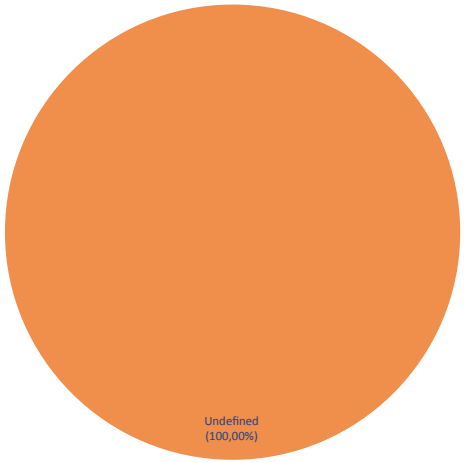
SPONSORS



GENERAL INFORMATION

Promoter	Võrguteenus
Operator	Võrguteenus
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014 Q1
FID	2014 Q1
Construction	2014 Q3
Commissioning	2015 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+35,00
Maximum Capacity (GWh/d)	+94,00
Expected Load Factor	70,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Karksi	Yes	exit	94,00	Hub Estonia	Hub Latvia
	Yes	entry	94,00	Hub Latvia	Hub Estonia

DESCRIPTION OF THE PROJECT

Uppgrade of interconnection pipeline by installation of compressor station and new metering equipment

EXPECTED BENEFITS

Security of Supply, Market integration (Estonia, Finland, Latvia), Reverse Flows, Diversification of sources, N-1 National (Estonia, Latvia)

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

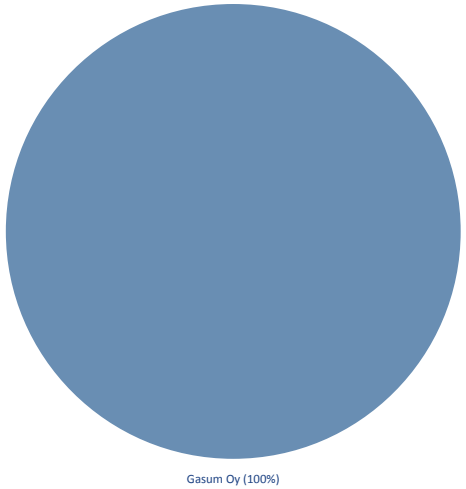
Finland

FINLAND
Tornio Manga LNG
Kyroskoski
Tampere
Nokia
Hameenlinna
Lahti
Lappeenranta
Imatra
Vyborg
Mantsala
Kotka
Pansio LNG
Turku
Lohja
HELSINKI
Vuosaari
Espoo
Finngulf
Hanko
Primorsk
Baltic LNG
St.Pet
BALTICONNECTOR
Tallinn LNG
Narva
Paldiski
TALLINN
ESTONIA
Pärnu

TRA-N-023	Balticconnector (FI-EE)	Non-FID

Pipeline including CS

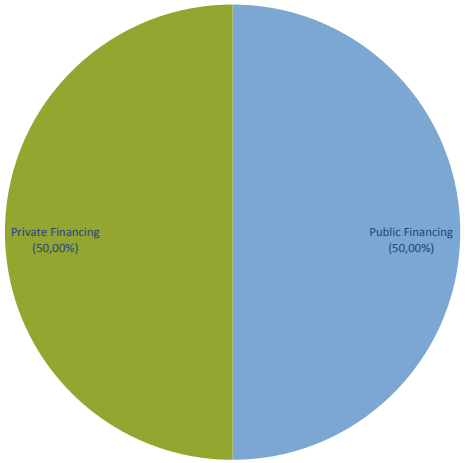
SPONSORS



GENERAL INFORMATION

Promoter	Gasum Oy
Operator	Gasum Oy
TEN-E Project ?	Priority Project
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.gasum.com

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2014
Construction	
Commissioning	2016 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+80,00
Total Compressor Power (MW)	+20,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Inkoo (FI) / Undetermined (EE) - Balticconnector	Yes	exit	79,80	Hub Finland	Hub Estonia
	Yes	entry	79,80	Hub Estonia	Hub Finland

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional, Back-up for renewables, Biogas
Balticconnector is a project targeted to interconnect markets around the northern Baltic Sea. It will enable two-way gas flows between Finland and Estonia and provide more gas supply capacity and flexibility for the whole region. Together with Finngulf LNG terminal, it improves the security of gas supply of Finland and Baltic Countries.
Together with Balticconnector, Finngulf LNG terminal makes it possible to diversify the gas sourcing from international LNG markets and thus improve the security of gas supply of Finland and Baltic Countries.

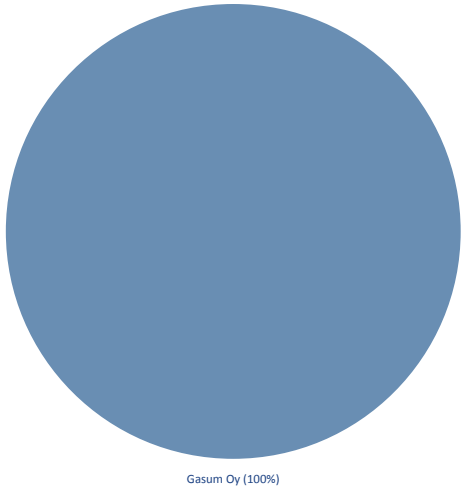
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Balticconnector 50%	Balticconnector 50%	

LNG-N-024	Finngulf	Non-FID

LNG Terminal

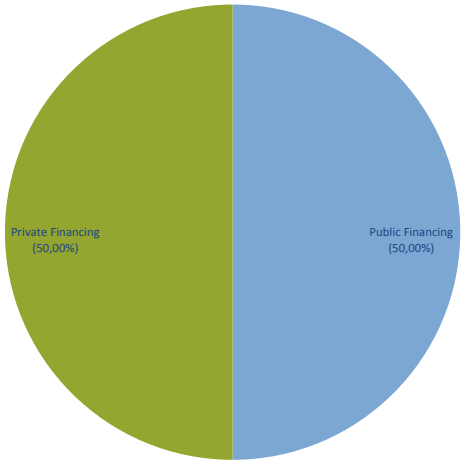
SPONSORS



GENERAL INFORMATION

Promoter	Gasum Oy
Operator	Gasum Oy
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.gasum.com

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2014
Construction	
Commissioning	2018 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	
Expected volume (bcm/y)	+1,00
Storage capacity (m3)	+300.000,00
Send-out (mcm/d)	+19,20
Ship size (m3)	150.000,00
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Finngulf LNG	Yes	entry	211,20	LNG Terminals Finland	Hub Finland

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional, Back-up for renewables, Biogas

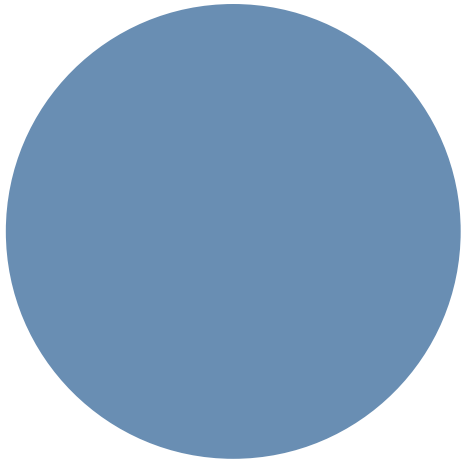
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Finngulf LNG 50%	Finngulf LNG 50%	

LNG-N-277	Pansio LNG	Non-FID

LNG Terminal

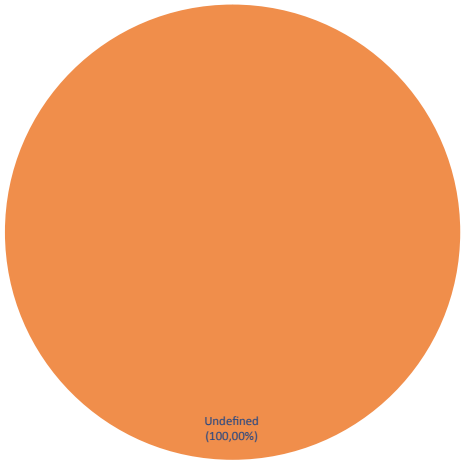
SPONSORS



GENERAL INFORMATION

Promoter	Gasum Oy
Operator	Gasum Oy
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.gasum.com

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2013 Q4
Construction	
Commissioning	2015 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	
Expected volume (bcm/y)	+0,11
Storage capacity (m3)	+30.000,00
Send-out (mcm/d)	
Ship size (m3)	15.000,00
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
	No	exit	0,00	LNG Terminals Finland	

DESCRIPTION OF THE PROJECT

Business orientation: Marine use and small facilities outside natural gas network (Terminal is not connected to natural gas network)

EXPECTED BENEFITS

Security of Supply, Reverse Flows, Diversification of sources, Diversification of routes, N-1 Regional, Back-up for renewables, Biogas

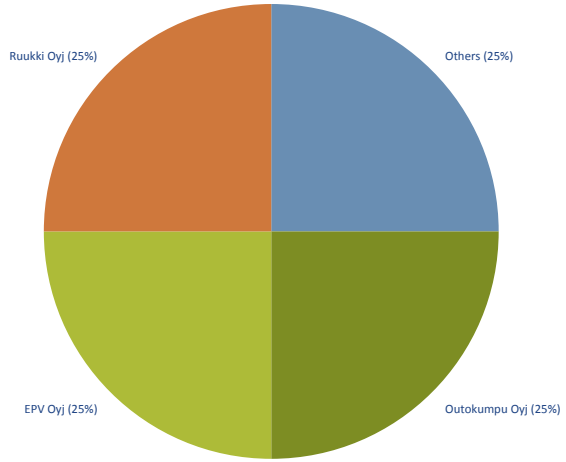
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-194	Tornio ManGa LNG Terminal project	Non-FID

LNG Terminal

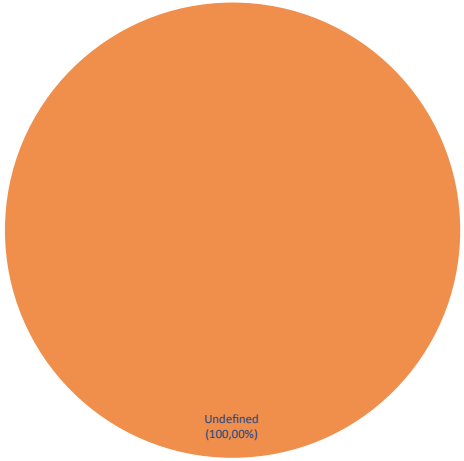
SPONSORS



GENERAL INFORMATION

Promoter	OutoKompu Oyj
Operator	OutoKompu Oyj
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Not yet
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2013 Q2
FID	2013 Q3
Construction	2014 Q1
Commissioning	2016 Q1
Last completed Phase :	FEED

TECHNICAL INFORMATION

Regasification facility	
Expected volume (bcm/y)	
Storage capacity (m3)	+140.000,00
Send-out (mcm/d)	+0,00
Ship size (m3)	45.000,00
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Tornio ManGa LNG	Yes	exit	0,03	LNG Terminals Finland(North)	

DESCRIPTION OF THE PROJECT

The Manga Ltd LNG terminal will supply natural gas into market areas and industrial companies which currently do not have access to gas via pipeline networks i.e. Northern and Central parts of Finland and Sweden. The terminal is located in Tornio, at the border of Finland and Sweden. Several Finnish and Swedish companies are interested in the project among them Outokumpu, which plans to use LNG in its production processes both in Sweden and in Finland.

EXPECTED BENEFITS

Security of Supply, Market integration (Northern Scandinavia, Sweden, Finland and Norway), Diversification of sources, Diversification of routes, Back-up for renewables,
- Increases the competitiveness of the Northern EU and its industry and securing Nordic raw materials for the manufacturing of industrial and consumer goods in NW and Continental
- Europe at economical prices (incl. metals, chemical and pulp & paper).
Improves the security of supply within the Northern EU – no energy islands.
- Reduces environmental pollution and CO2/NOx –emissions (replaces LPG, oil, peat and coal).
- Supports EU transportation policies, TEN-T, and Motorways of the Sea programme and SECA regulations within the Baltic Sea.
- Enhances the use of LNG in maritime transport in the region – provides ship vessel bunkering availability.
- Satisfies energy needs and demands both in Sweden and in Finland - 100% alignment with the Northern dimension of the EU.

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

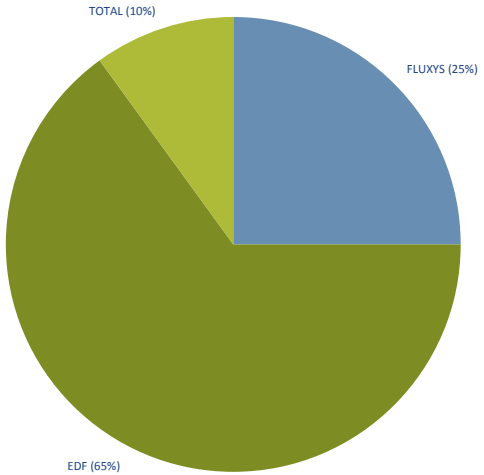
France

LONDON
Avonmouth
Humbly Grove
Isle of Grain
Portland
Zeebrugge
Dunkerque
Amsterdam
Maasvlakte
Gate Term
Rotterdam
TTF
Zevenaar
THE NETHERLANDS
Hilvarenbeek
Poppel
Zandvliet
Zebrugge
Alveringem
Loenhout
Dilsen
Lille
BRUSSELS
Quévy
Taisnières
Blaregnies
BELGIUM
Cherbourg
Le Havre
Lannion
Brest
Caen
Saint-Clair-sur-Epte
Saint-Illiers
Gournay-sur-Aronde
PEG NORD
Germigny-sous-Coulombs
PARIS
Beynes Profond
Beynes Supérieur
Saint-Arnoult des Bois
Trois Fontaines
Dierrey-Saint-Julien
Le Mans
Orleans
Montoir de Bretagne
Nantes
FRANCE
Soings-en-Sologne
Chémery
Céré-la-Ronde
LIAISON NORD-SUD
Cerville
Bras
Petange
LUX.
Remich
Frankenthal
Obergailbach
Mechelsheim
Karlsru
Alsace Sud
Wallbach
Olmgue
Rodersdorf
Basel
Fallentor
Fronhof
BERN
SWITZERLA
Griespass
Passo Gries
Etrez
Lyon
La Rochelle
Le Verdon-sur-Mer
PEG SUD
Castillon (Dordogne)
Bordeaux
PIR-MIDI
Hauterives
Tersanne
Grenoble
Brugherio
Milano
Torino
Genova
GAVIOTA
Gaviota
Bilbao
S.Sebastián
Irun
Biriatou
Lacq
Izaute
Lussagnet
PEG TIGF
Toulouse
Vitoria
Pamplona
Larrau
Logroño
Serrablo
Cruzy (Hérault)
Manosque
Nice
Fos Faster
Fos Tonkin
Fos Cavaou
Marseille
Toulon
Ligurian Sea
OLT Offshor
AND
Le Perthus
MIDCAT
Figueras
Soria
Huesca
Zaragoza
Lleida
Barcelona
Tarragona
CORSICA
Ajaccio
Teruel
Cuenca
Castor
Castellón de la Plana
Sagunto
Valencia
Albacete
Balearic Sea
Palma de Mallorca
from Egypt

LNG-F-210	Dunkerque LNG Terminal	FID

LNG Terminal

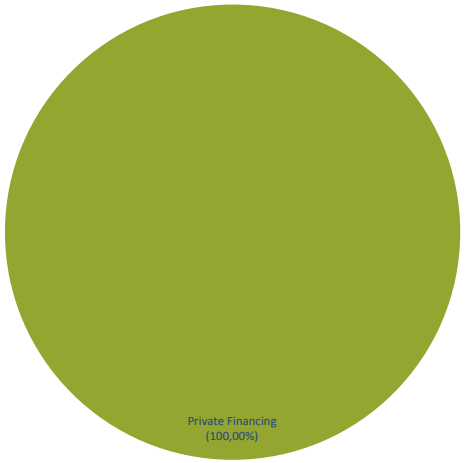
SPONSORS



GENERAL INFORMATION

Promoter	EdF
Operator	Dunkerque LNG
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Yes
Exemption granted ?	Yes
% Exemption in entry direction	100%
% Exemption in exit direction	100%

SCHEDULE

End of permitting phase	2010 Q2
FID	2011 Q2
Construction	2011 Q3
Commissioning	2015 Q4
Last completed Phase :	FID

TECHNICAL INFORMATION

Regasification facility	Dunkerque LNG
Expected volume (bcm/y)	+13,00
Storage capacity (m3)	+570.000,00
Send-out (mcm/d)	+45,60
Ship size (m3)	267.000,00
Reloading ability ?	Yes

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Dunkerque LNG / FRn	Yes	exit	519,00	LNG Terminals France(PEG North)	LNG Terminals France(PEG North)
Dunkerque LNG / Avringem - BE	Yes	exit	270,00	LNG Terminals France(PEG North)	Hub Belgium
Dunkerque LNG	Yes	exit	501,60	LNG Terminals France(PEG North)	Hub France(PEG North)

DESCRIPTION OF THE PROJECT

LNG regasification Facility located in Dunkirk

EXPECTED BENEFITS

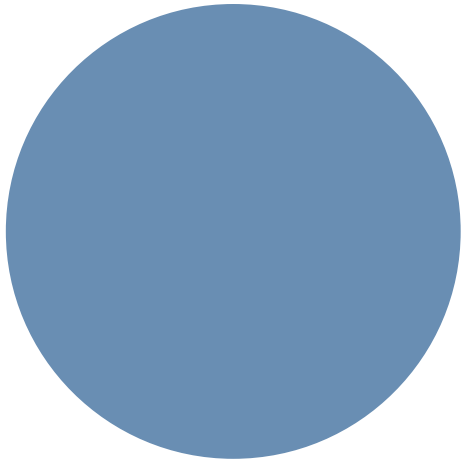
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-204	Salins des Landes	Non-FID

Storage Facility

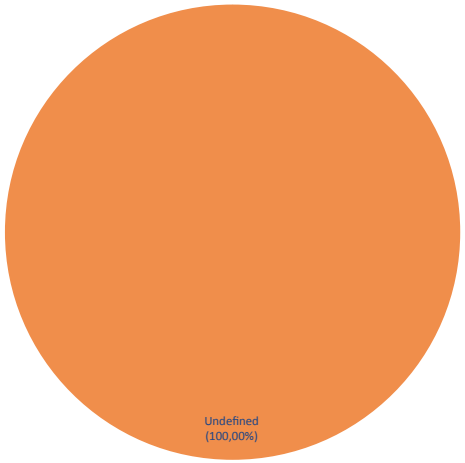
SPONSORS



GENERAL INFORMATION

Promoter	EdF
Operator	EDF
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Not yet
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2016 Q2
Construction	2016 Q3
Commissioning	2021 Q1
Last completed Phase :	Planned

TECHNICAL INFORMATION

Storage facility	Salins des Landes
Working volume (mcm)	+600,00
Injectability (mcm/d)	+10,42
Deliverability (mcm/d)	+20,16

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Salins des Landes	Yes	entry	114,62	Hub France(TIGF)	Storage France(TIGF)
	Yes	exit	221,76	Storage France(TIGF)	Hub France(TIGF)

DESCRIPTION OF THE PROJECT

Salins des Landes is a fast-cylce storage project in salt cavern located in South-West France

EXPECTED BENEFITS

Security of Supply, Market integration (France and Spain), N-1 National (In case of supply disruption, Salins des Landes will provide short-term deliverability to ensure demand is met), N-1 Regional (North-South West priority corridor), Back-up for renewables, Power-to-gas

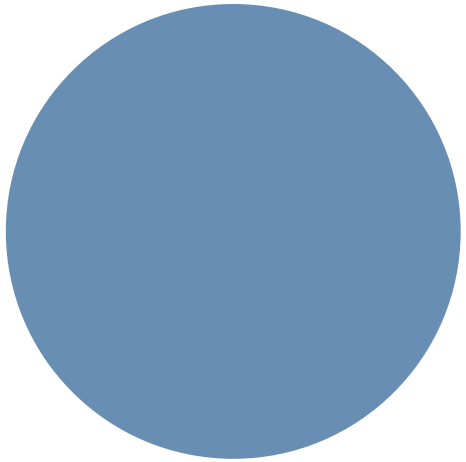
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-227	Fos Cavaou LNG Terminal Expansion	Non-FID

LNG Terminal

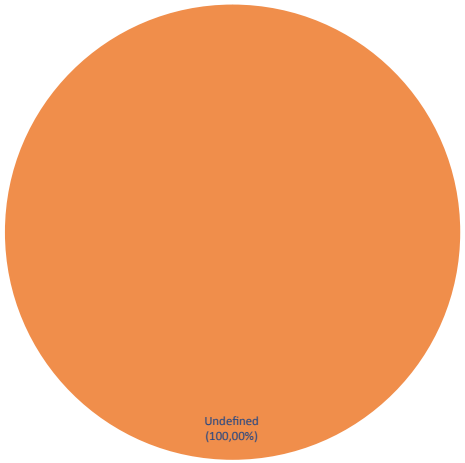
SPONSORS



GENERAL INFORMATION

Promoter	Elengy
Operator	Fosmax LNG
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.fosmax-lng.com

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2015 Q4
FID	2015 Q4
Construction	2016 Q2
Commissioning	2020 Q2
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Fos Cavaou LNG Terminal
Expected volume (bcm/y)	+8,25
Storage capacity (m3)	+220.000,00
Send-out (mcm/d)	+28,00
Ship size (m3)	270.000,00
Reloading ability ?	Yes

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Fos Cavaou	Yes	exit	308,00	LNG Terminals France(PEG South)	Hub France(PEG South)

DESCRIPTION OF THE PROJECT

The project aims to expand the LNG terminal capacity from 8.25 to 16.5 bcm/a through the construction of regasification units and storage tanks.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (France), N-1 Regional (France, Germany, Switzerland, Italy (Northern)), Back-up for renewables
Thanks to its location, Fos Cavaou LNG terminal is an excellent entry gate in Western Europe for LNG coming from the Mediterranean basin and the Middle East (which represent more than 45% of the world LNG production), toward the core of the European gas market in particular France, Germany as well as Switzerland and Northern Italy (through Switzerland). Indeed, LNG has the tremendous advantage of being able to be efficiently delivered at the nearest of the gas consumption areas, by optimizing pipeline and sea transportation. Moreover, the recent development of reloading services has significantly increased the fonctionalities of the LNG terminals, enabling them to offer possibilities equivalent to reverse flows, in addition to the classical uses.
From the Market Integration point of view, the project will strongly contribute to linking Northern and Southern European markets, through the hubs to which it give access in the North (France, Germany, Switzerland, Northern Italy), and through "flexible floating pipeline", ie ship tranfers, from and to the South (Spain, Italy, Greece, Malta in the future). In addition, the project will also enable to free up significant part of the already existing / under construction pipeline interconnection capacity between Spain and France, so that this capacity can be first and foremost utilized for short term trading.
The project will also contribute to:
- an increase of the competition,
- the development of shortsea LNG trading,
- the development of ECA (Emission Controlled Area) zones in the Northern part of the Mediterranean sea

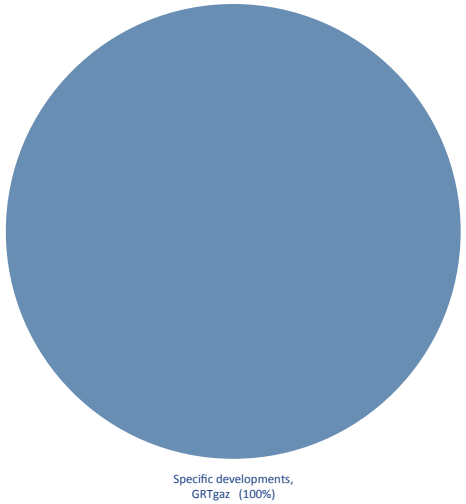
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-255	Fos Tonkin LNG expansion	Non-FID

Pipeline including CS

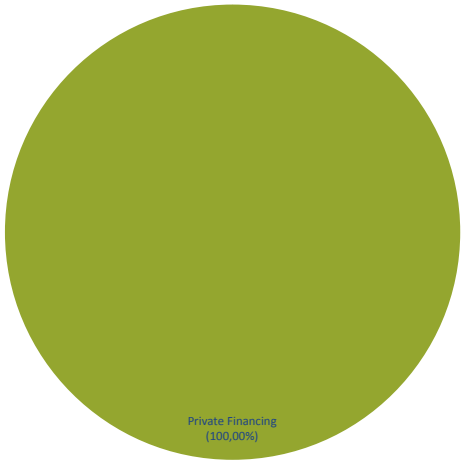
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	no
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2019
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Fos	Yes	entry	80,00	LNG Terminals France(PEG South)	Hub France(PEG South)

DESCRIPTION OF THE PROJECT

Only core system developments are needed for this expansion : they will depend on the other entry capacity increases in the South zone

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes, Back-up for renewables

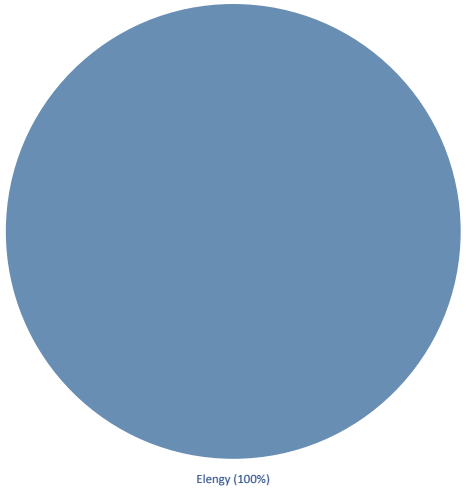
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-225	Montoir LNG Terminal Expansion	Non-FID

LNG Terminal

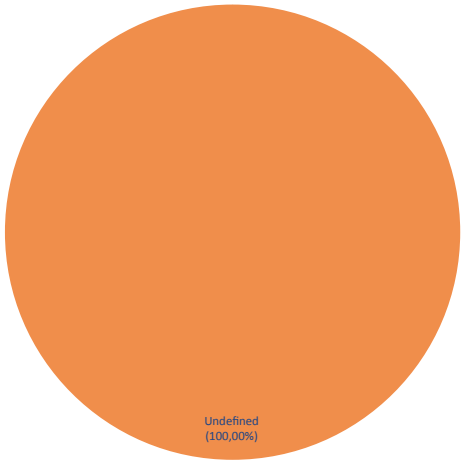
SPONSORS



GENERAL INFORMATION

Promoter	Elengy
Operator	Elengy
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.elengy.com/en/projects/montoir-extension.html

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2015 Q1
FID	2015 Q1
Construction	2015 Q2
Commissioning	2018 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Montoir LNG Terminal
Expected volume (bcm/y)	+6,50
Storage capacity (m3)	+190.000,00
Send-out (mcm/d)	+20,00
Ship size (m3)	265.000,00
Reloading ability ?	Yes

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Montoir de Bretagne	Yes	exit	220,00	LNG Terminals France(PEG North)	Hub France(PEG North)

DESCRIPTION OF THE PROJECT

The project aims to expand the LNG terminal capacity from 10 to 16.5 bcm/y through the construction of regasification units and storage tanks.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (France), N-1 Regional (France, Germany, Benelux countries, Switzerland, Italy (Northern)), Back-up for renewables,
Thanks to its location, Montoir LNG terminal is, from every points of view, one of the best entry gate in Western Europe for LNG coming from all over the world toward the core of the European gas market in particular France, Germany as well as Switzerland and Northern Italy (through Switzerland). In particular, the project is very well located to receive LNG from North America where LNG liquefaction should develop rapidly.
Indeed, LNG has the tremendous advantage of being able to be efficiently delivered at the nearest of the gas consumption areas, by optimizing pipeline and sea transportation.
Moreover, the recent development of reloading services has significantly increased the fonctionalities of the LNG terminals, enabling them to offer possibilities equivalent to reverse flows, in addition to the classical uses. The project will strongly contribute to linking Northern and Southern European markets, through the hubs to which it give access in the North (France, Germany, Benelux countries, Switzerland, Northern Italy), and through "flexible floating pipeline", ie ship tranfers, from and to the South (in particular Spain and Portugal). The project will also enable to free up significant part of the already existing / under construction pipeline interconnection capacity between Spain and France, so that this capacity can be first and foremost utilized for short term trading.
In addition to the above, the project will also contribute to (see below) :
- the reinforcement of the competition,
- the development of shortsea LNG trading,
- the development of ECA (Emission Controlled Area) zones on the Western Atlantic coast

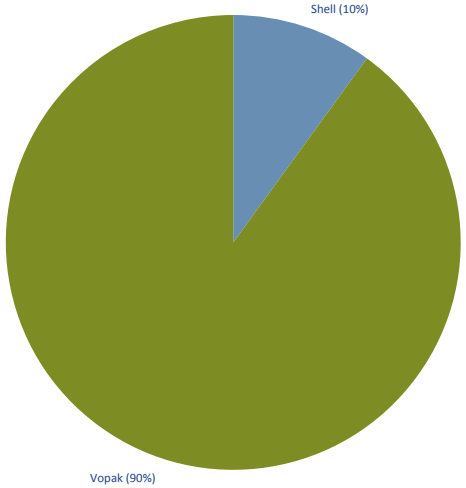
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-223	Fos Faster LNG Terminal	Non-FID

LNG Terminal

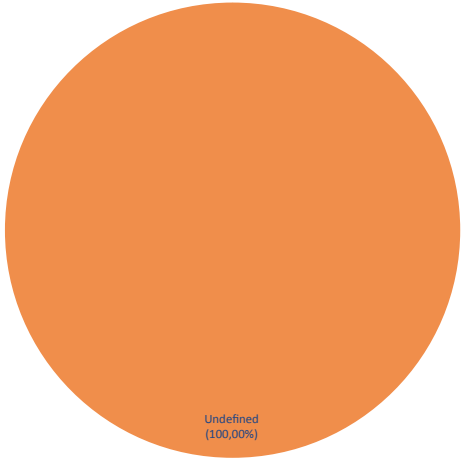
SPONSORS



GENERAL INFORMATION

Promoter	Fos Faster LNG
Operator	Faster
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.fosfaster.com

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Not yet
Exemption granted ?	Not yet
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2019
FID	2015
Construction	2019
Commissioning	2019
Last completed Phase :	Market test

TECHNICAL INFORMATION

Regasification facility	Fos Faster
Expected volume (bcm/y)	+8,00
Storage capacity (m3)	+360.000,00
Send-out (mcm/d)	+24,00
Ship size (m3)	270.000,00
Reloading ability ?	Yes

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Fos Faster	Yes	exit	264,00	LNG Terminals France(PEG South)	Hub France(PEG South)

DESCRIPTION OF THE PROJECT

The project aims to build a new LNG terminal at Fos-sur-Mer near Marseille in France with an intial 8bcm/a capacity (up to 16 bcm/a) allowing all type of LNG carriers.

Our projected terminal is dedicated to be an independent, opened and multi-customers terminal, including aa full range of small scale services

EXPECTED BENEFITS

Security of Supply, Market integration (South Of France), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (France), N-1 Regional, Back-up for renewables, to diversify the sources of supply, to debottleneck the South of France, to open an independent and multi customers terminal and thus contribute to the market opening, to support the SECA initiative in the Mediterranean Sea (small scale and LNG as transport fuel)

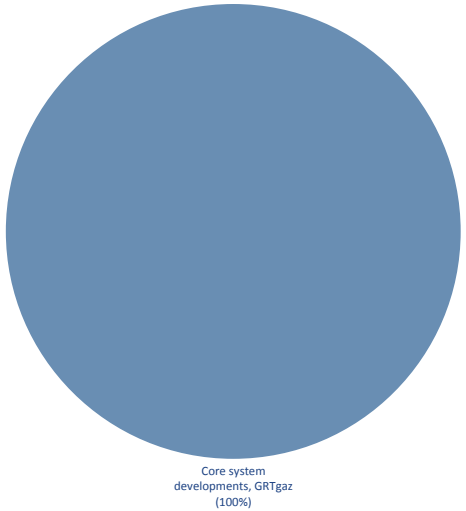
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-036	Arc de Dierrey	FID

Pipeline including CS

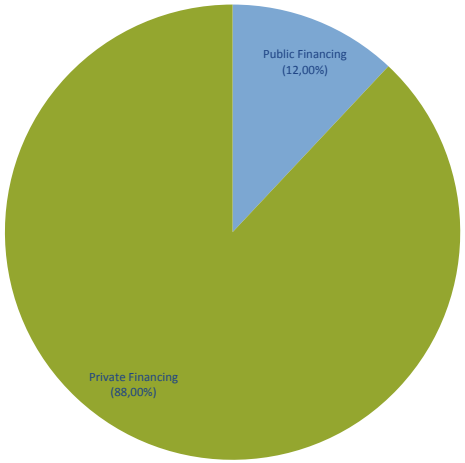
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2011 Q4
Construction	2015
Commissioning	2015 Q4
Last completed Phase :	FID

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+308,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

This core system development is necessary for several projects in the North (Dunkerque LNG terminal, Merger of the North and South zones, Exit capacity increase at Oltingue, Reverse capacity at Obergailbach, etc.)

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes

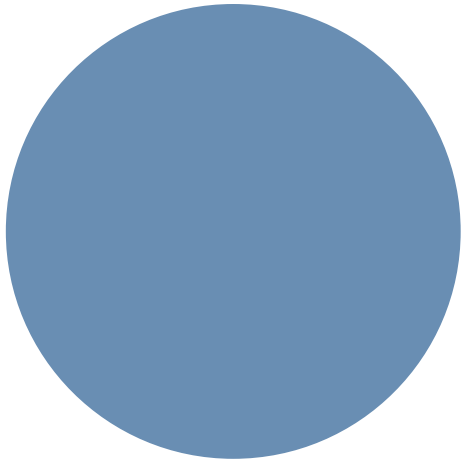
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-048	Developments for Montoir LNG terminal expansion at 12,5bcm - 1	Non-FID

Pipeline including CS

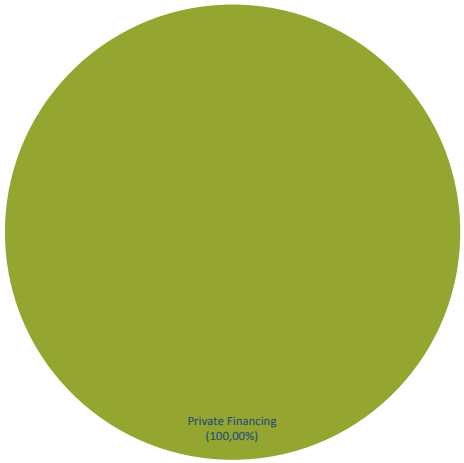
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2018
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+63,00
Total Compressor Power (MW)	+10,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Montoir de Bretagne	Yes	entry	55,00	LNG Terminals France(PEG North)	Hub France(PEG North)

DESCRIPTION OF THE PROJECT

This entry capacity increase at Montoir only needs specific developments.

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes

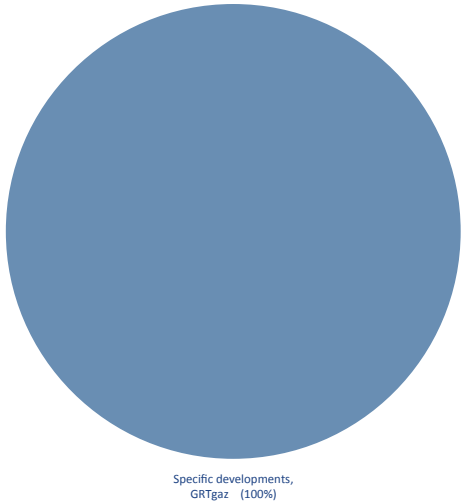
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-258	Developments for Montoir LNG terminal expansion at 16,5bcm - 2	Non-FID

Pipeline including CS

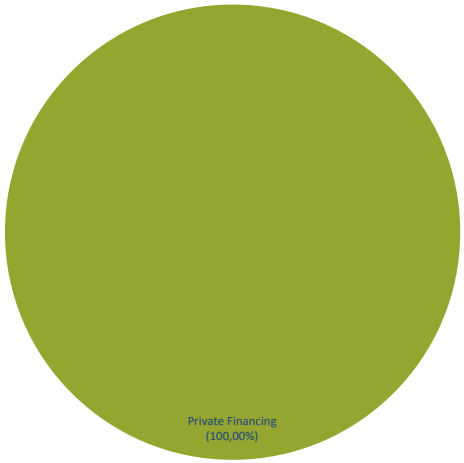
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2021
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+200,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Montoir de Bretagne	Yes	entry	125,00	LNG Terminals France(PEG North)	Hub France(PEG North)

DESCRIPTION OF THE PROJECT

This entry capacity increase at Montoir needs specific developments and core system developments (New line between Chemery and Dierrey).

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes

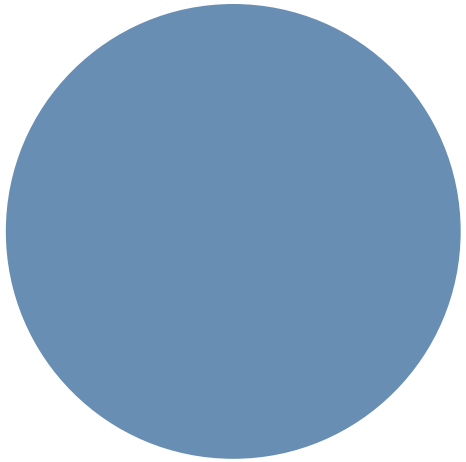
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-038	Developments for the Dunkerque LNG new terminal	FID

Pipeline including CS

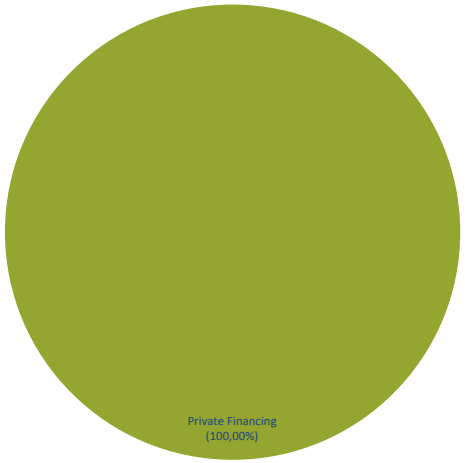
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2011 Q4
Construction	2015
Commissioning	2015 Q4
Last completed Phase :	FEED

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+142,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Dunkerque LNG / FRn	Yes	entry	250,00	Fork France(Dunkerque LNG)	Hub France(PEG North)

DESCRIPTION OF THE PROJECT

The connection of the terminal needs spécific transmission system developement and core system developements (Arc de Dierrey)

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes

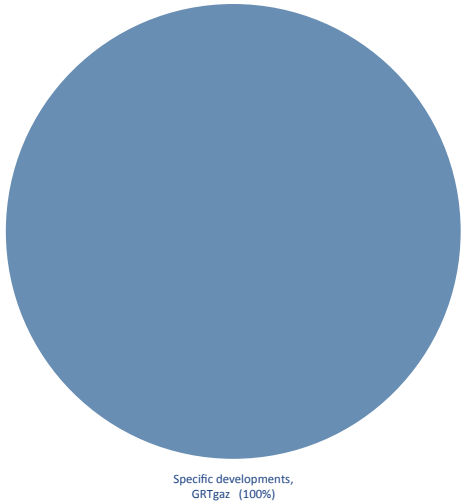
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-254	Developments for the Fos faster LNG new terminal	Non-FID

Pipeline including CS

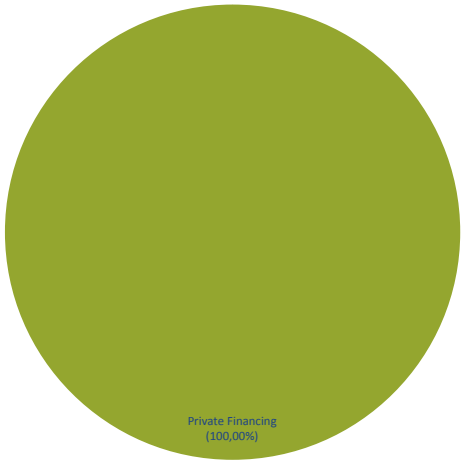
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2019
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+30,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Fos	Yes	entry	255,00	LNG Terminals France(PEG South)	Hub France(PEG South)
	No	entry	383,00	LNG Terminals France(PEG South)	Hub France(PEG South)

DESCRIPTION OF THE PROJECT

In addition to this specific connection, the reinforcement of the core transmission system is also needed (ERIDAN, East Lyonnais pipeline,Bourgogne and/or compressions depending on the developments already realized)

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes, Back-up for renewables

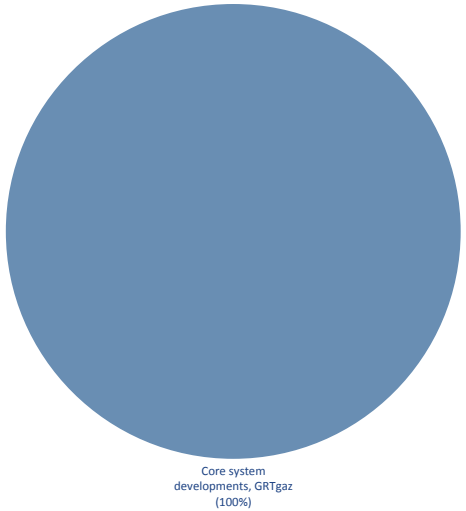
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-043	Developments to merge GRTgaz North and South zones	Non-FID

Pipeline including CS

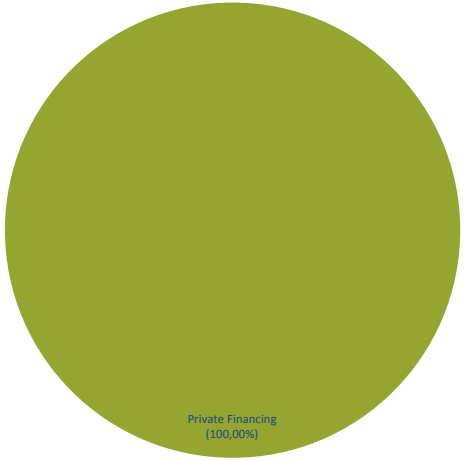
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2018
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+190,00
Total Compressor Power (MW)	+9,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Liaison Nord Sud	Yes	entry	999,00	Hub France(PEG North)	Hub France(PEG South)
	Yes	exit	999,00	Hub France(PEG North)	Hub France(PEG South)

DESCRIPTION OF THE PROJECT

In addition to the core transmission system reinforcement projects, Arc de Dierrey in the North and ERIDAN in the South, this merger needs the looping of the Bourgogne pipeline (between Etrez and Voisines)

EXPECTED BENEFITS

Security of Supply, Market integration

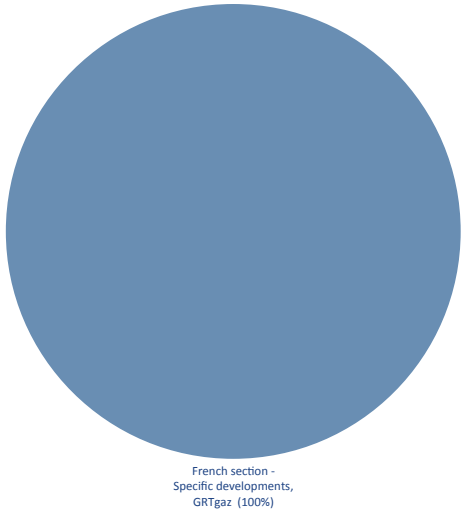
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-037	Entry capacity increase from Belgium to France	FID

Pipeline including CS

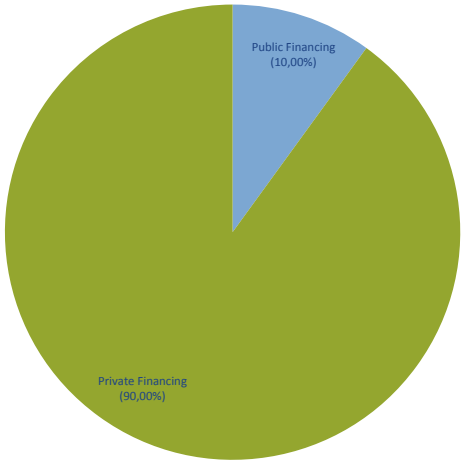
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2012
FID	2010 Q2
Construction	2013
Commissioning	2013 Q4
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+51,00
Total Compressor Power (MW)	+8,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Blarégnies (BE) / Taisnières (H) (FR)	Yes	entry	50,00	Hub Belgium	Hub France(PEG North)

DESCRIPTION OF THE PROJECT

Transmission systems development(s) in FR (and BE) to increase entry capacity in FR at Taisnières (from 590 to 640 GWh/d) - OS in 2009/2010

EXPECTED BENEFITS

Security of Supply, Market integration

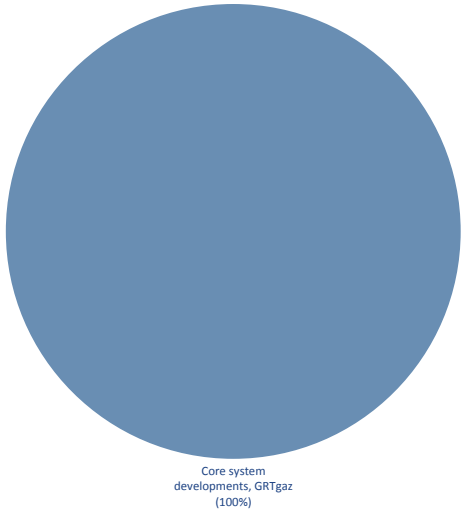
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-041	Eridan	Non-FID

Pipeline including CS

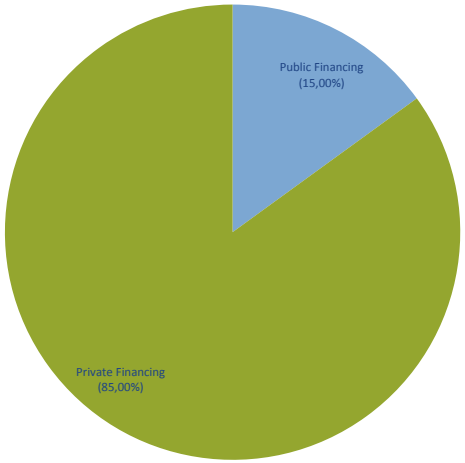
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2011
Construction	2016
Commissioning	2016
Last completed Phase :	FID

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+220,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

This development of the core transmission system, Saint Martin de Crau - Saint Avit pipeline, is necessary for entry/exit capacity increases in the South zone and to merge the North an South zones.

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes, Back-up for renewables

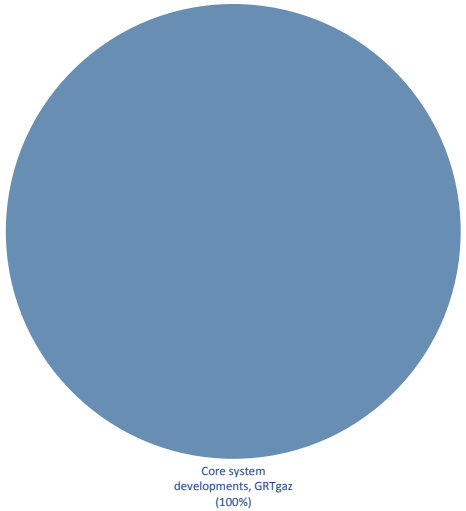
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
EEPR		

TRA-N-253	Est Lyonnais pipeline	Non-FID

Pipeline including CS

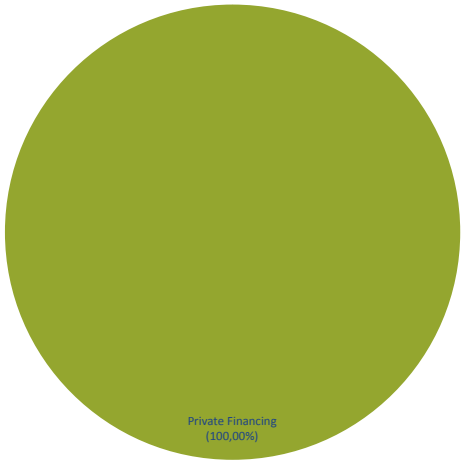
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2019
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+170,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Fos	No	entry	0,00	LNG Terminals France(PEG South)	Hub France(PEG South)

DESCRIPTION OF THE PROJECT

This development of the core transmision system is necessary to develop entry capacity in the South (Fos Projects, IP with spain, storages) and contribute to the South-North corridor in Western Europe

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes, Back-up for renewables

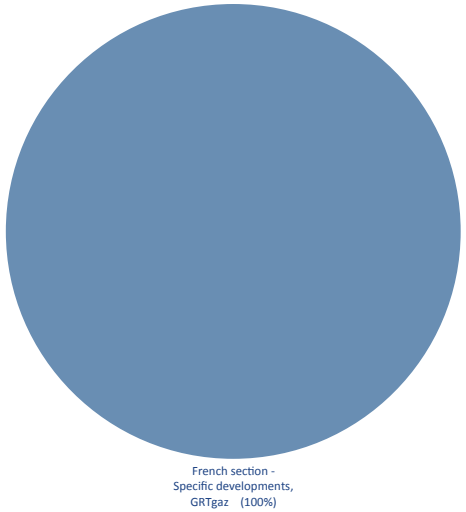
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-046	Exit capacity increase to CH at Oltingue	Non-FID

Pipeline including CS

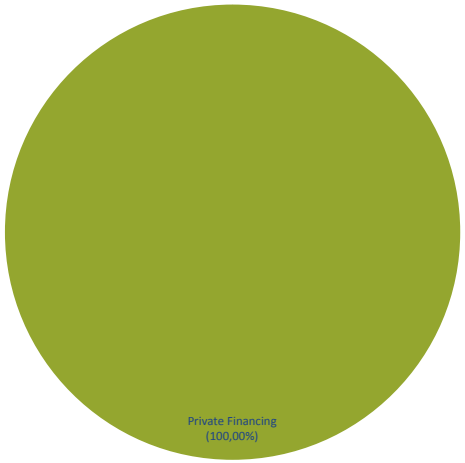
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2019
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	
Total Compressor Power (MW)	+30,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Oltingue (FR) / Rodersdorf (CH)	Yes	exit	100,00	Hub France(PEG North)	Hub Switzerland
	No	exit	40,00	Hub France(PEG North)	Hub Switzerland

DESCRIPTION OF THE PROJECT

Specific transmission system develpements to increase exit capacity to CH (design to confirm according to the market demand)

EXPECTED BENEFITS

Security of Supply, Market integration

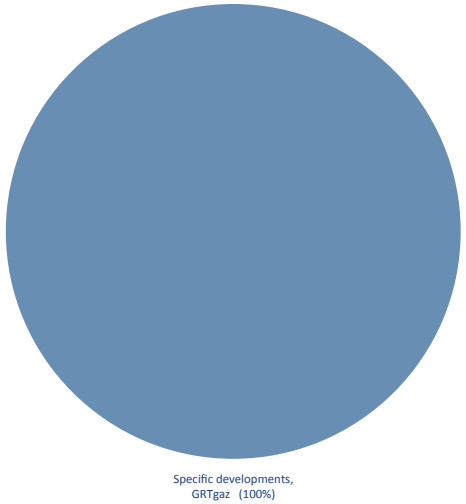
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-255	Fos Tonkin LNG expansion	Non-FID

Pipeline including CS

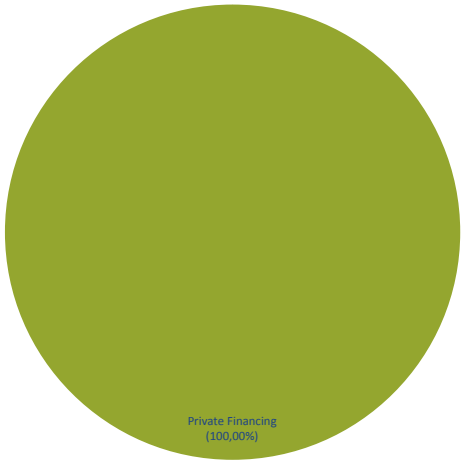
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	no
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2019
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Fos	Yes	entry	80,00	LNG Terminals France(PEG South)	Hub France(PEG South)

DESCRIPTION OF THE PROJECT

Only core system developments are needed for this expansion : they will depend on the other entry capacity increases in the South zone

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes, Back-up for renewables

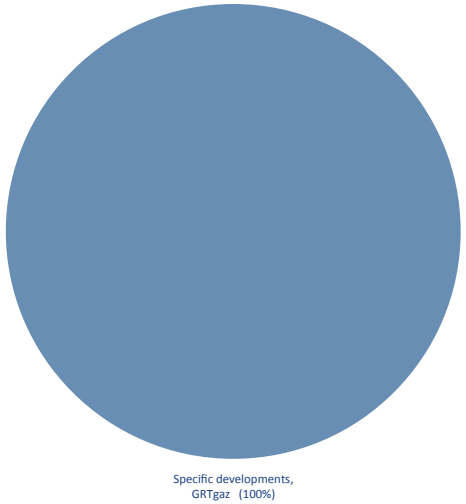
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-269	Fosmax (Cavaou) LNG expansion	Non-FID

Pipeline including CS

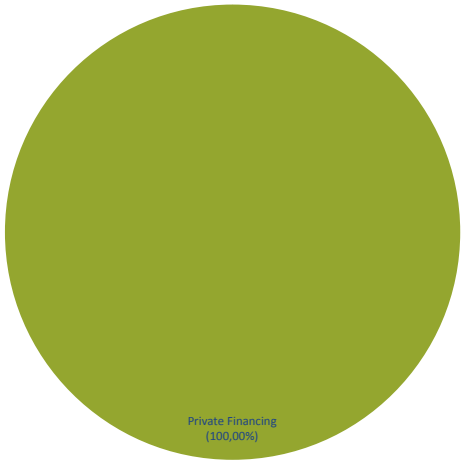
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	no
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2020
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Fos	Yes	entry	327,00	LNG Terminals France(PEG South)	Hub France(PEG South)

DESCRIPTION OF THE PROJECT

Only core system developments are needed for this expansion : they will depend on the other entry capacity increases in the South zone

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes, Back-up for renewables

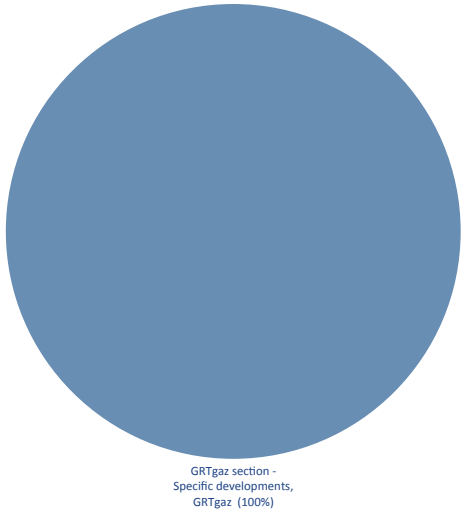
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-256	Iberian-French corridor: Eastern Axis-Midcat Project (CS Montpellier and CS Saint Martin de Crau)	Non-FID

Pipeline including CS

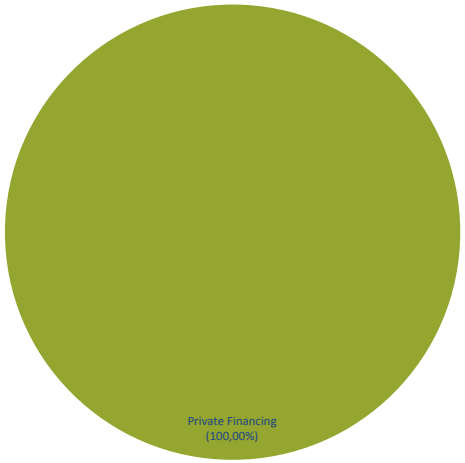
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	yes
IGAs	None
Web Link	www.grtgaz.com

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2020
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+30,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
PIR MIDI	Yes	entry	230,00	Hub France(TIGF)	Hub France(PEG South)
	Yes	exit	80,00	Hub France(PEG South)	Hub France(TIGF)

DESCRIPTION OF THE PROJECT

GRTgaz contribution to develop a new FR-ES IP on the Eastern axis -MidCat. In addition to these specific developments, the reinforcement of the core transmission system is also needed (ERIDAN, East Lyonnais pipeline, Bourgogne and/or compressions depending on the developments already realized)

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes, Back-up for renewables

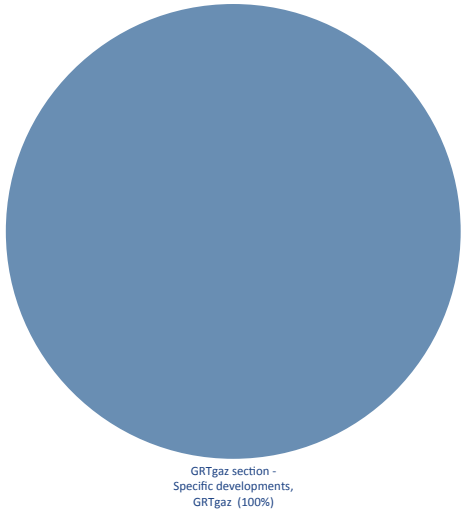
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-039	Iberian-French corridor: Western Axis (CS Chazelles)	FID

Pipeline including CS

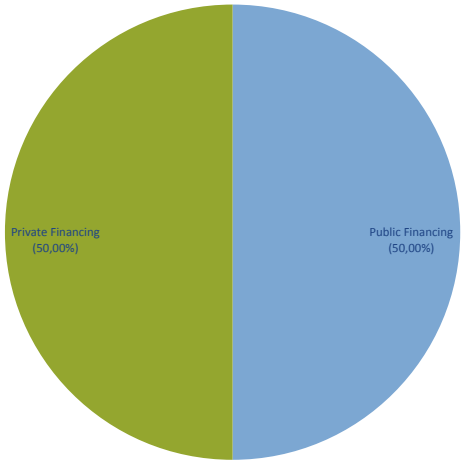
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.grtgaz.com#http://www.grtgaz.com#

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2012
FID	2010 Q1
Construction	2013
Commissioning	2013 Q1
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+36,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
PIR MIDI	Yes	entry	175,00	Hub France(TIGF)	Hub France(PEG South)
	Yes	exit	70,00	Hub France(PEG South)	Hub France(TIGF)

DESCRIPTION OF THE PROJECT

GRTgaz contribution to the transmission systems developments to develop FR-ES IP at Larrau and Biriatou, OS in 2009/2010

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes, Back-up for renewables

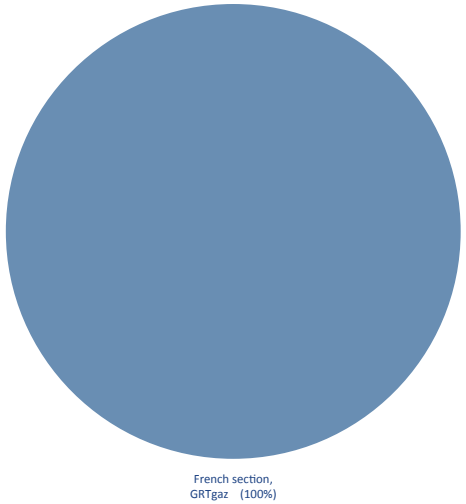
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-042	New interconnection IT-FR to connect Corsica	Non-FID

Pipeline including CS

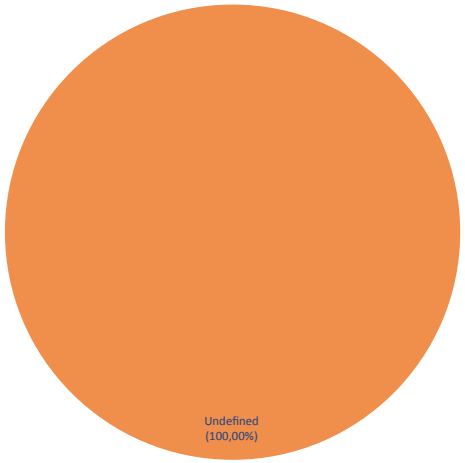
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2018
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+320,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Porto-Vecchio	Yes	entry	20,00	Interconnector GALSI	Hub France(Corsica)

DESCRIPTION OF THE PROJECT

This project is linked to the GALSI project and includes an offshore pipeline from Sardinia to Corsica and onshore pipelines in Corsica

EXPECTED BENEFITS

Security of Supply, Market integration, Back-up for renewables, Access to Natural gas for Corsica

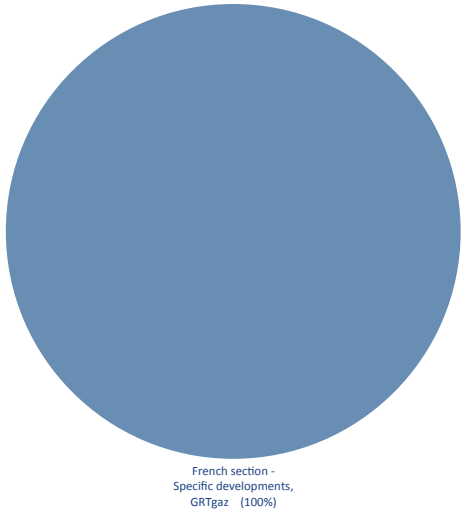
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Expected		

TRA-N-044	New interconnection to Luxembourg	Non-FID

Pipeline including CS

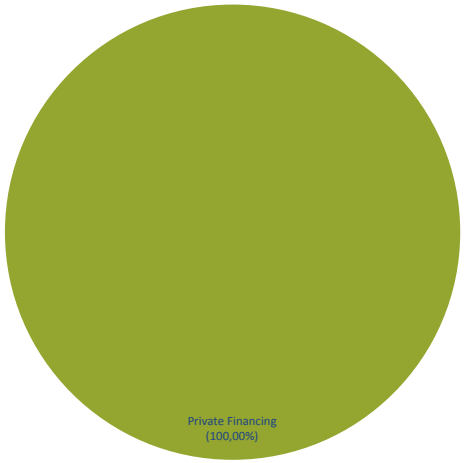
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2013
Construction	
Commissioning	2018
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+71,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
New IP France/Luxemburg	Yes	exit	40,00	Hub France(PEG North)	Hub Luxemburg
	Yes	exit	9,00	Hub France(PEG North)	Hub Luxemburg

DESCRIPTION OF THE PROJECT

Project design to finalised according to the OS

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes, Back-up for renewables

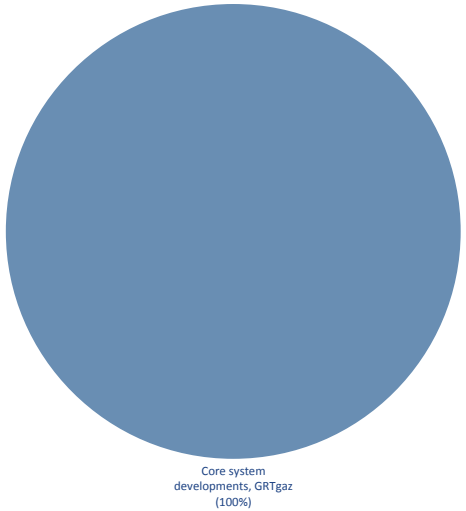
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-257	New line Between Chemery and Dierrey	Non-FID

Pipeline including CS

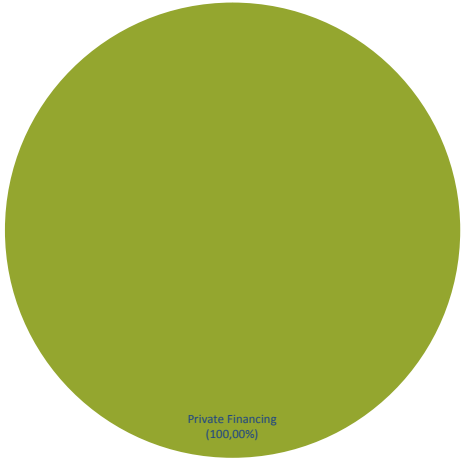
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2021
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+210,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

This core system development develop West-East capacity transit necessary for Montoir LNG terminal expansion2 and firm reverse flow to Germany

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes, Back-up for renewables

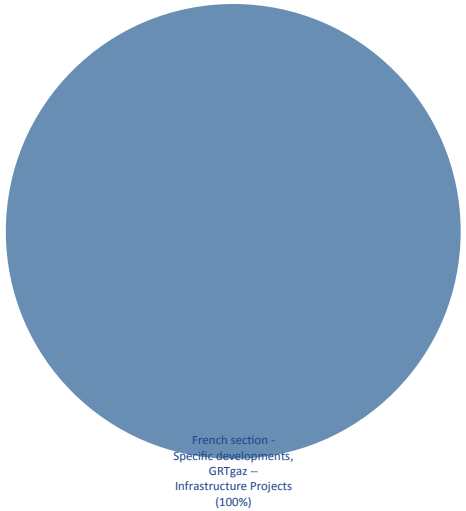
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-045	Reverse capacity from CH to FR at Oltingue	Non-FID

Pipeline including CS

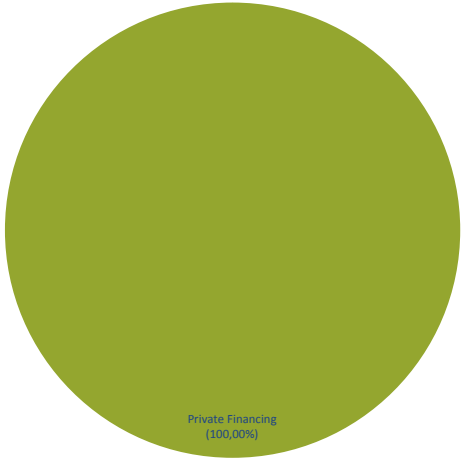
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.grtgaz.com#http://www.grtgaz.com#

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2018
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+87,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Oltingue (FR) / Rodersdorf (CH)	Yes	entry	100,00	Hub Switzerland	Hub France(PEG North)

DESCRIPTION OF THE PROJECT

Developements needed to create this reverse capacity

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes

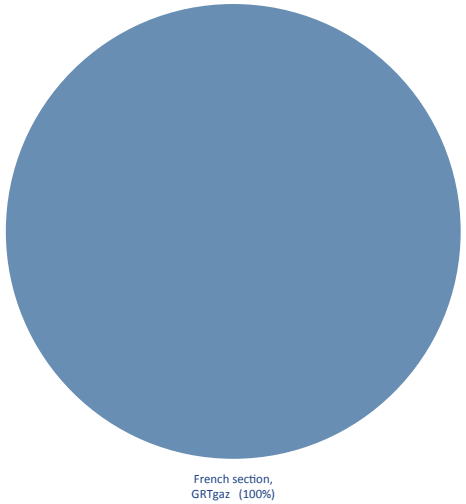
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-040	Reverse capacity from France to Belgium at Veurne	FID

Pipeline including CS

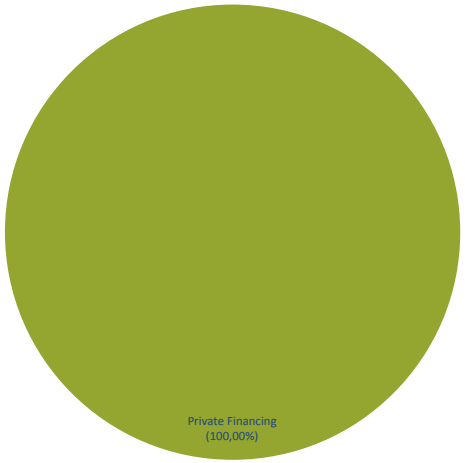
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2012 Q2
Construction	2015
Commissioning	2015 Q4
Last completed Phase :	FID

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+26,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
New IP FR-BE (FR) / Alveringem-Maldegem (BE)	Yes	exit	270,00	Hub France(PEG North)	Hub Belgium

DESCRIPTION OF THE PROJECT

New IP near Veurne between GRTgaz and Fluxys with capacity from FR to BE

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows

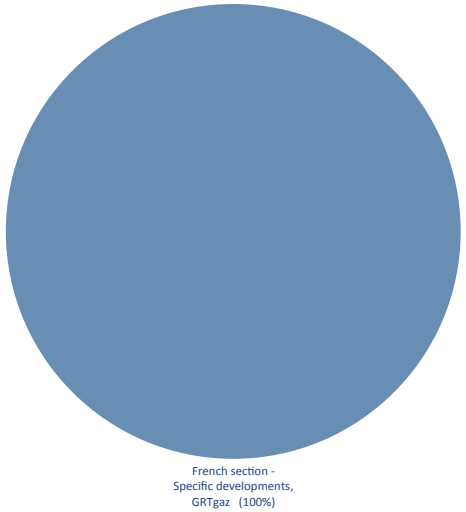
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-047	Reverse capacity from France to Germany at Obergailbach	Non-FID

Pipeline including CS

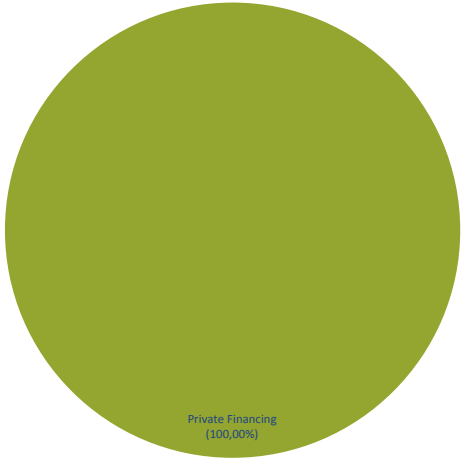
SPONSORS



GENERAL INFORMATION

Promoter	GRTgaz
Operator	GRTgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.grtgaz.com/en/home/major-projects/plan-decennal/10-year-development/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2018
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+60,00
Total Compressor Power (MW)	+42,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Medelsheim (DE) / Obergailbach (FR)	Yes	exit	100,00	Hub France(PEG North)	Hub Germany(NCG)
	No	exit	250,00	Hub France(PEG North)	Hub Germany
Medelsheim (DE) / Obergailbach (FR)	No	exit	180,00	Hub France(PEG North)	Hub Germany(NCG)

DESCRIPTION OF THE PROJECT

This project includes pipelines (including compression) and changes in the odorisation system (replacing odoristaion stations at the entry of the transmission system by odorisation stations at the entry of the regional networks)

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes

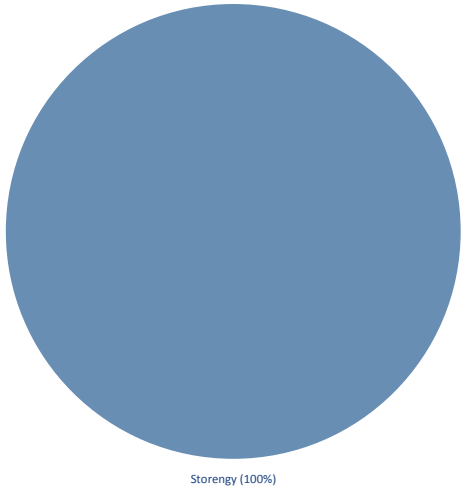
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-003	Etrez / Manosque	Non-FID

Storage Facility

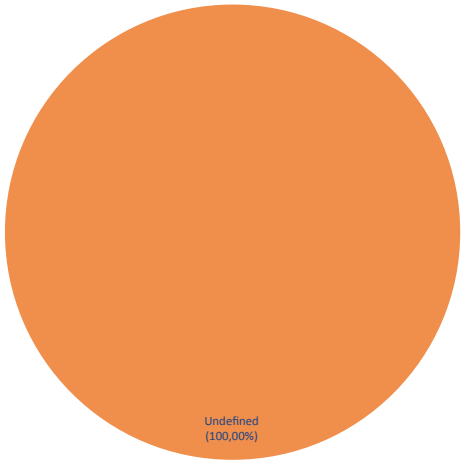
SPONSORS



GENERAL INFORMATION

Promoter	Storengy
Operator	Storengy
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2014
Last completed Phase :	Construction

TECHNICAL INFORMATION

Storage facility	Etrez /Manosque Gas Storage
Working volume (mcm)	+120,00
Injectability (mcm/d)	+2,00
Deliverability (mcm/d)	+7,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Etrez/Manosque	Yes	exit	77,00	Storage France(PEG South)	Hub France(PEG South)
	Yes	entry	22,00	Hub France(PEG South)	Storage France(PEG South)

DESCRIPTION OF THE PROJECT

Extension of the exisiting salt cavity storage facilities.

EXPECTED BENEFITS

Market Integration (Increase of competition)
The project will contribute to the increase of storage capacity in France, which will enhance security of supply and provide more flexibility to the market thus facilitating competition

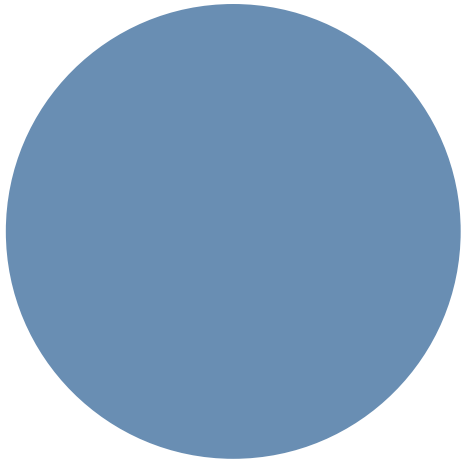
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-264	Etrez / Manosque - Stage 2	Non-FID

Storage Facility

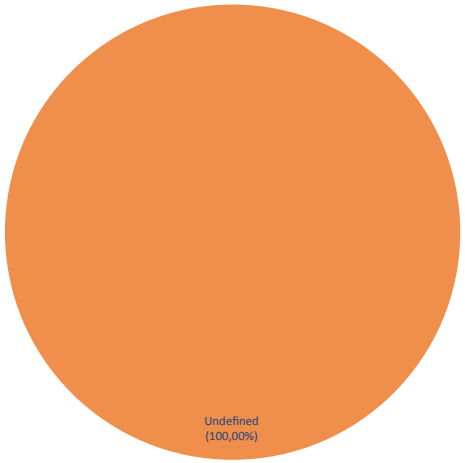
SPONSORS



GENERAL INFORMATION

Promoter	Storengy
Operator	Storengy
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022
Last completed Phase :	Construction

TECHNICAL INFORMATION

Storage facility	Etrez /Manosque Gas Storage
Working volume (mcm)	+480,00
Injectability (mcm/d)	+9,00
Deliverability (mcm/d)	+28,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Etrez/Manosque	Yes	exit	308,00	Storage France(PEG South)	Hub France(PEG South)
	Yes	entry	99,00	Hub France(PEG South)	Storage France(PEG South)

DESCRIPTION OF THE PROJECT

Extension of the exisiting salt cavity storage facilities.

EXPECTED BENEFITS

Market Integration (Increase of competition)
The project will contribute to the increase of storage capacity in France, which will enhance security of supply and provide more flexibility to the market thus facilitating competition

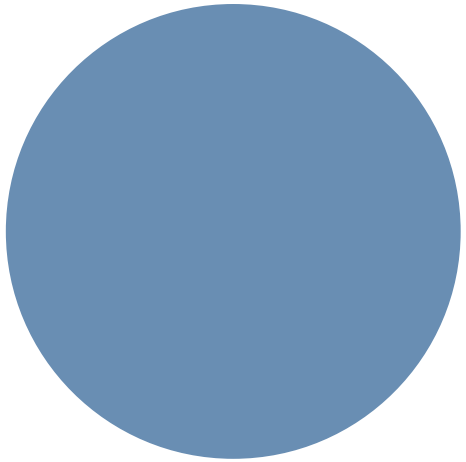
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-F-265	Hauterives - Stage 2	FID

Storage Facility

SPONSORS

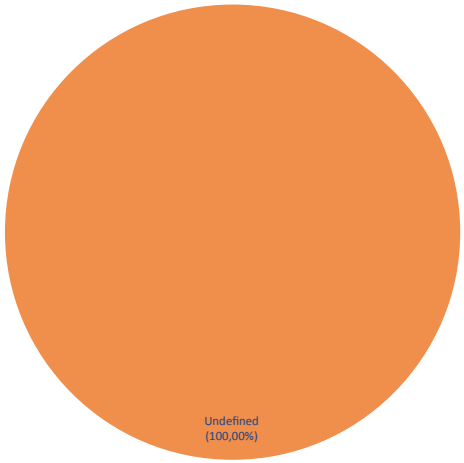


GENERAL INFORMATION

Promoter	Storengy
Operator	Storengy
TEN-E Project ?	Priority Project
Interested by PCI ?	No
IGAs	None
Web Link	

TEN-E Requests	Date of Request	Year Funding Granted
		2002

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2015 Q1
Last completed Phase :	Construction

TECHNICAL INFORMATION

Storage facility	Hauterives
Working volume (mcm)	+40,00
Injectability (mcm/d)	+0,80
Deliverability (mcm/d)	+3,20

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Hauterives	Yes	entry	8,80	Hub France(PEG South)	Storage France(PEG South)
	Yes	exit	35,20	Storage France(PEG South)	Hub France(PEG South)

DESCRIPTION OF THE PROJECT

Development of a new salt cavity storage.

EXPECTED BENEFITS

Security of Supply, Market integration

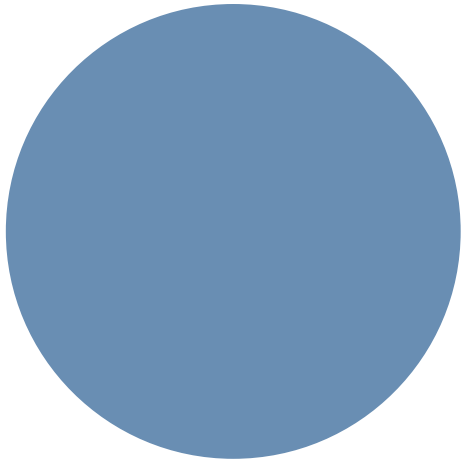
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-F-004	Hauterives Storage Project - Stage 1	FID

Storage Facility

SPONSORS

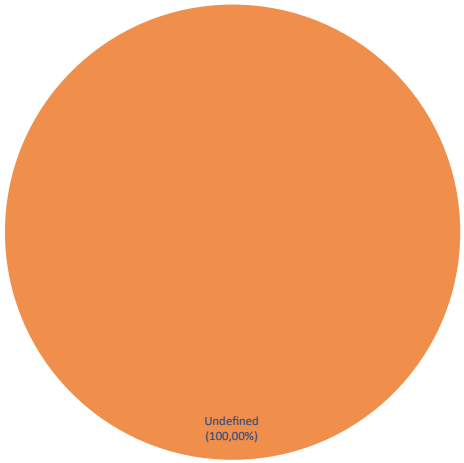


GENERAL INFORMATION

Promoter	Storengy
Operator	Storengy
TEN-E Project ?	Priority Project
Interested by PCI ?	No
IGAs	None
Web Link	

TEN-E Requests	Date of Request	Year Funding Granted
		2002

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2014 Q1
Last completed Phase :	Construction

TECHNICAL INFORMATION

Storage facility	Hauterives
Working volume (mcm)	+60,00
Injectability (mcm/d)	+1,20
Deliverability (mcm/d)	+4,80

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Hauterives	Yes	entry	13,20	Hub France(PEG South)	Storage France(PEG South)
	Yes	exit	52,80	Storage France(PEG South)	Hub France(PEG South)

DESCRIPTION OF THE PROJECT

Development of a new salt cavity storage.

EXPECTED BENEFITS

Security of Supply, Market integration

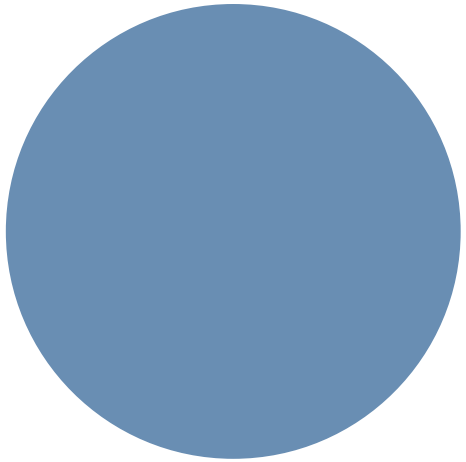
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-250	Artère de Guyenne (Phase B Girland Project)	FID

Pipeline including CS

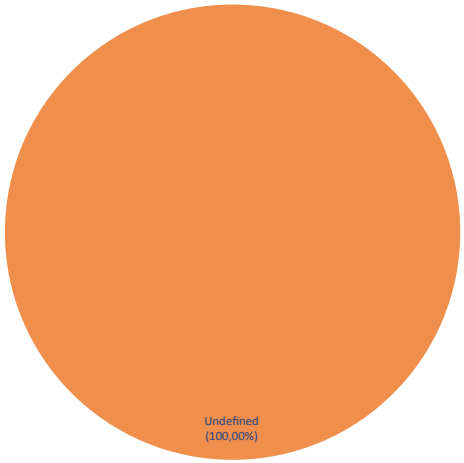
SPONSORS



GENERAL INFORMATION

Promoter	TIGF
Operator	TIGF
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.tigf.fr

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2010
Construction	
Commissioning	2013
Last completed Phase :	FEED

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+58,00
Total Compressor Power (MW)	+5,50
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
PIR MIDI	No	entry	185,00	Hub France(PEG South)	Hub France(TIGF)
	No	exit	180,00	Hub France(TIGF)	Hub France(PEG South)
PIR MIDI	Yes	exit	175,00	Hub France(TIGF)	Hub France(PEG South)
	Yes	entry	70,00	Hub France(PEG South)	Hub France(TIGF)

DESCRIPTION OF THE PROJECT

It's a DN 900 and 58 km long pipeline that conects the UGS of Lussagnet with Captieux with an additional compression at Sauveterre (that's not decided yet)

EXPECTED BENEFITS

Security of Supply

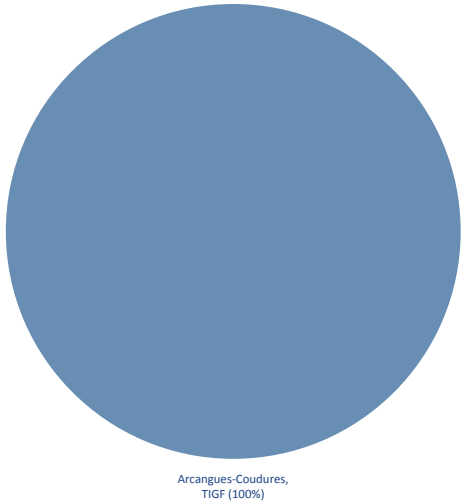
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-251	Artère de l'Adour (former Euskadour) (FR-ES interconnection)	FID

Pipeline including CS

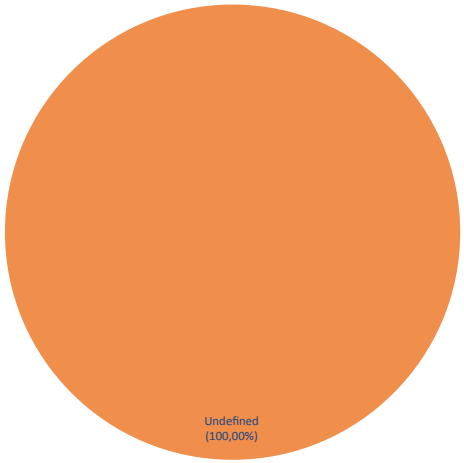
SPONSORS



GENERAL INFORMATION

Promoter	TIGF
Operator	TIGF
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.artere-adour-tigf.fr

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2015 Q4
Last completed Phase :	FEED

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+95,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Biriatou (FR) / Irun (ES)	Yes	entry	55,00	Hub Spain	Hub France(TIGF)
	Yes	exit	60,00	Hub France(TIGF)	Hub Spain

DESCRIPTION OF THE PROJECT

It's a 24" and 95 km long pipeline between Arcangues and Coudures that will allow to conect (using the existing infrastructure) the UGS of Lussagnet with the Spanish frontier.

EXPECTED BENEFITS

Security of Supply
This project will create the bidirectional gas flow between France and Spain by increasing the transport capacity

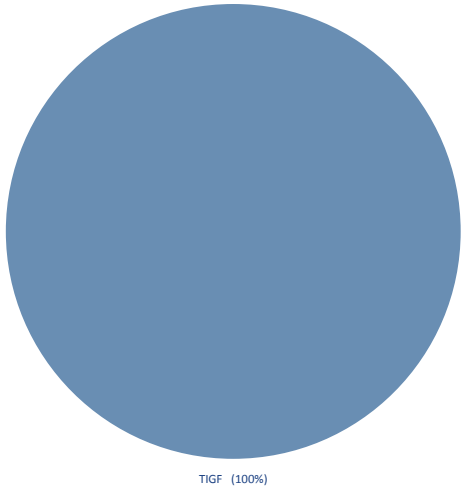
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-252	Iberian-French corridor: Eastern Axis-Midcat Project	Non-FID

Pipeline including CS

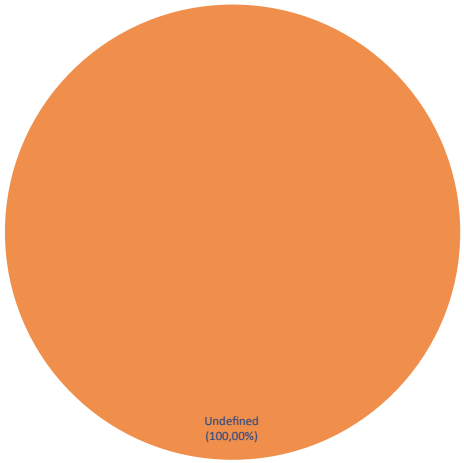
SPONSORS



GENERAL INFORMATION

Promoter	TIGF
Operator	TIGF
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.tigf.fr

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2020
Last completed Phase :	

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+148,00
Total Compressor Power (MW)	+10,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Le Perthus	Yes	entry	230,00	Hub Spain	Hub France(TIGF)
	Yes	exit	80,00	Hub France(TIGF)	Hub Spain

DESCRIPTION OF THE PROJECT

In the French side, it's composed by a 120 km long pipeline between the frontier (near Le Perthus) and the CS of Barbaira, the instalation of an aditional compression of 10 MW at Barbaira, and a 28 km long pipeline between Lupiac and Baran (Artère du Gascogne).

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional, Back-up for renewables

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

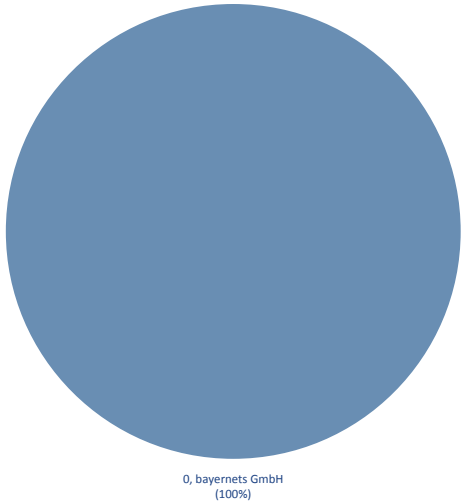
Germany

Nybro
Egtved
COPENHAGEN
Malmö
Dragør
Trelleborg
Stenlille
Avedøre
F3
NOGAT
NORPIPE
EUROPIPE
EUROPIPE II
Ellund
BALTIC PIPE
Domum
Nüttermoor
Emden
Krummhörn
Etzel*
Dornum
Kiel-Rönne
Greifswald
Świnoujście
Quarnstedt
NGT
Zuidwending I
Grijpskerk
Oude Statenzijl
Norg
Alkmaar
Vlieghuis
Bunde
Wardenburg
Oldenburg
Harsefeld
Kraak
Hamburg Reitbrook
Bremen-Lesum
Mockow
Szczecin
OPAL
NEL
RHG
Kalle
Uelsen
Emsbüren
Epe*
Nordhorn
Rehden
Drohne
Steinitz
VHP-GASPOOL-H
Peckensen
Lehrte
Hannover
Empelde
Berlin
Mallnow
Klenbaum
Buchholz
Rüdersdorf
TTF
Zevenaar
Winterswijk
Münster
Xanten
Dortmund
Essen
Stassfurt
Katharina
GERMANY
Kassel
Allmenhausen
Kirchheiligen
Bad Lauchstädt
Leipzig
Lasow
Obbicht
Bocholtz
Bilstchweiden
Stolberg
Behringen
Reckrod
Olbernhau
Deutschneudorf
Hora Svaté Kateřiny
MIDAL
TENP
LUX.
Remich
Stockstadt
Hähnlein
Frankenthal
Lampertheim
Sandhausen
VHP NCG-H
Eschenfelden
Waidhaus
PRAGUE
VOB
Háje
CZECH
Obergailbach
Medelsheim
Karlsruhe
Cerville
Stuttgart
MEGAL
GAZELLE
Veselí nad Lužnicí
Oberkappel
Bierwang
Burghausen
München
Wolfersberg
Inzenham-West
Schmidthausen
Pfronten
Kiefersfelden
Breitbrunn
Überackern
Linz
Schönkirchen
Thann
Puchkirchen
Altgelsbrunn
Haidach*
7 Fields
Innsbrück
Fronhofen-Trigonodus
Fallentor
Alsace Sud
Wallbach
Ottingue
Rodersdorf
Basel
Lindau
BERN
LIECHT.

TRA-N-241	MONACO section phase I (Burghausen-Finsing)	Non-FID

Pipeline including CS

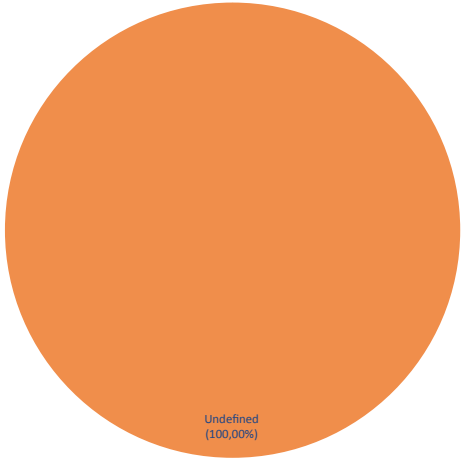
SPONSORS



GENERAL INFORMATION

Promoter	bayernets GmbH
Operator	bayernets GmbH
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	1
Web Link	www.bayernets.de/start_netzinformation_en.aspx?int_name=_73792

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not yet
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014 Q4
FID	
Construction	2017 Q4
Commissioning	2017 Q4
Last completed Phase :	FEED

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+90,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Tauerngasleitung / Austria	No	exit	0,00		Interconnector Tauerngas Leitung
Penta-West /Überackern	No	exit	0,00		Hub Austria
SÜDAL / Burghausen	No	exit	0,00		
Storage Haiming	No	exit	0,00		Hub Austria
Storage 7Fields	No	exit	0,00		

DESCRIPTION OF THE PROJECT

Pipeline project

EXPECTED BENEFITS

Security of Supply, Market integration, The MONACO project is divided in two phases: 1. Burghausen-Finsing and 2. Finsing-Amerdingen. The new pipeline is targeted to link areas of high demand in Germany and further westwards with liquid gas sources in and through Austria (Überackern/Burghausen at the Austrian border, Penta-West, WAG, MEGAL, Hub CEGH Baumgarten) and of Italy (via TGL pipeline, planned to deliver mainly LNG gas northwards). The project increases physical flow capacity between these market areas and therefore contributes to market integration, as well as accelerating competition through the increased diversification of sources and diversification of routes.

The project will also provide better access of large Austrian gas reservoirs Haidach and 7 UGS to Germany and further westwards. It thus enhances the resilience of the gas network, shows positive impact on the remaining flexibility of the system and therefore contributes to Security of Supply in Europe.

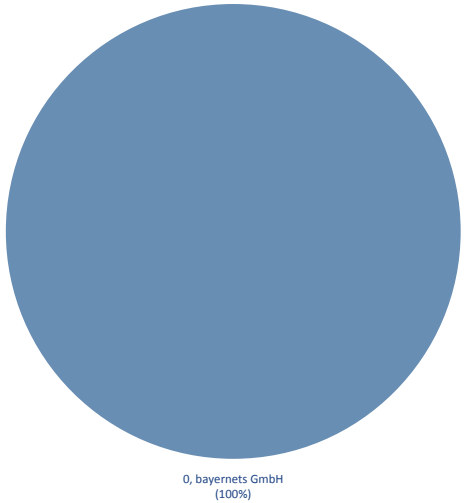
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-240	MONACO section phase II (Finsing-Amerdingen)	Non-FID

Pipeline including CS

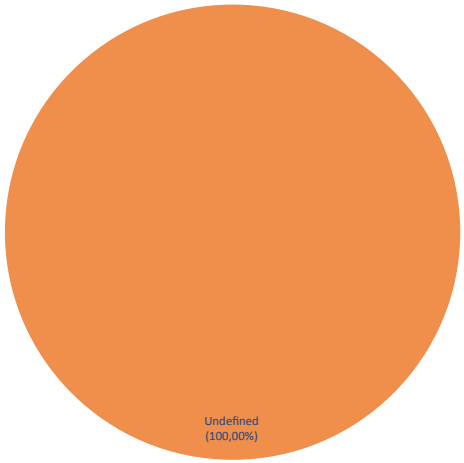
SPONSORS



GENERAL INFORMATION

Promoter	bayernets GmbH
Operator	bayernets GmbH
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	1
Web Link	www.bayernets.de/start_netzinformation_en.aspx?int_name=_73792

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not yet
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2016 Q4
FID	
Construction	2018 Q4
Commissioning	2018 Q4
Last completed Phase :	Market test

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+130,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Penta-West /Überackern	No	exit	0,00		Hub Austria
Tauerngasleitung / Austria	No	exit	0,00		Interconnector Tauerngas Leitung
SÜDAL / Burghausen	No	exit	0,00		
Storage 7Fields	No	exit	0,00		
Storage Haiming	No	exit	0,00		Hub Austria

DESCRIPTION OF THE PROJECT

Pipeline project

EXPECTED BENEFITS

Security of Supply, Market integration, The MONACO project is divided in two phases: 1. Burghausen-Finsing and 2. Finsing-Amerdingen. The new pipeline is targeted to link areas of high demand in Germany and further westwards with liquid gas sources in and through Austria (Überackern/Burghausen at the Austrian border, Penta-West, WAG, MEGAL, Hub CEGH Baumgarten) and of Italy (via TGL pipeline, planned to deliver mainly LNG gas northwards). The project increases physical flow capacity between these market areas and therefore contributes to market integration, as well as accelerating competition through the increased diversification of sources and diversification of routes.

The project will also provide better access of large Austrian gas reservoirs Haidach and 7 UGS to Germany and further westwards. It thus enhances the resilience of the gas network, shows positive impact on the remaining flexibility of the system and therefore contributes to Security of Supply in Europe.

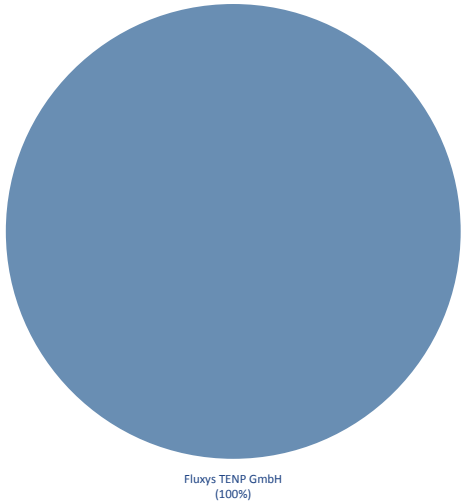
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-207	Bretella	Non-FID

Pipeline including CS

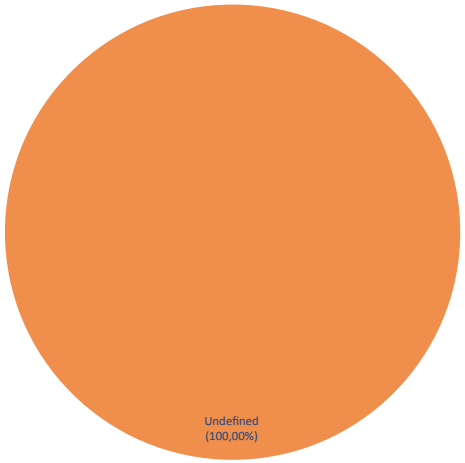
SPONSORS



GENERAL INFORMATION

Promoter	Fluxys
Operator	Fluxys TENP GmbH
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014 Q3
FID	2013 Q1
Construction	2014 Q1
Commissioning	2016 Q4
Last completed Phase :	Market test

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+11,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+260,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Eynatten (BE) // Lichtenbusch / Raeren (DE) (Fluxys TENP)	Yes	entry	260,00	Hub Belgium	Hub Germany(NCG)
	Yes	exit	260,00	Hub Germany(NCG)	Hub Belgium

DESCRIPTION OF THE PROJECT

Building an additional pipeline between Stolberg and Eynatten to increase bi-directional flow from the TENP system to Fluxys Belgium. This is part of a high case scenario of the Reverse Flow project.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, Back-up for renewables

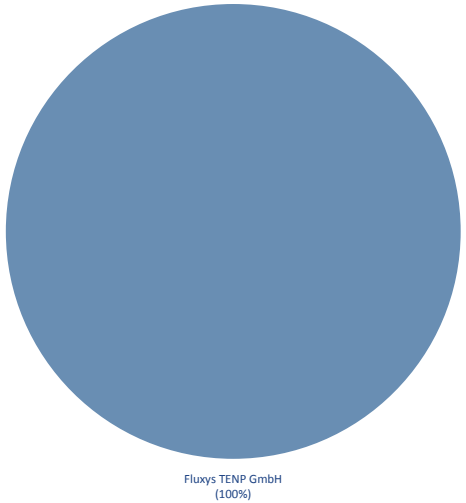
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-208	Reverse Flow TENP Germany	Non-FID

Pipeline including CS

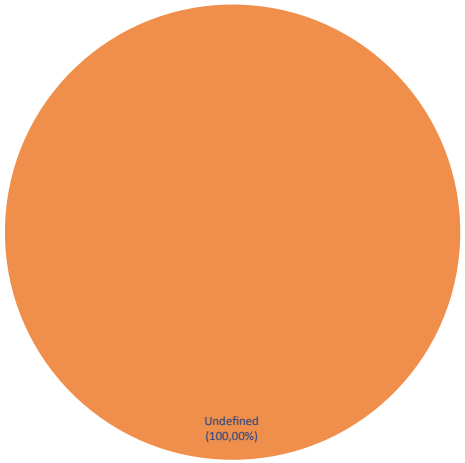
SPONSORS



GENERAL INFORMATION

Promoter	Fluxys
Operator	Fluxys TENP GmbH
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014 Q3
FID	2013 Q1
Construction	2014 Q1
Commissioning	2016 Q4
Last completed Phase :	Market test

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+252,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Wallbach (Fluxys TENP/FluxSwiss)	Yes	entry	252,00	Hub Switzerland	Hub Germany(NCG)
Stolberg	Yes	exit	108,00	Hub Germany(NCG)	Hub Germany(Gaspool)

DESCRIPTION OF THE PROJECT

Reversing the TENP pipeline to be able to source gas from the south (Italy) into the north of Europe. This project will reverse compressor stations and will add compression capacity in Stolberg.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, Back-up for renewables

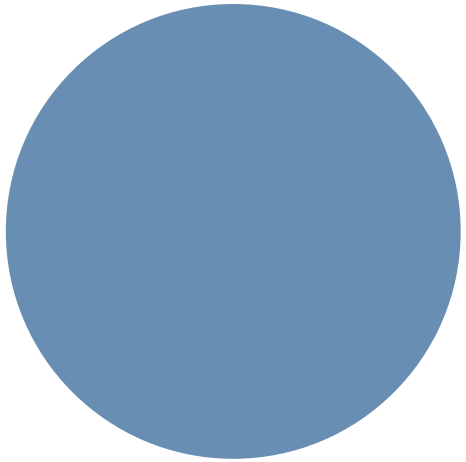
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-249	Extension of GASCADE grid in the context of the Nord Stream (on-shore) project	Non-FID

Pipeline including CS

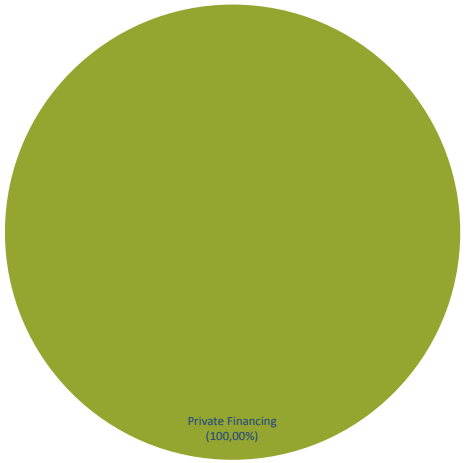
SPONSORS



GENERAL INFORMATION

Promoter	GASCADE Gastransport GmbH
Operator	GASCADE Gastransport GmbH
TEN-E Project ?	Project of European Interest
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.gascade.de

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	0
Considered Tariff Regime	0
Applied for Exemption ?	0
Exemption granted ?	0
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2012 Q4
FID	
Construction	2013 Q4
Commissioning	2014 Q1
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+105,00
Total Compressor Power (MW)	+61,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Bunde (DE) / Oude Statenzijl (H) (NL) (GASCADE)	Yes	exit	285,00	Hub Germany(Gaspool)	Hub Netherlands
Eynatten (BE) // Lichtenbusch / Raeren (DE) (GASCADE)	Yes	exit	100,00	Hub Germany(Gaspool)	Hub Belgium

DESCRIPTION OF THE PROJECT

Construction of approximately 105 km pipelines (mainly loops) and increase of compressor stations power (about 61 MW) to enhance capacity of existing pipelines.

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of routes, Extension of transport capacity of Russian gas to the West, Integration of Nord Stream off- and on-Shore in the European gas infrastructure

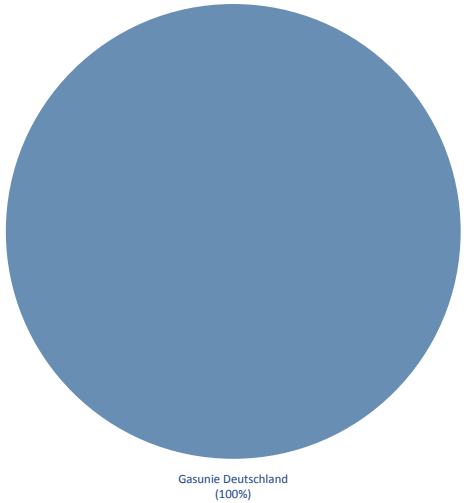
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-231	Extension of existing gas transmission capacity in the direction to Denmark - 1. Step	FID

Pipeline including CS

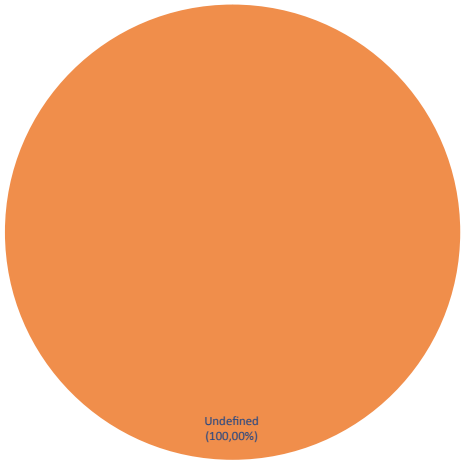
SPONSORS



GENERAL INFORMATION

Promoter	Gasunie Deutschland Transport Services GmbH
Operator	Gasunie Deutschland Transport Services GmbH
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	www.gasunie.de

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2014 Q4
Last completed Phase :	Construction

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+15,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Ellund (GUD)	Yes	exit	50,81	Hub Germany(Gaspool)	Hub Denmark

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration
Better connection of the gas hubs (TTF in the Netherlands and market area GASPOOL in Germany); Compensation of the depletion of Danish gas fields and better connection of gas hubs; Connection of new storages to the GUD-grid.

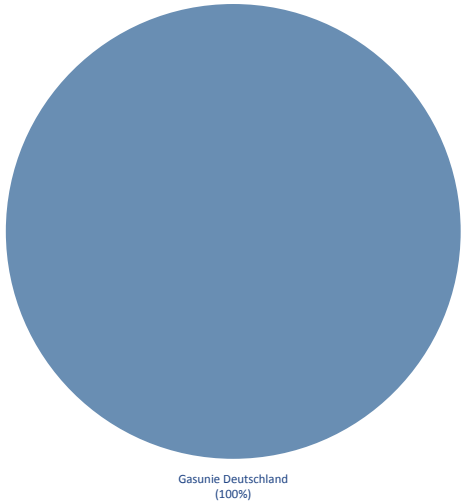
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-232	Extension of existing gas transmission capacity in the direction to Denmark - 2. Step	Non-FID

Pipeline including CS

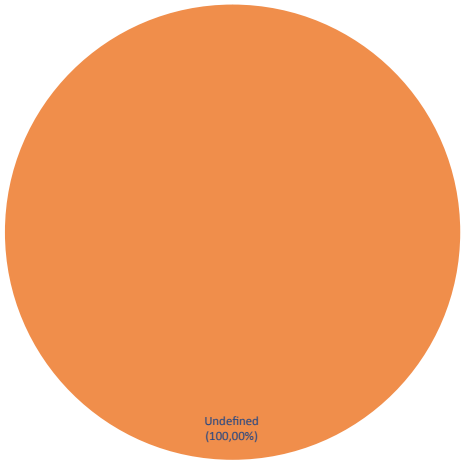
SPONSORS



GENERAL INFORMATION

Promoter	Gasunie Deutschland Transport Services GmbH
Operator	Gasunie Deutschland Transport Services GmbH
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	www.gasunie.de

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2015 Q4
Last completed Phase :	Construction

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+63,50
Total Compressor Power (MW)	+16,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Ellund (GUD)	Yes	exit	40,56	Hub Germany(Gaspool)	Hub Denmark

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration
Better connection of the gas hubs (TTF in the Netherlands and market ared GASPOOL in Germany); Compensation of the depletion of Danish gas fields and better connection of gas hubs; Connection of new storages to the GUD-grid.

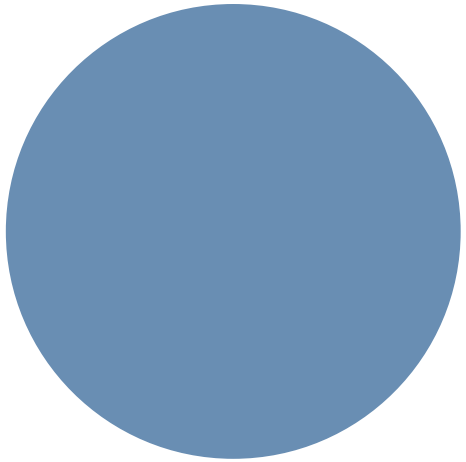
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-244	Stepwise change-over to physical H-gas operation of L-gas networks	Non-FID

Pipeline including CS

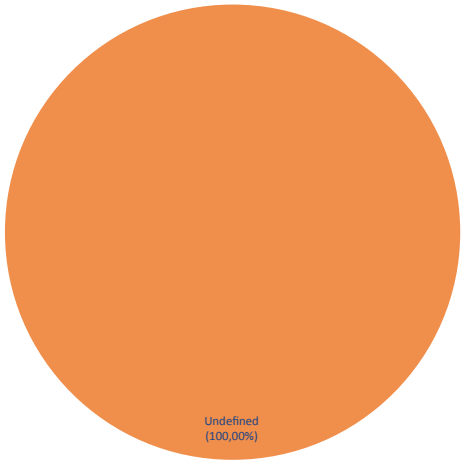
SPONSORS



GENERAL INFORMATION

Promoter	Open Grid Europe GmbH
Operator	Open Grid Europe GmbH
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.open-grid–europe.com

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	
Considered Tariff Regime	
Applied for Exemption ?	
Exemption granted ?	
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2020
Construction	
Commissioning	2020
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Stepwise change-over to physical H-gas operation of L-gas networks (due to decreasing L-gas supply)

EXPECTED BENEFITS

Security of Supply, Market Integration (Increase of competition)
A decline in availability of L-gas necessitates action.
Open Season 2008: The project prioritisation process has been carried out in a non-discriminatory manner based on criteria suggested by BNetzA. It takes into account the factors competition, security of supply, as well as network efficiency. Capacities were allotted to new market entrants. North-south and west-east de-bottlenecking strengthens security of supply.
Future projects: The overall economic benefit of a physical change-over from L (low calorific) to H-gas (high calorific) is higher than permanent conversion. Furthermore, enabling access of storage and gas fired power stations to the network necessitates investments. These measures also serve both market integration and security of supply.

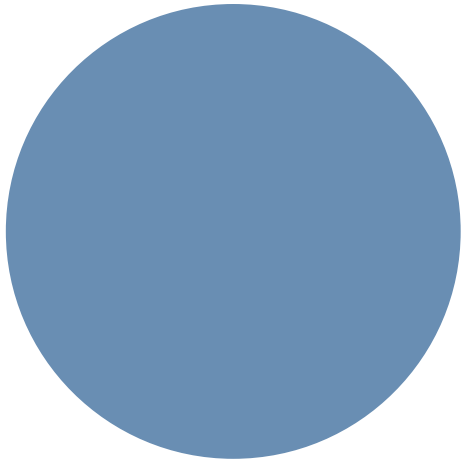
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-243	System enhancements, including the connection of gas-fired power plants, storages and the integration of power to gas facilities	Non-FID

Pipeline including CS

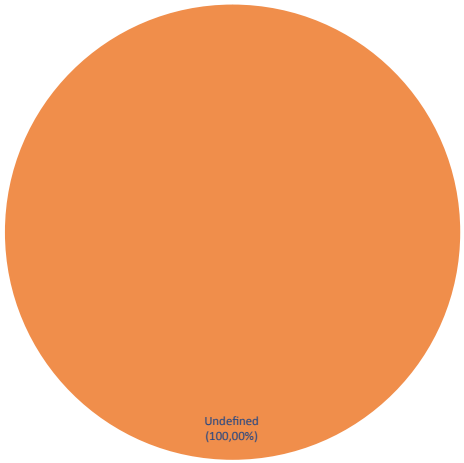
SPONSORS



GENERAL INFORMATION

Promoter	Open Grid Europe GmbH
Operator	Open Grid Europe GmbH
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.open-grid–europe.com

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	
Considered Tariff Regime	
Applied for Exemption ?	
Exemption granted ?	
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2020
Construction	
Commissioning	2020
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Extension of the gas grid infrastructure according to the outcomes of the German Network Development Plan in line with demand forecasts and the optimisation of the overall economy, including the expansion and reversion of compressor stations and a feasibility study on the integration of power to gas facilities into the transmission system.

EXPECTED BENEFITS

Security of Supply, Market integration (), Back-up for renewables, Power-to-gas, Energy turnaround: stabilisation and better interlinkage with power grid, back-up for renewable energies

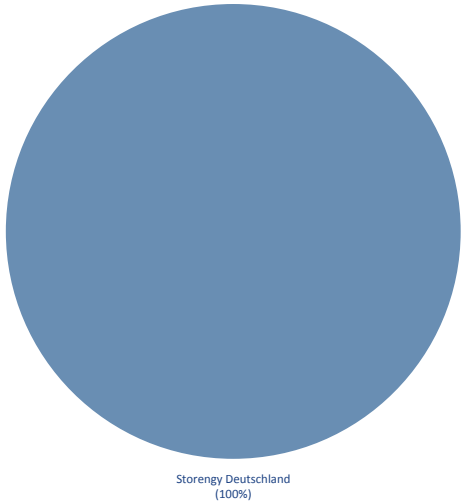
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-049	Behringen Gas Storage	Non-FID

Storage Facility

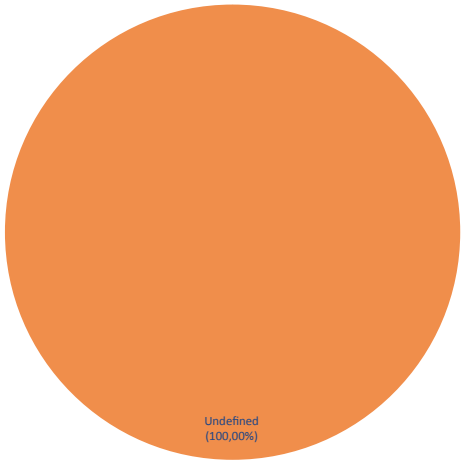
SPONSORS



GENERAL INFORMATION

Promoter	Storengy
Operator	Storengy Deutschland GmbH
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Storage facility	Behringen Gas Storage
Working volume (mcm)	+1.000,00
Injectability (mcm/d)	+7,00
Deliverability (mcm/d)	+14,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Behringen	Yes	exit	154,00	Storage Germany	Hub Germany(Gaspool)
	Yes	entry	77,00	Hub Germany(Gaspool)	Storage Germany

DESCRIPTION OF THE PROJECT

Development of a new storage facility in a depleted gas field.

EXPECTED BENEFITS

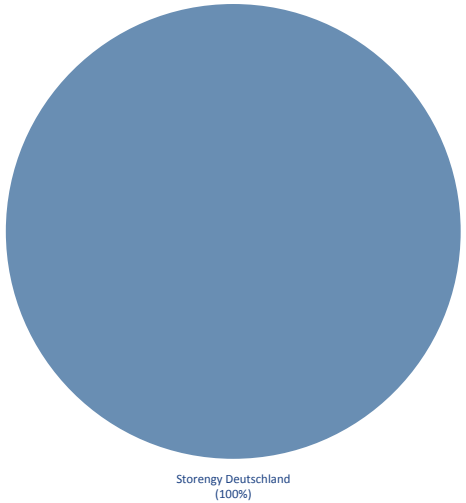
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-001	Harsefeld	Non-FID

Storage Facility

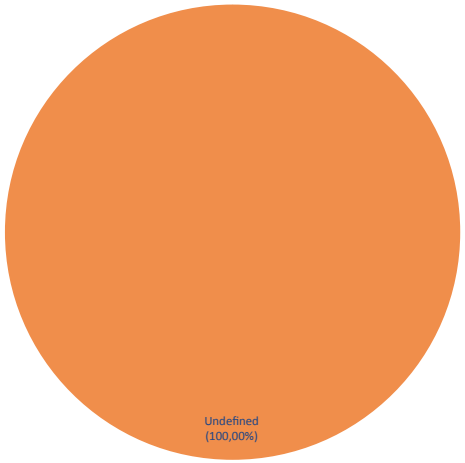
SPONSORS



GENERAL INFORMATION

Promoter	Storengy
Operator	Storengy Deutschland GmbH
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2019 Q2
Last completed Phase :	Planned

TECHNICAL INFORMATION

Storage facility	Harsefled Gas Storage
Working volume (mcm)	+120,00
Injectability (mcm/d)	+3,60
Deliverability (mcm/d)	+3,60

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Harsefeld	Yes	exit	39,60	Storage Germany	Hub Germany(Gaspool)
	Yes	entry	39,60	Hub Germany(Gaspool)	Storage Germany

DESCRIPTION OF THE PROJECT

Extension of the existing salt cavity storage facility in Germany

EXPECTED BENEFITS

SoS, Market Integration (Increase of competition)
The project will contribute to the increase of storage capacity in France, which will enhance security of supply and provide more flexibility to the market thus facilitating competition.

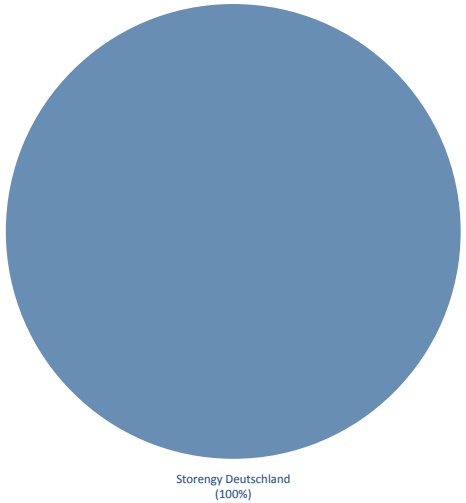
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-005	Peckensen Gas Storage	Non-FID

Storage Facility

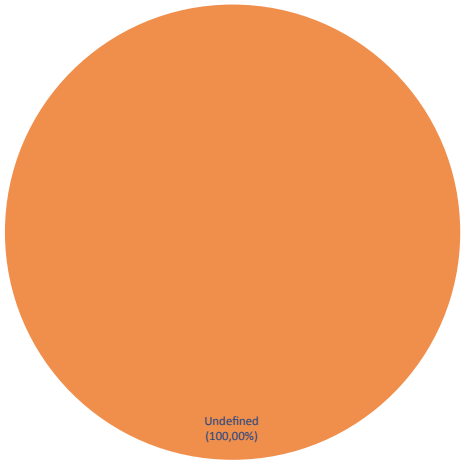
SPONSORS



GENERAL INFORMATION

Promoter	Storengy
Operator	Storengy Deutschland GmbH
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2017 Q2
Last completed Phase :	Construction

TECHNICAL INFORMATION

Storage facility	Peckensen Storage
Working volume (mcm)	+280,00
Injectability (mcm/d)	+3,00
Deliverability (mcm/d)	+10,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Peckensen	Yes	entry	33,00	Hub Germany(Gaspool)	Storage Germany
	Yes	exit	110,00	Storage Germany	Hub Germany(Gaspool)

DESCRIPTION OF THE PROJECT

Extension of the existing salt cavity gas storage.

EXPECTED BENEFITS

Security of Supply, Market integration (Western and Central Europe), Diversification of routes, N-1 National (Germany), N-1 Regional (Western and Central Europe), Back-up for renewables, Apart from the benefits listed above, the projects will contribute to increased flexibility of the system which will have a positive impact on both market integration and security of supply. Thanks to its location (on the link between the NGC market area and the Gaspool market area), the project will have a positive expected influence on price convergence and arbitrage opportunities.

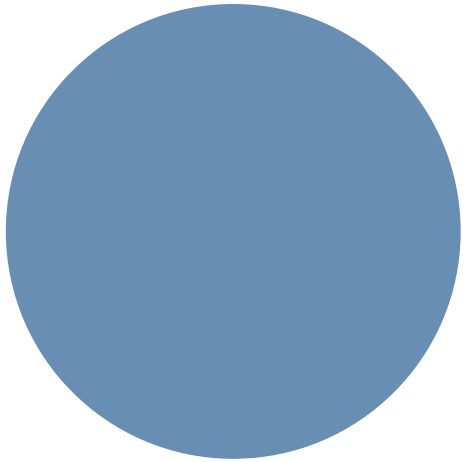
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-228	Nordschwarzwaldleitung	Non-FID

Pipeline including CS

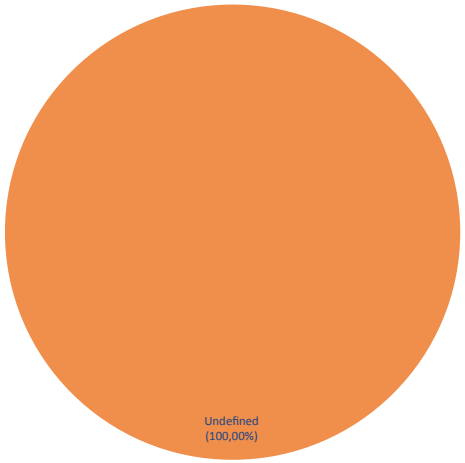
SPONSORS



GENERAL INFORMATION

Promoter	terranets bw GmbH
Operator	terranets bw GmbH
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2016
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+70,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+8,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

pipeline between Au am Rhein, coupling to TENP and Leonberg/Stuttgart

EXPECTED BENEFITS

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

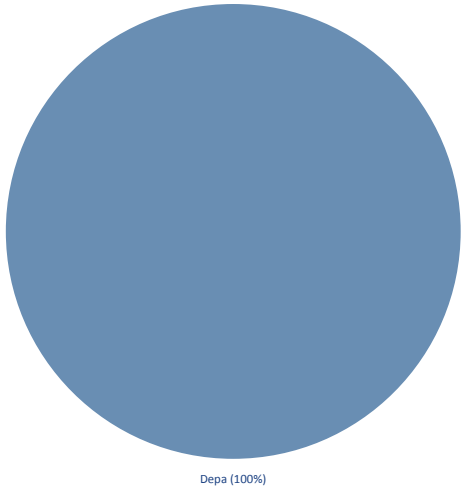
Greece

Chiren
Dimitrovgrad
SOFIA
BULGARIA
Burgas
Nabucco-West
ITB
Malkodar
Stara Zagora
UNMI
KOSOVO
Pristina
Dupnitsa
South Stream
Zidilovo
SKOPJE
FYRO
MACEDONIA
IGB
Petrich
Kula
Sidirokastron
Xanthi
Drama
Komotini
Kipi
Alexandropoulis
Alexandropoulis LNG
Kilkis
Kavala
Aegean LNG
Thessaloniki
TIRANA
TAP
ALBANIA
Katerini
IGI
South Stream
Thesprotia
Larissa
Volos
Aegean
Sea
EAST MED
Lamia
GREECE
Halkida
Thiva
ATHENS
Revithoussa
MEGALOPOLI
Ionian
Sea
from Algeria
TRANS-MEDITERRANEAN GAS PIPELINE
from Algeria
CRETA
Marmara Ereglisi
Tekirdag
Marmara Ereglisi
Karacabey
Canakkale
Çan
Ezine
Balikesir
Aliaga
Manisa
Turgutlu
Izmir
Aydin
EAST MED
diterranean Sea

LNG-N-129	Aegean LNG Import Terminal	Non-FID

LNG Terminal

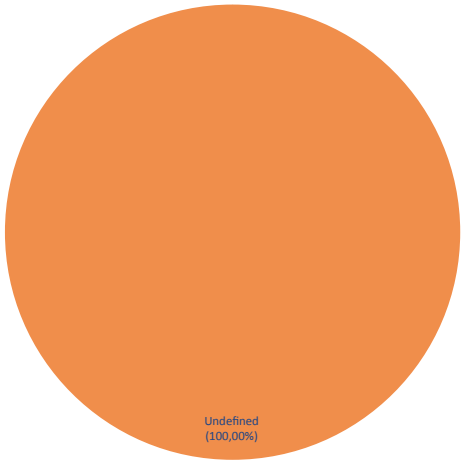
SPONSORS



GENERAL INFORMATION

Promoter	DEPA S.A.
Operator	DESFA S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Not yet
Exemption granted ?	Not yet
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014 Q1
FID	2014 Q1
Construction	2016 Q1
Commissioning	2016 Q1
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Regasification facility is integrated at the FSRU
Expected volume (bcm/y)	+5,00
Storage capacity (m3)	+170.000,00
Send-out (mcm/d)	+14,00
Ship size (m3)	150.000,00
Reloading ability ?	Yes

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Aegean LNG	Yes	entry	154,00	LNG Terminals Greece	Hub Greece

DESCRIPTION OF THE PROJECT

The LNG import terminal will be a FSRU, located at the North-Eastern (Northern Aegean) area of Greece, with a capacity of 3-5 bcm/y. It will supply LNG directly Greece, Bulgaria and Romania.

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, N-1 National, Back-up for renewables, Power-to-gas
Being located in the North of Greece provides more balanced LNG supply in the country than the existing Revithousa terminal. The upgrading of the pipline network could be facilitated by creating an additional access point in this particular geographical area. Will make available small quantities LNG for industrial/commercial applications and for use it as a transportation fuel for road, rail and marine applications. The availability of LNG in the South-Eastern Balkan area will increase the use of Natural Gas for electricity production and other big industrial applications, reducing substantially the GHG emissions. As a LNG storage facility, the project will respond to daily increases in demand (short term resilience).

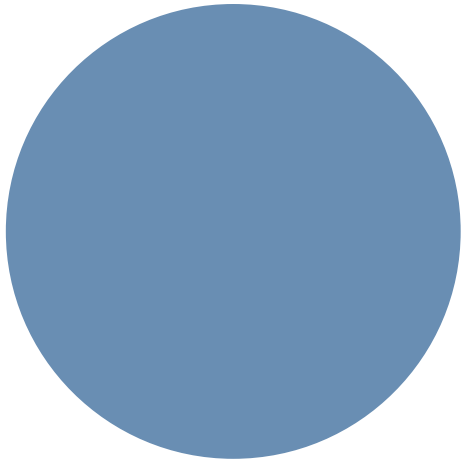
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-189	East Med	Non-FID

Pipeline including CS

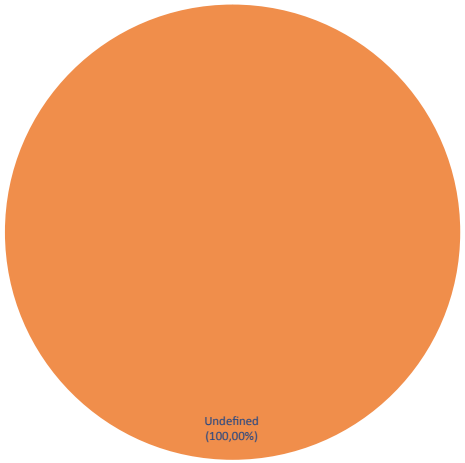
SPONSORS



GENERAL INFORMATION

Promoter	DEPA S.A.
Operator	Future Greek Trans-Med TSO
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Not yet
Exemption granted ?	Not yet
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014 Q3
FID	2014 Q4
Construction	2017 Q3
Commissioning	2017 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+3.250,00
Total Compressor Power (MW)	+780,00
Maximum Capacity (GWh/d)	+237,00
Expected Load Factor	1,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Interconnector CY-GR (Trans-Med)	Yes	exit	29,00	Hub Greece	Hub Cyprus
	Yes	entry	237,00	Hub Cyprus	Hub Greece

DESCRIPTION OF THE PROJECT

An offshore natural gas pipeline connecting the offshore natural gas fields in Levantine Basin (Cyprus, Israel) to South Eastern Europe (Bulgaria) or to Italy via Greece

EXPECTED BENEFITS

Security of Supply, Market integration (Cyrpus, Greece, Italy, Bulgaria, Romania, Hungary, FYROM,
Serbia, Albania, BiH, Montenegro), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Cyprus, Greece, Italy, Bulgaria), N-1 Regional (South Eastern Europe region), Back-up for renewables
The main objective of the project is to capitalise on the recent offshore discoveries of natural gas in the Eastern Mediterranean.
As a direct result the pipeline will constitute a supply source for Europe which diversifies the supply source, the supply route and the counterparts to Europe with a capacity of around 8-9bcma. Furthermore, the project aims to avoid other transit countries which are part of the current Southern Gas Corridor options and further minimise the security of supply risk.
The diversification of supply source and route will enhance significantly the security of supply of Europe, specifically affecting the Southern Gas Corridor Group, the NSI South Eastern and Central Europe Group and the NSI Western Europe Group.
The project will promote the integration of the market and gas to gas competition.
The additional quantities from East Mediterranean and the alternative route will be the perfect complement to the existing options of the Southern Gas Corridor.
Furthermore the project will alleviate the isolation of at least one MS (i.e. Cyprus) as well as possibly contribute to the alleviation of isolations within a MS (as an example the pipeline may allow the opportunity to alleviate the isolation of Crete from the rest of the Greek national gas grid).

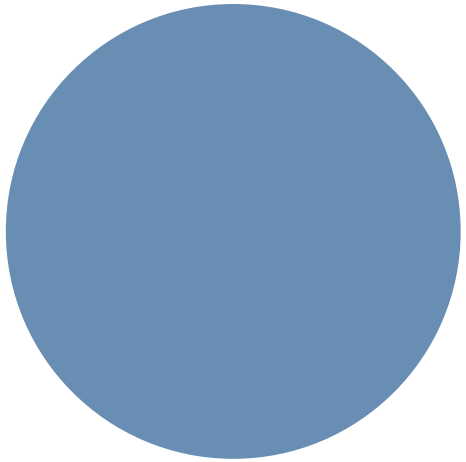
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-128	Compressor Station Kipi	Non-FID

Pipeline including CS

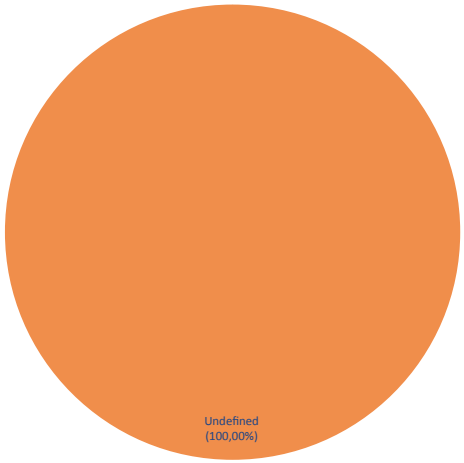
SPONSORS



GENERAL INFORMATION

Promoter	DESFA S.A.
Operator	DESFA S.A.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	www.desfa.gr

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014
FID	2013
Construction	2014
Commissioning	2018
Last completed Phase :	FEED

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	
Total Compressor Power (MW)	+38,10
Maximum Capacity (GWh/d)	+374,00
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Kipi	Yes	entry	102,00	Hub Turkey	Hub Greece
	Yes	entry	374,00	Hub Turkey	Hub Greece

DESCRIPTION OF THE PROJECT

The project aims at increasing the Transported Capacity of NNGS in order to be possible the transmission of natural gas volumes to the Greek and European markets with the use of downstream transmission systems of natural gas, INGS, which are likely to be developed in the region.

EXPECTED BENEFITS

Market integration (GR-IT-BG-RO), Diversification of sources, Diversification of routes, N-1 National (GR), N-1 Regional (GR-IT-BG-RO)

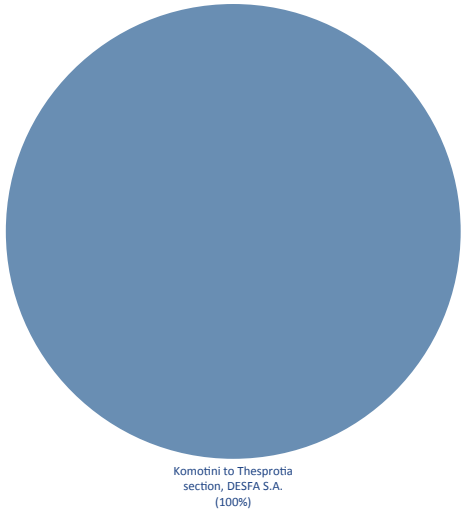
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-014	Komotini-Thesprotia pipeline	Non-FID

Pipeline including CS

SPONSORS

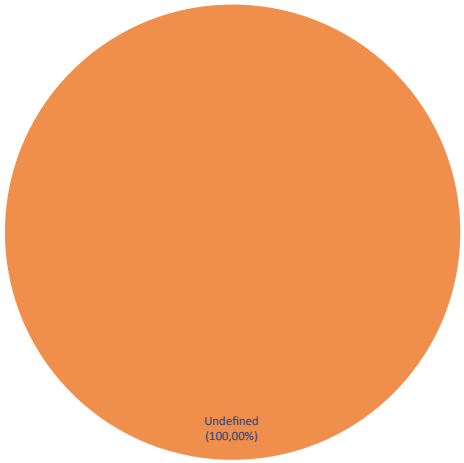


GENERAL INFORMATION

Promoter	DESFA S.A.
Operator	DESFA S.A.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	1
Web Link	www.desfa.gr

TEN-E Requests	Date of Request	Year Funding Granted
	1/04/05	Not yet
	1/04/03	2004

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014
FID	2013
Construction	2014
Commissioning	2018
Last completed Phase :	FEED

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+613,00
Total Compressor Power (MW)	+58,20
Maximum Capacity (GWh/d)	+302,70
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

High pressure pipeline from Komotini to Thesprotia area near Ionian coast along with compressor stations, operation and maintenance center.

EXPECTED BENEFITS

Security of Supply, Market integration (Western Greece), Diversification of sources, The project, together with Greece-Italy interconnector project (sponsored by 3rd parties) will establish an energy corridor between Asian, Middle Eastern and Eastern Mediterranean gas sources and European consumers. The project aims at enhancing the diversification of supply sources at a European level and contributing to the improvement of the Security of Supply level in the region of South Eastern Europe.

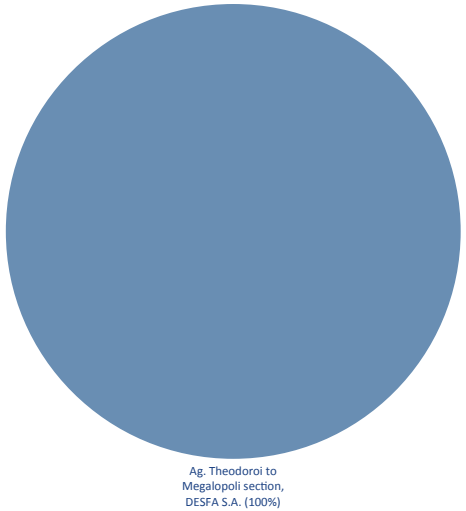
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

POW-F-028	Megalopoli pipeline	FID

Interconnection with a gas-fired power plant

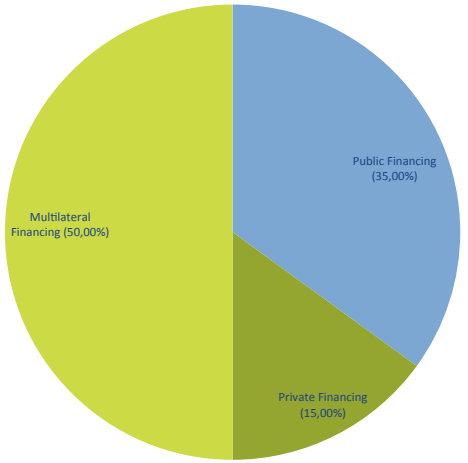
SPONSORS



GENERAL INFORMATION

Promoter	DESFA S.A.
Operator	DESFA S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.desfa.gr

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2012 Q4
FID	2008 Q2
Construction	2012 Q1
Commissioning	2013 Q3
Last completed Phase :	FEED

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+166,80
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+42,80
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

High pressure transmission pipeline, metering station from Ag. Theodoroi to Megalopoli for connection with Public Power Corporation's (PPC) 820 MW gas fired power plant and urban/industrial areas along the routing.

EXPECTED BENEFITS

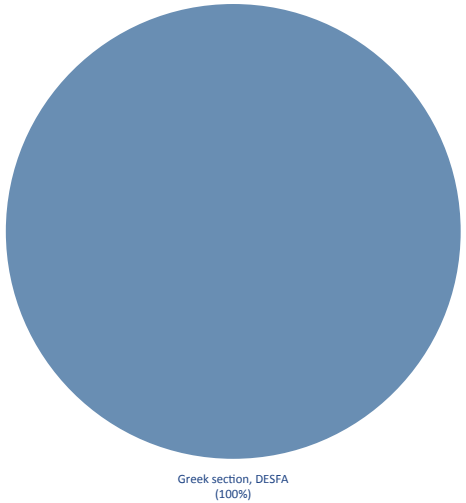
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
From NSRF 2007-2013	DESFA's own equity	EIB loan

TRA-N-188	Reverse flow at GR-BG border (Greek part)	Non-FID

Pipeline including CS

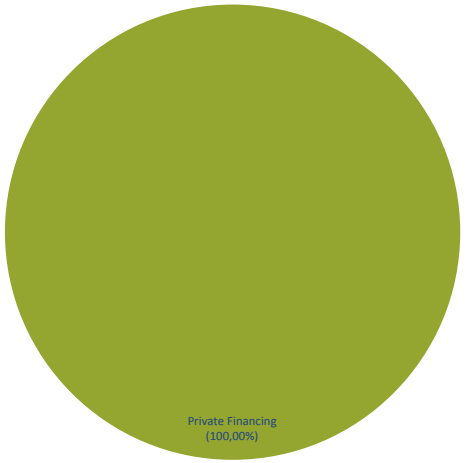
SPONSORS



GENERAL INFORMATION

Promoter	DESFA S.A.
Operator	DESFA S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	wwwdesfa.gr

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2013 Q2
Construction	2013 Q4
Commissioning	2014 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+33,50
Expected Load Factor	80,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Kula (BG) / Sidirokastron (GR)	Yes	exit	33,50	Hub Greece	Hub Bulgaria

DESCRIPTION OF THE PROJECT

The project consists of interventions at the Sidirokastro Border Metering Station to allow the reverse flow and metering of gas. <font

color=black>Similar (and more extended) interventions have to take place at the Bulgarian side of the network

EXPECTED BENEFITS

Security of Supply, Market integration (BG-RO), Reverse Flows, Diversification of sources, Diversification of routes, N-1 Regional (BG-RO)

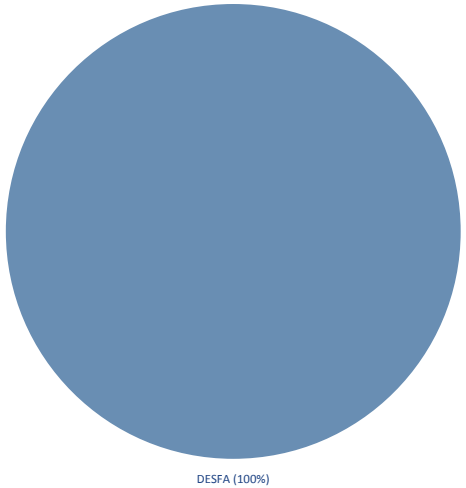
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-F-147	Revythoussa (2nd upgrade)	FID

LNG Terminal

SPONSORS

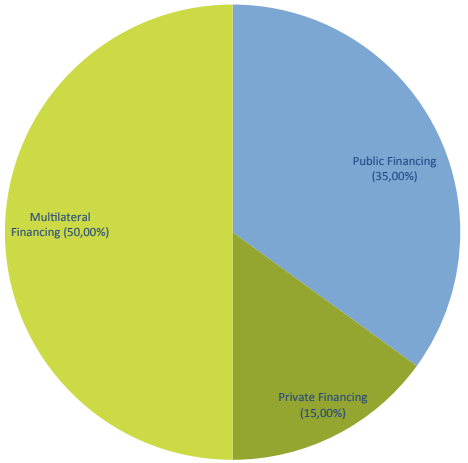


GENERAL INFORMATION

Promoter	DESFA S.A.
Operator	DESFA S.A.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	www.desfa.gr

TEN-E Requests	Date of Request	Year Funding Granted
	30/04/10	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2013 Q3
FID	2010 Q2
Construction	2014 Q1
Commissioning	2016 Q1
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Revythoussa LNG Terminal
Expected volume (bcm/y)	+2,10
Storage capacity (m3)	+95.000,00
Send-out (mcm/d)	+5,68
Ship size (m3)	120.000,00
Reloading ability ?	Yes

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Revythoussa	Yes	entry	62,48	LNG Terminals Greece	Hub Greece

DESCRIPTION OF THE PROJECT

The projects consists of:

- the upgrading of the send-out capacity from 1000 to 1400 m3/h (from 14,14 to 19,82 Nm3/d)

- the upgrading of the storage capacity from 130.000 m3 to 225.000 m3 with the addition of a 3rd tank

- the increase of maximum ship size from 140.000 to 260.000 m3

EXPECTED BENEFITS

Security of Supply, Market integration (BG- RO), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (GR), N-1 Regional (BG- RO), The LNG Terminal at Revythoussa plays significant role regarding the Security of Supply of gas in Greece and contributes to the stable operation of NNGS. The project will enhance the above attitudes along with its flexibility for serving more shippers. It will also increase the storage capacity of the terminal.

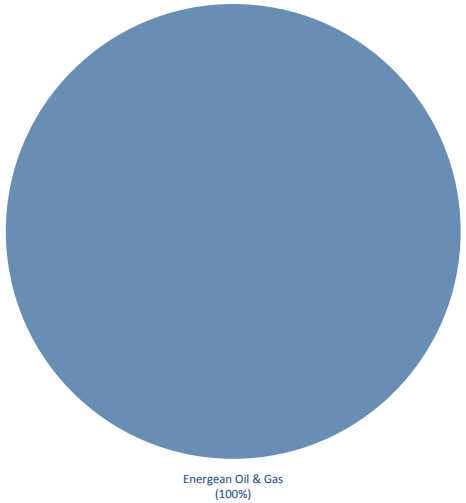
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Application to be submitted in 1Q 2013		Loan application not yet submitted

UGS-N-076	Underground Gas Storage at South Kavala	Non-FID

Storage Facility

SPONSORS

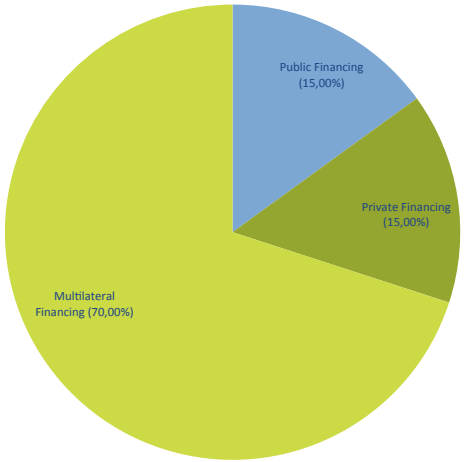


GENERAL INFORMATION

Promoter	Energean Oil & Gas S.A.
Operator	Energean Oil & Gas S.A.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	

TEN-E Requests	Date of Request	Year Funding Granted
	1/02/11	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not yet
Exemption granted ?	Not yet
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2013 Q4
Construction	2016 Q2
Commissioning	2018
Last completed Phase :	Planned

TECHNICAL INFORMATION

Storage facility	Underground Gas Storage at South Kavala
Working volume (mcm)	+360,00
Injectability (mcm/d)	+5,00
Deliverability (mcm/d)	+4,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
UGS - GR - DESFA/Energean Oil&Gas	Yes	entry	55,00	Hub Greece	Storage Greece
	Yes	exit	44,00	Storage Greece	Hub Greece

DESCRIPTION OF THE PROJECT

The project is aiming to the conversion of the South Kavala offshore natural gas reservoir to an Underground Gas Storage facility. The South Kavala field is an almost depleted reservoir, which is a turbistic sand package at a depth of 1720 m, contained between a sequence of evaporites. The license for the development and operation of the UGS of South Kavala will be attributed through a tender procedure, expected to be launched in 2013 by the Hellenic Republic Asset Development Fund (HRADF) to which the rights over the field have been transferred by the State. The right to exploit the nearly depleted gas field of South Kavala are held, until 2014, by a private oil company (Source : DESFA).

EXPECTED BENEFITS

Security of Supply, Diversification of sources, N-1 National (Greece), N-1 Regional (Balkans), Back-up for renewables, o Security of Supply, Extension of transport capacity of Russian gas to the West, Integration of Nord Stream off- and on-Shore in the European gas infrastructure

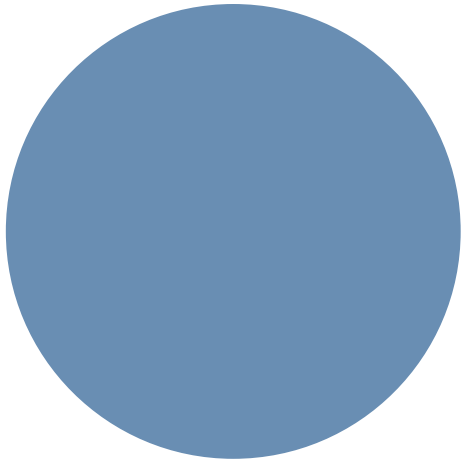
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-062	Alexandroupolis Independent Natural Gas System - LNG Section	Non-FID

LNG Terminal

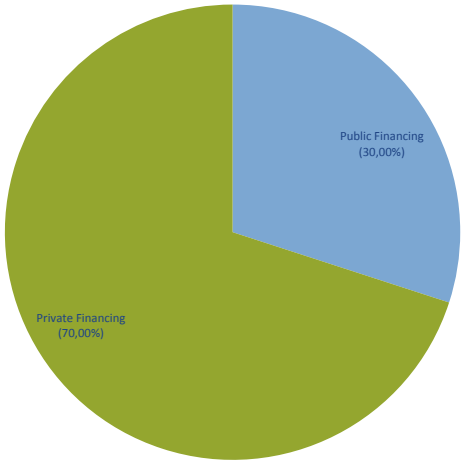
SPONSORS



GENERAL INFORMATION

Promoter	Gastrade S.A.
Operator	Gastrade S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2013 Q2
FID	2013 Q2
Construction	2013 Q3
Commissioning	2015 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Alexandroupolis INGS LNG - FSRU
Expected volume (bcm/y)	+2,60
Storage capacity (m3)	+170.000,00
Send-out (mcm/d)	+16,80
Ship size (m3)	170.000,00
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Alexandropolis LNG	Yes	exit	184,80	LNG Terminals Greece	Hub Greece

DESCRIPTION OF THE PROJECT

The project comprises an offshore floating LNG terminal (FSRU) including mooring, flex risers, PLEM, etc. located permanently in the Sea of Thrace, NE Greece

EXPECTED BENEFITS

Security of Supply, Market integration (SEE+Serbia+FYROM), Diversification of sources, Diversification of routes, N-1 National (Greece), N-1 Regional (SEE+Serbia+FYROM), Back-up for renewables, Power-to-gas, Extension of transport capacity of Russian gas to the West,
Integration of Nord Stream off- and on-Shore in the European gas infrastructure

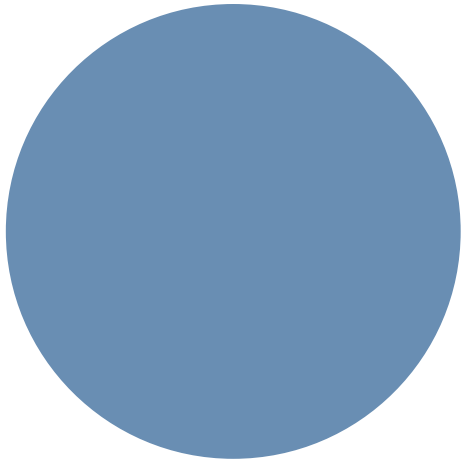
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-063	Alexandroupolis Independent Natural Gas System - Pipeline Section	Non-FID

Pipeline including CS

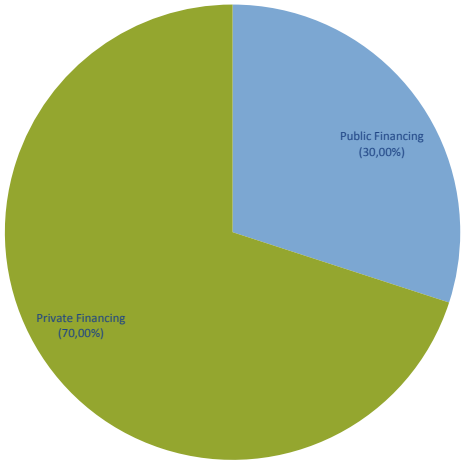
SPONSORS



GENERAL INFORMATION

Promoter	Gastrade S.A.
Operator	Gastrade S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2013 Q2
FID	2013 Q2
Construction	2013 Q3
Commissioning	2015 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+29,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+268,00
Expected Load Factor	30,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Alexandropolis LNG	Yes	exit	268,00	LNG Terminals Greece	Hub Greece

DESCRIPTION OF THE PROJECT

The project is a 29 km gas transmission pipeline connecting the Alexandroupolis INGS LNG section (FSRU) to the Greek Natural Gas Transmission System (NNGS). The pipeline has a 25 km subsea and 4 km onshore sections

EXPECTED BENEFITS

Security of Supply, Market integration (SEE+Serbia+FYROM), Diversification of sources, Diversification of routes, N-1 National (Greece), N-1 Regional (SEE+Serbia+FYROM), Back-up for renewables, Power-to-gas, Extension of transport capacity of Russian gas to the West,
Integration of Nord Stream off- and on-Shore in the European gas infrastructure

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

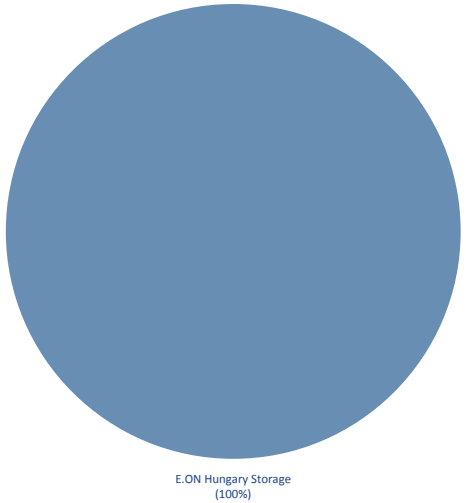
Hungary

SLOVAKIA
HUNGARY
BRATISLAVA
BUDAPEST
MGP
Uhřice
Kralice
Dolní Bojanovice
Tvrdonice
Břeclav
Reinthal
Lanzhot
Baumgarten
Láb*
Kittsee
Mosonmagyarovar
Győr
Balassagyarmat
Velké Kapušany
Uzhgorod
Beregdaróc
Százhalombatta
Csepel
Vecsés
Ercsi
Adony
Hajdúszoboszló
Satu Mare
Kardoskút-Pusztaszolos
Varosföld
Pusztaederics
Nabucco-West
South Stream
Zsana-Nord
Szöreg-1
Csanadpalota
Arad
Kiskundorozsma
Subotica
Sombor
Dravaszerdahely
Donji Miholac
Benicanci
Osijek
Bačko Novo Selo
Banatski Dvor
Sotin
Slobodnica
Brod
Novi Sad
Banja Luka
BOSNIA
HERZEGOVINA
Zvornik
Loznica
Zenica
BELGRADE
SARAJEVO
Zaječar
Split
Ploče
Niš
SERBIA
Dimitrovgr

UGS-N-209	Pusztaederics - Compressor System Reconstruction	Non-FID

Storage Facility

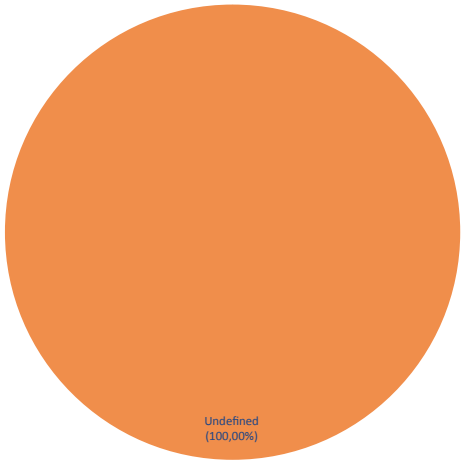
SPONSORS



GENERAL INFORMATION

Promoter	E.ON Földgaz
Operator	E.ON Hungary Storage
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2013 Q1
FID	2012 Q4
Construction	2013 Q2
Commissioning	2013
Last completed Phase :	FEED

TECHNICAL INFORMATION

Storage facility	Pusztaederics
Working volume (mcm)	+340,00
Injectability (mcm/d)	+2,50
Deliverability (mcm/d)	+2,90

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Pusztaederics	Yes	exit	31,90	Storage Hungary	Hub Hungary
	Yes	entry	27,50	Hub Hungary	Storage Hungary

DESCRIPTION OF THE PROJECT

To significantly increase the operational reliability and flexibility of storage services in the very crucial part of the North/South Corridor in the Region towards Slovenia, Croatia and Serbia.

Also to generate ~20% increased daily injection peak (0,5 Mm3/d) and off season operation.

EXPECTED BENEFITS

Market integration, Diversification of routes

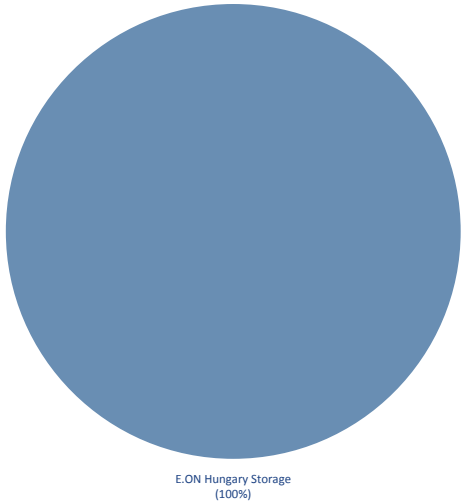
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-234	Zsana UGS - Decrease of the minimum injection capacity	Non-FID

Storage Facility

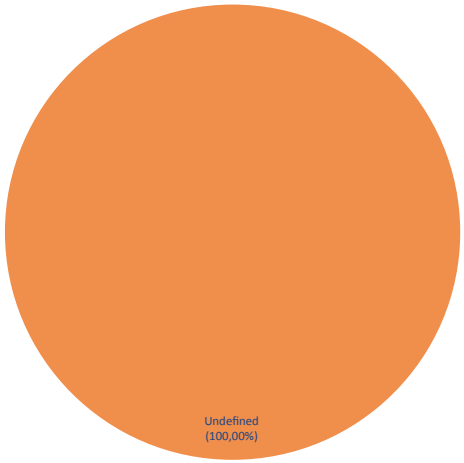
SPONSORS



GENERAL INFORMATION

Promoter	E.ON Földgaz
Operator	E.ON Hungary Storage
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2016 Q1
FID	2015 Q4
Construction	2016 Q3
Commissioning	2016 Q4
Last completed Phase :	Market test

TECHNICAL INFORMATION

Storage facility	Zsana
Working volume (mcm)	+2.140,00
Injectability (mcm/d)	+17,20
Deliverability (mcm/d)	+28,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
UGS - HU - FGSZ/E.ON Hungary	Yes	exit	308,00	Storage Hungary	Hub Hungary
	Yes	entry	189,20	Storage Hungary	Hub Hungary

DESCRIPTION OF THE PROJECT

Flexible operation down to 0,24 Mm3/d and beyond the existing 17,0 Mm3/d.

EXPECTED BENEFITS

Market integration, Diversification of routes

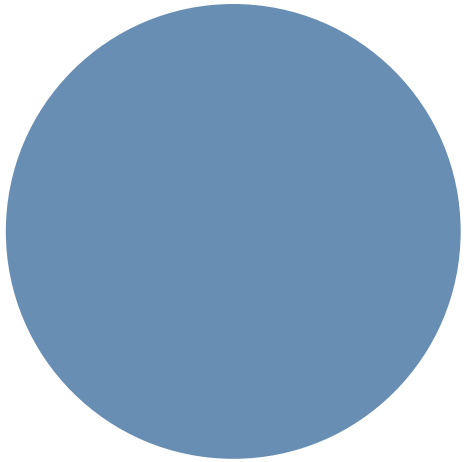
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-019	Csepel connecting pipeline	Non-FID

Pipeline including CS

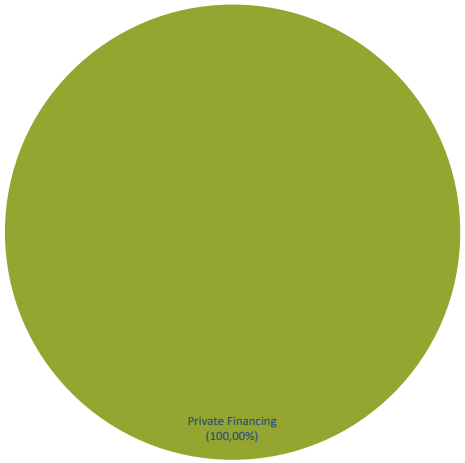
SPONSORS



GENERAL INFORMATION

Promoter	FGSZ Natural Gas Transmission
Operator	FGSZ Natural Gas Transmission
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.fgsz.hu

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2013 Q4
FID	2013 Q2
Construction	2013 Q4
Commissioning	2014 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+20,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

New pipeline to Csepel

EXPECTED BENEFITS

Market integration (Budapest region new power plant supply), the Hungarian projects taken as a whole main aim, is to enhance the flexibility of the Hungarian transmission system by connecting to neighbouring systems, ensuring reserves flow availability, and guaranteeing flow deliverability which will enhance the transmission systems security of supply position along with helping with further market integration.

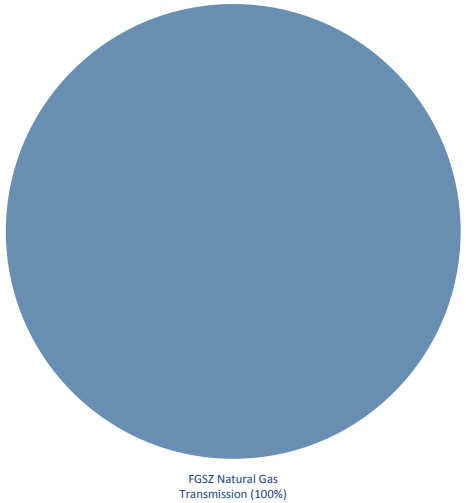
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-061	Ercsi-Szazhalombatta	Non-FID

Pipeline including CS

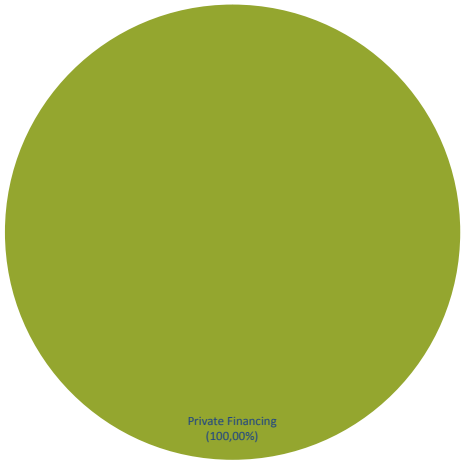
SPONSORS



GENERAL INFORMATION

Promoter	FGSZ Natural Gas Transmission
Operator	FGSZ Natural Gas Transmission
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014 Q1
FID	2013 Q2
Construction	2014 Q1
Commissioning	2016 Q3
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+11,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

New pipeline between Ercsi and Szazhalombatta nodes, DN800 PN63, 11 km

EXPECTED BENEFITS

Security of Supply, Market integration (Security of Supply of Budapest region, New power plant supply at Budapest region, Increase capacity Sk>HU and HU>SK), Reverse Flows, Diversification of sources.
The Hungarian projects taken as a whole main aim, is to enhance the flexibility of the Hungarian transmission system by connecting to neighbouring systems, ensuring reserves flow availability, and guaranteeing flow deliverability which will enhance the transmission systems security of supply position along with helping with further market integration.

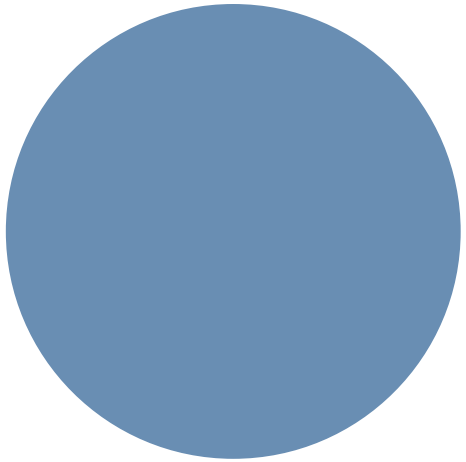
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-065	Hajduszoboszlo CS	Non-FID

Pipeline including CS

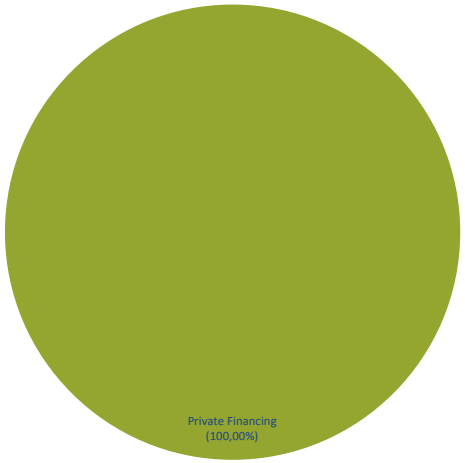
SPONSORS



GENERAL INFORMATION

Promoter	FGSZ Natural Gas Transmission
Operator	FGSZ Natural Gas Transmission
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.fgsz.hu

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2016 Q3
FID	2016 Q2
Construction	2016 Q3
Commissioning	2018 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+5,70
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Equipment replacement

EXPECTED BENEFITS

The Hungarian projects taken as a whole main aim, is to enhance the flexibility of the Hungarian transmission system by connecting to neighbouring systems, ensuring reserves flow availability, and guaranteeing flow deliverability which will enhance the transmission systems security of supply position along with helping with further market integration. In particular, this project helps the reverse flow from Varösföld to Beregdaroc.

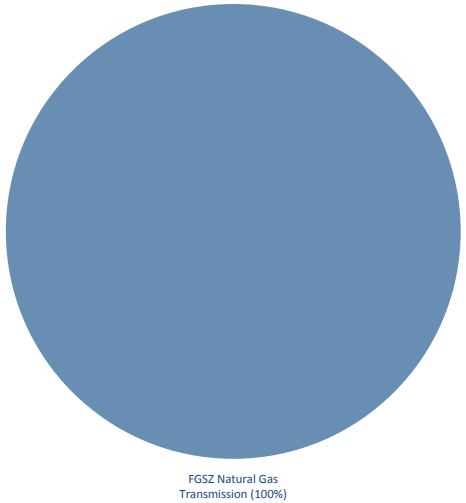
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-124	Local Odorisation - FGSZ	Non-FID

Pipeline including CS

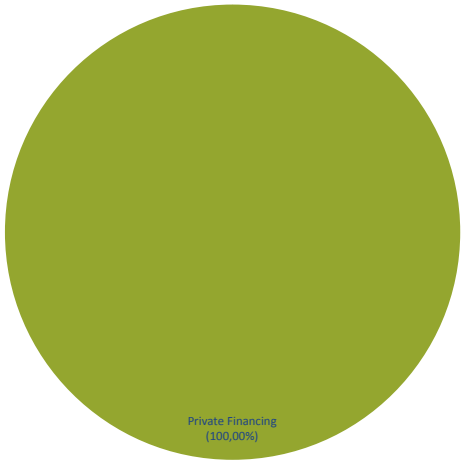
SPONSORS



GENERAL INFORMATION

Promoter	FGSZ Natural Gas Transmission
Operator	FGSZ Natural Gas Transmission
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.fgsz.hu

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014 Q1
FID	2013 Q2
Construction	2014 Q1
Commissioning	2015 Q3
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

The Hungarian projects taken as a whole main aim, is to enhance the flexibility of the Hungarian transmission system by connecting to neighbouring systems, ensuring reserves flow availability, and guaranteeing flow deliverability which will enhance the transmission systems security of supply position along with helping with further market integration.

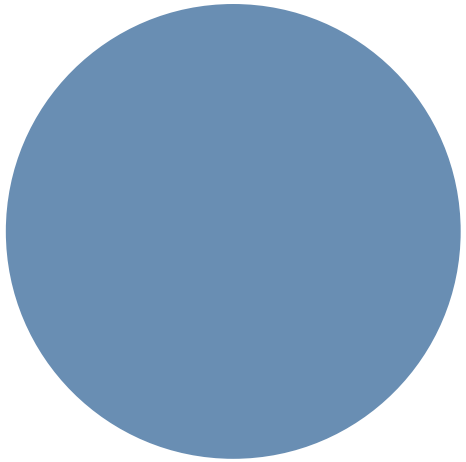
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-286	Romanian-Hungarian reverse flow Hungarian section	Non-FID

Pipeline including CS

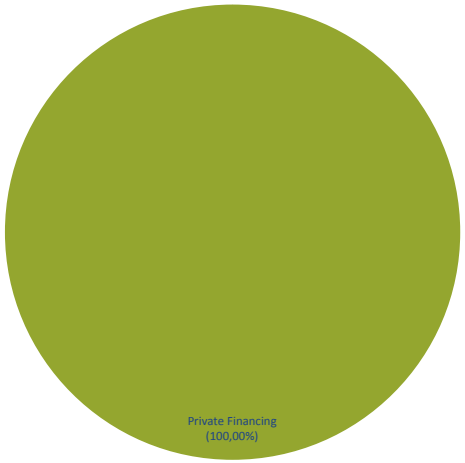
SPONSORS



GENERAL INFORMATION

Promoter	FGSZ Natural Gas Transmission
Operator	FGSZ Natural Gas Transmission
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014 Q1
FID	2013 Q2
Construction	2014 Q1
Commissioning	2015 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	3
Total Pipeline Length (km)	
Total Compressor Power (MW)	+13,50
Maximum Capacity (GWh/d)	+127,40
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Csanadpalota	No	entry	50,90	Hub Romania	Hub Hungary
	Yes	entry	12,60	Hub Romania	Hub Hungary
Csanadpalota	No	entry	127,40	Hub Romania	Hub Hungary

DESCRIPTION OF THE PROJECT

New compressor station at Csanádpalota.

EXPECTED BENEFITS

Security of Supply, Market integration (RO and HU markets), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National

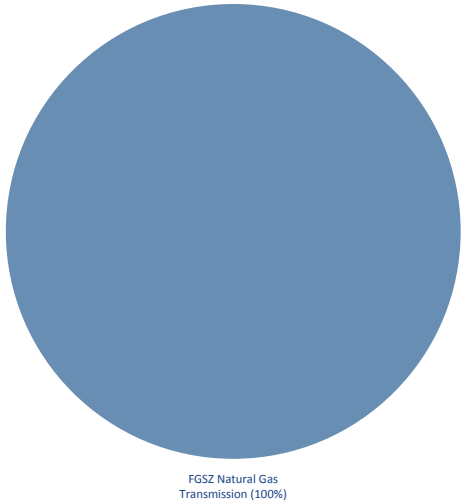
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-123	Városföld CS	Non-FID

Pipeline including CS

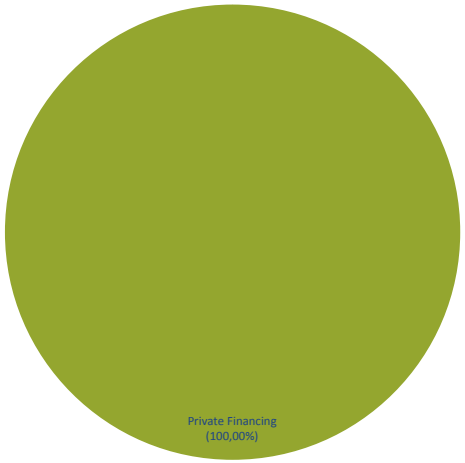
SPONSORS



GENERAL INFORMATION

Promoter	FGSZ Natural Gas Transmission
Operator	FGSZ Natural Gas Transmission
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.fgsz.hu

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014 Q1
FID	2013 Q3
Construction	2014 Q1
Commissioning	2016 Q3
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+5,70
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Compressor station extension, 5,7 MW

EXPECTED BENEFITS

o The Hungarian projects taken as a whole main aim, is to enhance the flexibility of the Hungarian transmission system by connecting to neighbouring systems, ensuring reserves flow availability, and guaranteeing flow deliverability which will enhance the transmission systems security of supply position along with helping with further market integration.

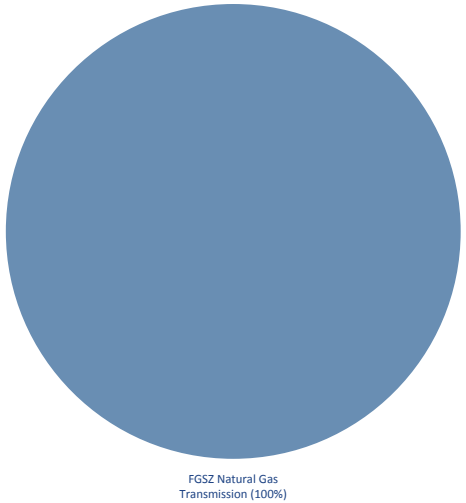
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-018	Városföld-Ercsi-Győr	Non-FID

Pipeline including CS

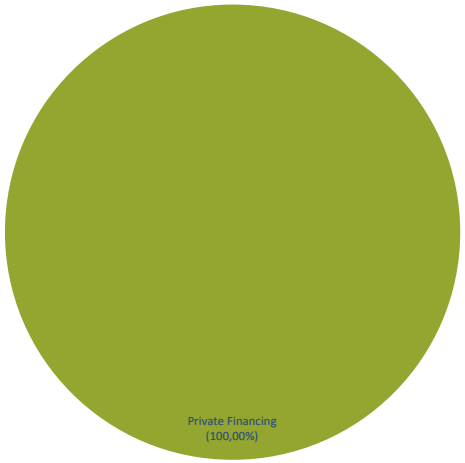
SPONSORS



GENERAL INFORMATION

Promoter	FGSZ Natural Gas Transmission
Operator	FGSZ Natural Gas Transmission
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.fgsz.hu

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2016 Q3
FID	2013 Q2
Construction	2014 Q1
Commissioning	2015 Q3
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+220,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Pipeline between Városföld-Ercsi and Győr nodes, DN1000, PN100, 220 km.This project will enable the Mosonmagyarovar interconnection point to reach its full capacity of 153 GWh/d from Austria to Hungary.It will also enable the Mosonmagyarovar interconnection point to realize reverse flow capacity up to 153 GWh/d from Hungary to Austria as well.

EXPECTED BENEFITS

Security of Supply, Market integration (Increase AT/HU border capacity, Security of Supply of Western Hungary, new power plant supply, Reverse fllow HU>AT, Increase capacity Sk>HU and HU>SK, Create capacity RO>AT), Reverse Flows, Diversification of sources, o The Hungarian projects taken as a whole main aim, is to enhance the flexibility of the Hungarian transmission system by connecting to neighbouring systems, ensuring reserves flow availability, and guaranteeing flow deliverability which will enhance the transmission systems security of supply position along with helping with further market integration.

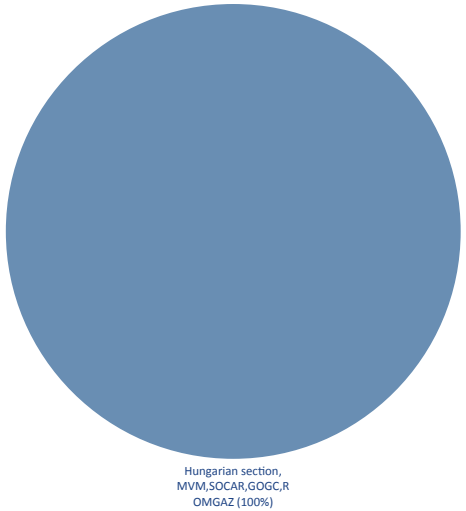
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-195	AGRI Pipeline - Hungarian section	FID

Pipeline including CS

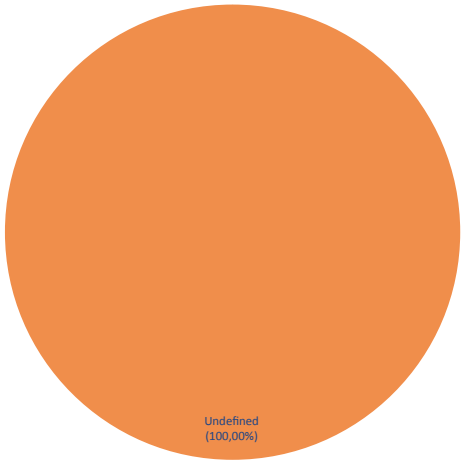
SPONSORS



GENERAL INFORMATION

Promoter	Magyar Gaz Tranzit Zrt.
Operator	MGT Hungarian Gas Transit Ltd.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	1
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	0
Considered Tariff Regime	0
Applied for Exemption ?	No
Exemption granted ?	no
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
East-West Pipeline RO-HU (AGRI)	No	entry	0,00	Hub Romania	Hub Hungary

DESCRIPTION OF THE PROJECT

The project is in feassibility phase

EXPECTED BENEFITS

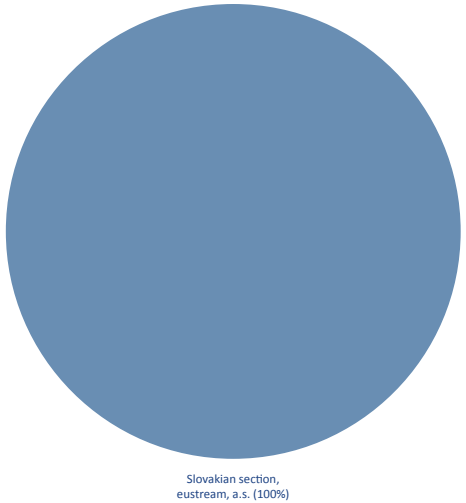
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-016	Slovakia - Hungary interconnection	FID

Pipeline including CS

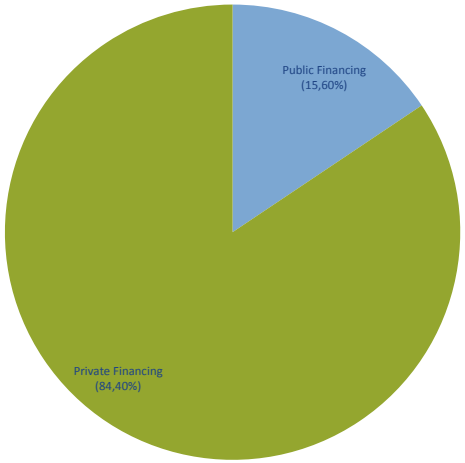
SPONSORS



GENERAL INFORMATION

Promoter	eustream, a.s.
Operator	eustream, a.s.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	1
Web Link	www.eustream.sk/en_transmission-system/en_sk-hu-interconnector

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2012 Q1
FID	2010 Q1
Construction	2014 Q2
Commissioning	2014 Q4
Last completed Phase :	Supply contract

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+115,00
Total Compressor Power (MW)	+7,00
Maximum Capacity (GWh/d)	+127,40
Expected Load Factor	80,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Balassagyarmat	Yes	entry	50,90	Hub Hungary	Hub Slovakia
	Yes	exit	127,40	Hub Slovakia	Hub Hungary

DESCRIPTION OF THE PROJECT

Creation of a missing interconnection between SK and HU and thus increase the SoS in CEE region, and enhance market integration and functionality.

EXPECTED BENEFITS

Security of Supply, Market integration (CEE region), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Slovakia, Hungary), N-1 Regional (CEE region), Back-up for renewables, Power-to-gas

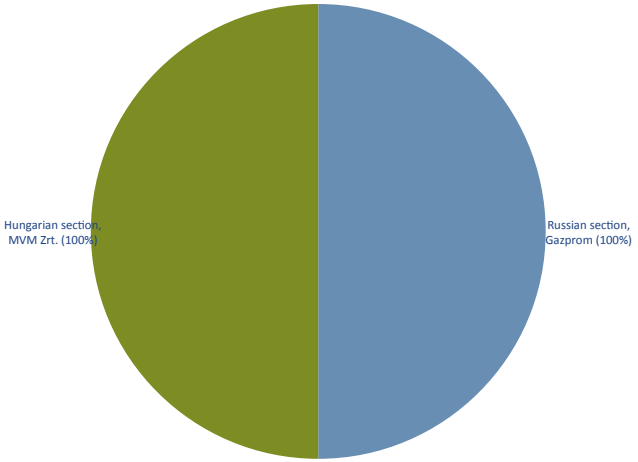
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Interconnector Slovakia – Hungary: EEPR: € 3.3 mil.	eustream, a.s.	

TRA-F-196	South Stream Hungary	FID

Pipeline including CS

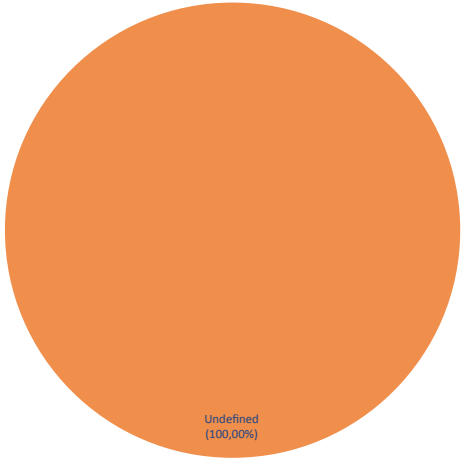
SPONSORS



GENERAL INFORMATION

Promoter	Magyar Gaz Tranzit Zrt.
Operator	MGT Hungarian Gas Transit Ltd.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	1
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	0
Considered Tariff Regime	0
Applied for Exemption ?	0
Exemption granted ?	0
% Exemption in entry direction	50%
% Exemption in exit direction	45%

SCHEDULE

End of permitting phase	2015
FID	
Construction	2014
Commissioning	2015 Q1
Last completed Phase :	

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+220,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
South Stream (Bata, Nagykanizsa) (HU)	Yes	entry	224,00	Interconnector South Stream	Hub Hungary

DESCRIPTION OF THE PROJECT

Hungarian section 220 km. DN1400/1200, Pn 90 bar.

EXPECTED BENEFITS

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

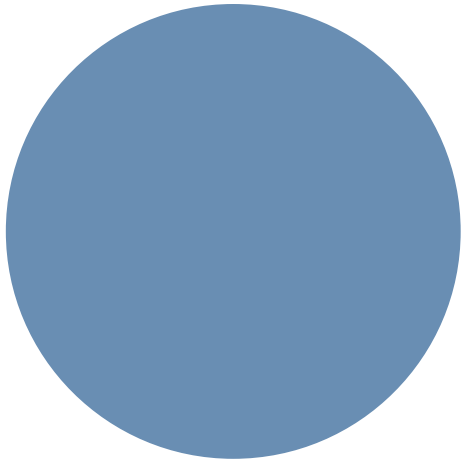
Ireland

Islandmagee
Londonderry / Derry
S.N.I.P.S.
Ballylumford
BELFAST
CORRIB
Bellanaboy
IRELAND
INTERCONNECTOR 2
INTERCONNECTOR 1
Gormanston
Loughshinny
DUBLIN
Galway
IBP
Limerick
Shannon LNG
Waterford
Cork
Inch
Milford Haven
KINSALE HEAD
SEVEN HEADS
South Hook LNG
Dragon LNG
Kinsale Southwest
from Qatar

TRA-N-059	Physical Reverse Flow at Moffat Interconnection Point	Non-FID

Pipeline including CS

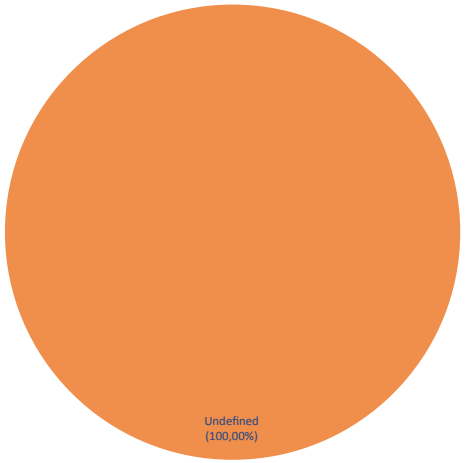
SPONSORS



GENERAL INFORMATION

Promoter	Gaslink
Operator	Gaslink
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2017
Last completed Phase :	Market test

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+37,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+38,50
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Moffat	Yes	exit	38,50	Hub Ireland	Hub United Kingdom

DESCRIPTION OF THE PROJECT

The interconnection point at Moffat is currently uni-directional with gas flow from UK to Ireland. This project would be to make the Moffat interconnection point bi-directional.

EXPECTED BENEFITS

Security of Supply, Market integration (Ireland & UK; Ireland & Northern ireland), Reverse Flows, Diversification of sources, Diversification of routes, Back-up for renewables, Biogas, 1.New sources of gas supplies will potentially be available in Ireland and Northern Ireland from 2017 onwards and there may be an over supply for exportation to the UK. In order to enable the physical exportation of gas, physical reverse flow is required at Moffat. 2. Increased participation by Irish shippers in the UK market facilitates closer linkage to the European market. 3. Contributes to the viability of LNG and storage projects.

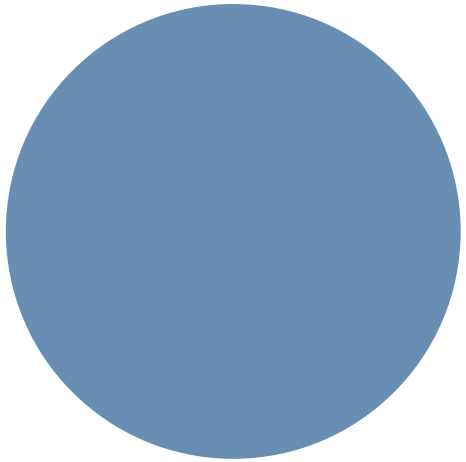
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-071	Physical Reverse Flow on South North Pipeline	Non-FID

Pipeline including CS

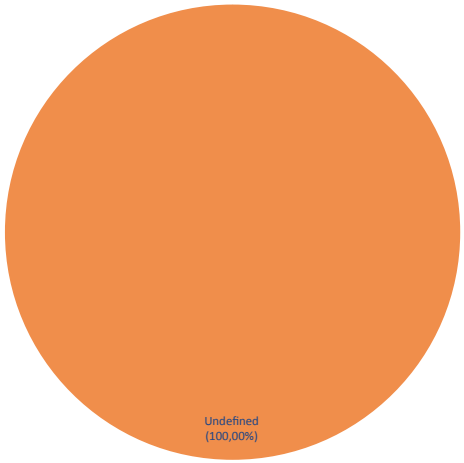
SPONSORS



GENERAL INFORMATION

Promoter	Gaslink
Operator	Gaslink
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2017
Last completed Phase :	Market test

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+27,60
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Gormanston	Yes	entry	27,60	Hub United Kingdom	Hub Ireland

DESCRIPTION OF THE PROJECT

Currently gas flow between Ireland & Northern Ireland via the South North Pipeline is uni-directional (at the Gormanston Interconnection Point)

EXPECTED BENEFITS

Security of Supply, Market integration (Northern Ireland), Reverse Flows, Diversification of routes, Back-up for renewables, Biogas, 1.Physical reverse flow between Ireland and Northern Ireland is beneficial to the development of an integrated market on the island of ireland, having significant importance in the development and operation of a single gas market between both jurisdictions. 2 It would widen the market that is available to Northern Ireland gas market participants.3 Contributes to the viability of LNG and storage projects.

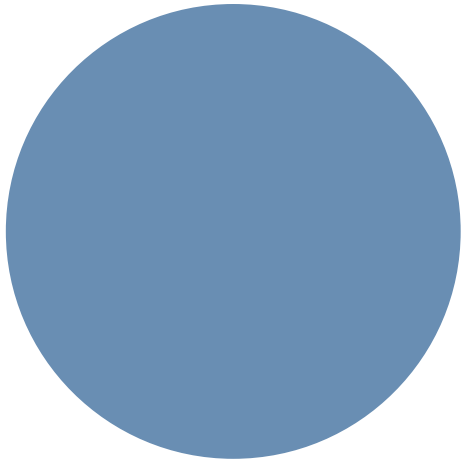
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-060	Twinning of South West Scotland Onshore System	Non-FID

Pipeline including CS

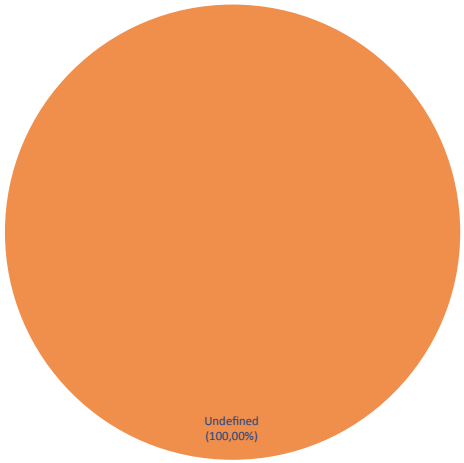
SPONSORS



GENERAL INFORMATION

Promoter	Gaslink
Operator	Gaslink
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Not defined yet
IGAs	2
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2015 Q1
Last completed Phase :	Market test

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+50,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+375,00
Expected Load Factor	86,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Moffat	No	entry	0,00	Hub United Kingdom	Hub Ireland

DESCRIPTION OF THE PROJECT

Twinning a 50km section of pipeline between Cluden and Brighouse Bay in South West Scotland.

EXPECTED BENEFITS

Security of Supply, Market integration (Increases interoperability between Ireland & UK; Ireland & Northern Ireland; UK & Isle of Man), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Ireland), N-1 Regional (Ireland, Northern Ireland & UK), Biogas, 1.Reinforcing the 50km single section of the SWSOS transmission system guarantees the supply capacity and the security to meet Ireland's future demand requirements in the short, medium and long term.2 Ireland is on the Western peripheral of Europe and is quite isolated from mainland Europe. Ireland would greatly benefit from any infrastructure that would further connect Ireland to the gas system in the UK. It would also remove a capacity 'bottleneck' on the Interconnection System; this will increase the Technical Capacity of Moffat Entry Point and subsequently increase the available firm capacity that can be offered by the transporter to the Shippers.

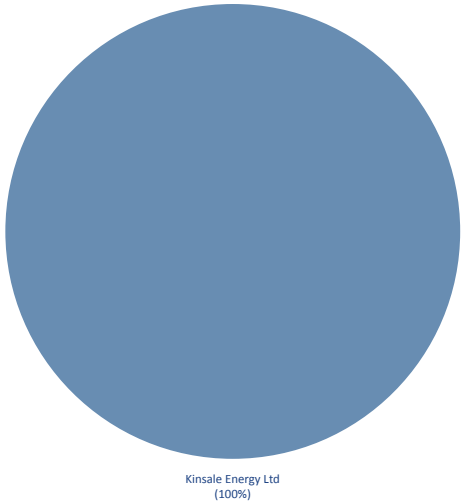
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-197	Southwest Kinsale Storage Expansion Project	Non-FID

Storage Facility

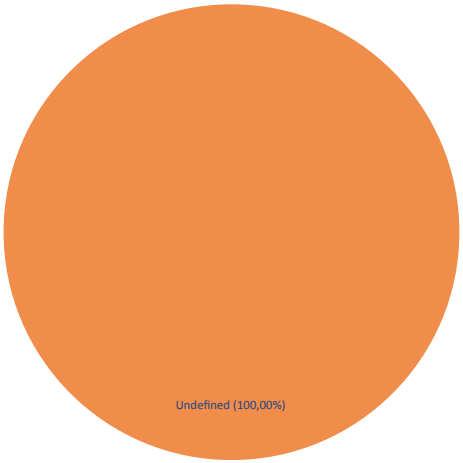
SPONSORS



GENERAL INFORMATION

Promoter	Kinsale Energy Ltd
Operator	Kinsale Energy Ltd
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.kinsale-energy.ie

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Not yet
Exemption granted ?	Not yet
% Exemption in entry direction	85%
% Exemption in exit direction	100%

SCHEDULE

End of permitting phase	2014 Q4
FID	2013 Q4
Construction	2015 Q2
Commissioning	2015 Q3
Last completed Phase :	Planned

TECHNICAL INFORMATION

Storage facility	Southwest Kinsale Gas Storage Expansion
Working volume (mcm)	+174,00
Injectability (mcm/d)	+2,80
Deliverability (mcm/d)	+3,70

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Kinsale Southwest	Yes	entry	30,80	Hub Ireland	Storage Ireland
	Yes	exit	40,70	Hub Ireland	Storage Ireland

DESCRIPTION OF THE PROJECT

The project involves the expansion of the existing Southwest Kinsale storage facility from 226mcm to 400mcm through the drilling of a new well (s) and process equipment modifications to provide additional injection / withdrawal capacity

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, N-1 National (Ireland), Back-up for renewables

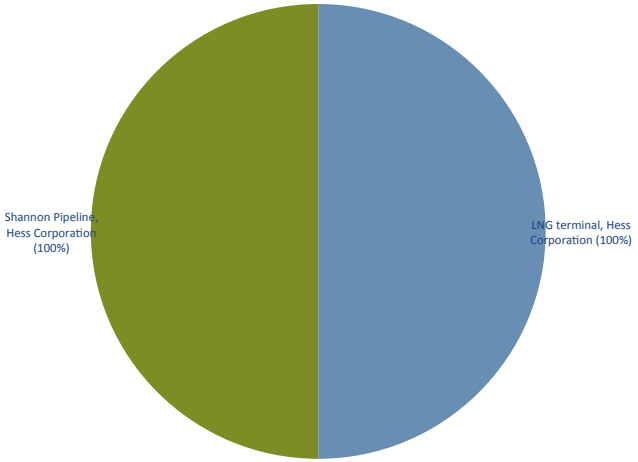
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-030	Shannon LNG Terminal	Non-FID

LNG Terminal

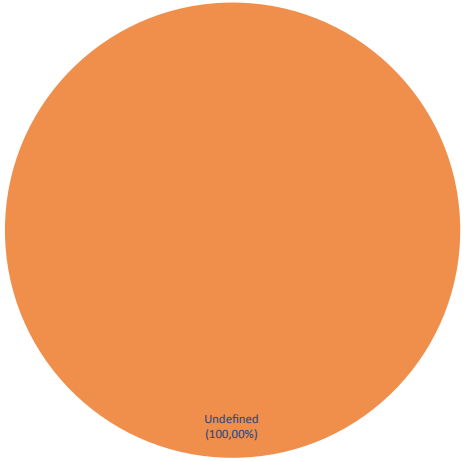
SPONSORS



GENERAL INFORMATION

Promoter	Shannon LNG
Operator	Shannon LNG
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.shannonlngplanning.ie

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Yes
Exemption granted ?	Yes
% Exemption in entry direction	100%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2013
FID	2013
Construction	2017
Commissioning	2017
Last completed Phase :	Market test

TECHNICAL INFORMATION

Regasification facility	Shannon LNG Limited
Expected volume (bcm/y)	+3,00
Storage capacity (m3)	+200.000,00
Send-out (mcm/d)	+10,70
Ship size (m3)	265.000,00
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Shannon LNG	Yes	exit	117,70	LNG Terminals Ireland	Hub Ireland

DESCRIPTION OF THE PROJECT

Shannon LNG has obtained all of the major permits and consents for the LNG project including planning permission for the terminal and export pipeline, pipeline rights of way and foreshore leases and licenses.

The Shannon LNG terminal is designed and permitted to export to the national gas grid up to 26.8 million normal cubic metres per day of natural gas. It is currently envisaged the project will have initial deliverability of 10.7 normal million cubic metres per day.

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes, N-1 National (Ireland), Back-up for renewables, The Shannon LNG project will increase Ireland security of gas supply. Ireland imports over 90% of its gas via two pipelines from Scotland. Ireland is unable to meet its N-1 Infrastructure requirements under Regulation (EU) No 994/2010 (CER Consultation Paper “Draft National Preventive Action Plan – Gas 2012-2014 Ireland” (CER/12/088)). The initial phase of the Shannon LNG project will be capable of supplying approximatly 40% of forecast Irish peak demand for 2019/2020 (Calculated using 1 in 50 Winter Peak Day Demand & Base Supply Scenario forecast, Gaslink 2011 Joint Gas Capacity Statement). The proposed LNG terminal will increase market integration and system flexibility by providing a new gas supply route to Ireland. The project supports emmission reductions and will enhance Irelands long-term security of supply resiliance by providing an entirely new supply source for Ireland with LNG imported from geographies that may include Africa, Middle East, North America, Russia etc

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

Italy

SWITZERLAND
AUSTRIA
HUNGAR
SLOVENIA
LJUBLJANA
ZAGREB
CROATIA
BOSNIA HERZEGOVINA
ITALY
CORSICA
SARDINIA
Ligurian Sea
Tyrrhenian Sea
Adriatic Sea
BERN
Basel
Zurich
Innsbruck
Graz
Klagenfurt
Villach
Arnoldstein
Tarvisio
Trento
Milano
Torino
Genova
Nice
Venezia
Gorizia
Sempeter
Rogatec
Murfeld
Celsk
Lucko
Karlovac
Rijeka
Omisalj
Krk
Pula
Vodnjan
Umag
Porto Viro
Ravenna
Bologna
Firenze
Livorno
Ancona
Perugia
Pescara
Chieti
L'Aquila
Rome
Napoli
Campobasso
Potenza
Bari
Brindisi
Otranto
Split
Zadar
Knin
Benkovac
Gospic
Banja Luka
Zenica
Brod
Slobodnica
Osijek
Dravaszerdahely
Donji Miholjac
Benisanci
Okoli
Pusztaederics
Szazhalombatta
Gyor
Bratislava
Moscenicka Draga
Kittsee
CEGH
Puchkirchen
Algesbrunn
Haidach
7 Fields
Baumgarten
Oberkappel
Ellund
Rodersdorf
Griespass
Passo Gries
Settala
Sergnano
Brugherio
Ripalta
Bordolano
Cortemaggiore
Cotignola & San Potito
Minerbio
Sabbioncello
Panigaglia
Falconara Marittima LNG
OLT Offshore LNG Toscana
Piombino
PSV
Bastia
Ajaccio
Olbia
Cagliari
Porto Botte
Cellino
Flume Teresa
Zaule LNG
Porto Levante
Omisalj LNG
Medgaz LNG
Gioia Tauro
Catanzaro
Messina
Palermo
Mazara del Vallo
Agrigento
Porto Empedocle LNG
Gela
Koudiet Eddraouch
Tunis
Algeria - Sardinia - Italy (GALSI)
Transmed
Cyrenee
Galsi
Adriatica Pipeline
Tirrenica Pipeline
South Stream
Trans Austria Gasleitung
Penta Gas
Rumgas
Italy-Austria
Tarvisio
Gorizia
Sempeter
Rogatec
Murfeld
Celsk
Lucko
Karlovac
Rijeka
Omisalj
Krk
Pula
Vodnjan
Umag
Porto Viro
Ravenna
Bologna
Minerbio
Sabbioncello
Cotignola & San Potito
Bordolano
Cortemaggiore
Ripalta
Sergnano
Settala
Brugherio
Milano
Torino
Genova
Nice
Panigaglia
Falconara Marittima LNG
OLT Offshore LNG Toscana
Livorno
Piombino
PSV
Bastia
Ajaccio
Olbia
Cagliari
Porto Botte
Cellino
Flume Teresa
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Porto Levante
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Gioia Tauro
Catanzaro
Messina
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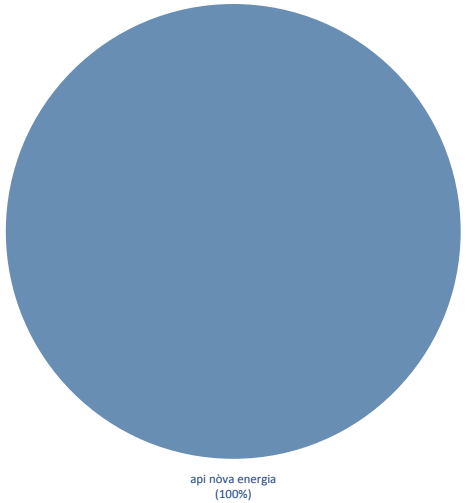
Agrigento
Porto Empedocle LNG
Gela
Koudiet Eddraouch
Tunis
Algeria - Sardinia - Italy (GALSI)
Transmed
Cyrenee
Galsi
Adriatica Pipeline
Tirrenica Pipeline
South Stream
Trans Austria Gasleitung
Penta Gas
Rumgas
Italy-Austria

LNG-N-085	api nòva energia S.r.l. – LNG off-shore regasification terminal of Falconara Marittima (Ancona, Italy)	Non-FID

LNG Terminal

SPONSORS

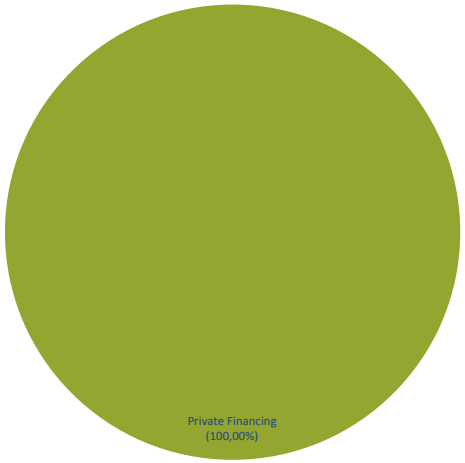


GENERAL INFORMATION

Promoter	API Nova Energia S.r.l.
Operator	API Nova Energia S.r.l.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	apinovaenergia.gruppoapi.com/Gas-Power/Terminale-GNL/

TEN-E Requests	Date of Request	Year Funding Granted
	24/04/09	2010
	28/02/11	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Yes
Exemption granted ?	Not yet
% Exemption in entry direction	100%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2012 Q1
FID	2013 Q3
Construction	2014 Q2
Commissioning	2016 Q1
Last completed Phase :	Permitting

TECHNICAL INFORMATION

Regasification facility	api nova energia S.r.l. – LNG off-shore regasification terminal of Falconara
Expected volume (bcm/y)	+4,00
Storage capacity (m3)	+150.000,00
Send-out (mcm/d)	+25,90
Ship size (m3)	150.000,00
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Falconara Marittima	Yes	exit	284,90	LNG Terminals Italia	Hub Italia

DESCRIPTION OF THE PROJECT

The project envisages the utilization of an off-shore mooring structure, Single Point Mooring type, located 16 km off the coast and currently used for the crude oil discharge for the Falconara Marittima refinery, to be adapted in order to allow also the mooring of Floating Storage Regasification Unit (FSRU) vessels and the discharge of regasified natural gas in the national gas network through a new off-shore and on-shore 20 km long connection pipeline, and one or more FSRU vessels for the onboard regasification of LNG and the discharge through the SPM of regasified natural gas. Regasification operations shall be performed directly onboard the FSRU vessels, that shall load LNG either from liquefaction plants abroad or via transhipment from LNG carriers away from the SPM. No on-shore fixed LNG storage facilities shall be installed: the regasified gas shall be transported to the coast through a new submarine pipeline and shall then be redirected to a regulation and metering station for the connection with the existing national transport network, located close to the landing point.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional

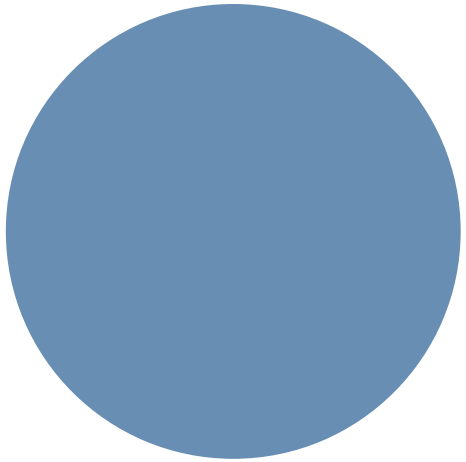
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-011	Brindisi LNG	Non-FID

LNG Terminal

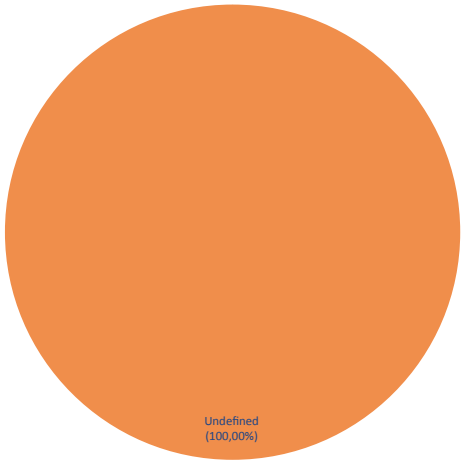
SPONSORS



GENERAL INFORMATION

Promoter	BG Group
Operator	BG Group
TEN-E Project ?	Priority Project
Interested by PCI ?	Yes
IGAs	None
Web Link	www.brindisilng.it

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Yes
Exemption granted ?	Yes
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2013 Q4
FID	2014
Construction	
Commissioning	2017 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	
Expected volume (bcm/y)	+8,00
Storage capacity (m3)	+320.000,00
Send-out (mcm/d)	+25,00
Ship size (m3)	
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Brindisi	Yes	exit	275,00	LNG Terminals Italia	Hub Italia

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources:
gas for the Project is intended to be sourced from BG's LNG supply portfolio. The Project should therefore increase the number of supply sources to the Italian market and reduce the EU's dependence on a few large suppliers (Russia and Algeria). This will enhance the security of supply not only to Italy but also to the Southern European region. The development of the Brindisi LNG project will provide an alternative mechanism to pipelines at a national and European level for the transportation of gas into the EU. The investment in the Terminal will also support wider infrastructure enhancement in the SNAM Rete Gas national transportation network.
Market Integration (Increase of competition): The project will allow the entry of new operators into the Italian wholesale gas market and will provide the power generators, industrial users and the retail gas market with important alternative sources to the incumbent gas wholesaler. The project will therefore promote competition in both the wholesale and retail markets, whilst constituting an important investment in Italian gas infrastructure.

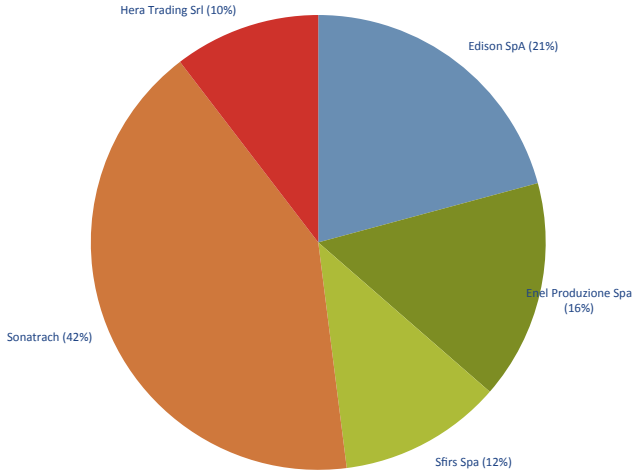
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-012	GALSI Pipeline	Non-FID

Pipeline including CS

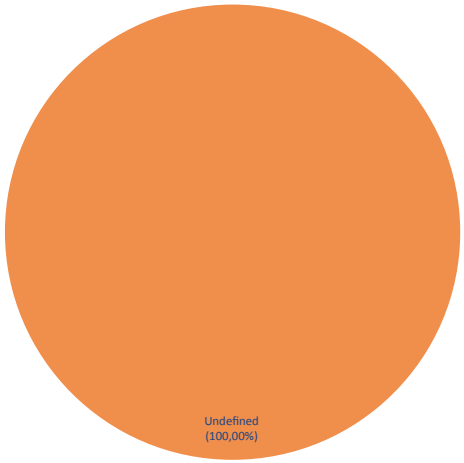
SPONSORS



GENERAL INFORMATION

Promoter	Edison
Operator	Galsi S.p.A.
TEN-E Project ?	Project of European Interest
Interested by PCI ?	Yes
IGAs	1
Web Link	www.galsi.it

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2012 Q4
FID	2012 Q4
Construction	2016 Q4
Commissioning	2016 Q3
Last completed Phase :	FEED

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	3
Total Pipeline Length (km)	+861,00
Total Compressor Power (MW)	+151,00
Maximum Capacity (GWh/d)	+258,20
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Olbia (Galsi)	Yes	entry	244,00		Interconnector GALSI
Algerian Coast (Galsi)	Yes	entry	244,00	Supplier Algeria	Interconnector GALSI
Porto Botte (Galsi)	Yes	exit	244,00	Interconnector GALSI	
Olbia (Galsi)	Yes	exit	30,50	Hub Italia	
Piombino (Galsi)	Yes	exit	244,00	Interconnector GALSI	Hub Italia

DESCRIPTION OF THE PROJECT

Gas pipeline project aiming to create a new link between Algeria and Italy via Sardinia

EXPECTED BENEFITS

Security of Supply, Reverse Flows, Diversification of sources, Diversification of routes (the Galsi project will improve security of supply in Italy and Europe, providing for a new and more efficient route for Algerian gas to reach the centre of Italian gas consumption (located in northern Italy) and further on the Northern European markets; in the longer term, with the development of new projects interconnecting different gas sources in Africa (e.g. new Algerian shale gas or TSGP project for Nigerian gas), the Galsi pipeline could provide a highly strategic diversification of gas supply routes to European markets and their supply flexibility; the project will contribute to the creation of an Italian gas hub for gas supply to Europe which, through the increase of gas liquidity, will enable the export of major gas volumes from Italy to other European markets through the development of reverse flow capacities)
Market integration (the Galsi project represents an unique opportunity to bring natural gas to the island of Sardinia currently not connected to the Italian gas network; similar benefits could potentially be further extended to Corsica, through the Cyrénéé project, improving thereby cohesion within Europe and the already excellent relations between Italy and France; in addition, new entrants will be able to develop and/or consolidate their market positions in the Italian gas market through an independent infrastructure)
N-1 National (on the basis of the “Transportation Capacity Multi-Annual” as published by Snam Rete Gas, in the year of commissioning of Galsi project, the largest gas supply infrastructure to Italy – in terms of transportation capacity – will be the Trans Austrian Gas pipeline (TAG) with a firm capacity of 107 mSm3/day at the entry point of Tarvisio; in the event of disruption on the TAG pipeline, additional capacities could be made available by maximizing the gas flow in the Galsi pipeline to an extent that will depend upon the then prevailing operating conditions)
Back-up for renewables (a significant quota of electricity generation in Italy (approx. 50% today) is represented by CCGTs whose utilization is increasingly shifting towards a back-up of RES, in the light of their dramatic increase witnessed in these last years)
Reduction of GHG emissions (the Galsi project complies with sustainable development guidelines, i.e. the promotion of the substitution of high pollutant fossil fuels with a low pollutant such as natural gas, the improvement of efficiency in the electricity production by switching from other fossil fuels to natural gas, and the penetration of the use of natural gas in industrial/residential and tertiary sector)
Power-to-gas, Biogas

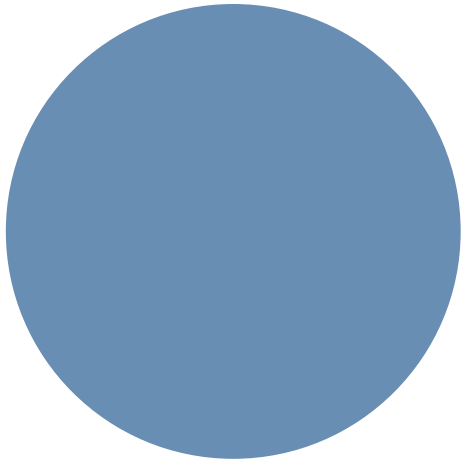
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-235	Nuovi Sviluppi Edison Stoccaggio	Non-FID

Storage Facility

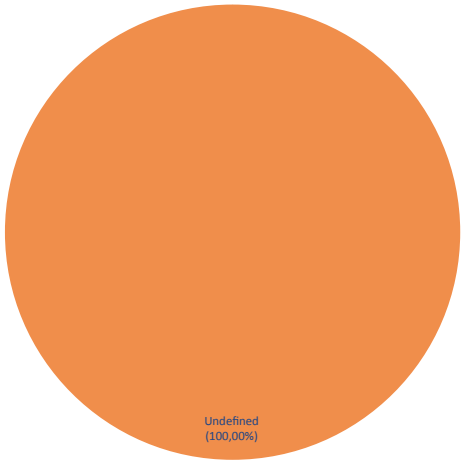
SPONSORS



GENERAL INFORMATION

Promoter	Edison Stoccagio S.p.A.
Operator	Edison Stoccagio S.p.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2016 Q1
Last completed Phase :	Planned

TECHNICAL INFORMATION

Storage facility	
Working volume (mcm)	+1.000,00
Injectability (mcm/d)	+10,00
Deliverability (mcm/d)	+10,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
UGS - IT - Snam Rete Gas/Edison	Yes	exit	110,00	Storage Italia	Hub Italia
	Yes	entry	110,00	Hub Italia	Storage Italia

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration, o SoS and Market Integration (Increase of competition):
The Italian Storage facilities is a market characterized by absence of a different operators, low level of development new storage capacity by the major operator (with the 97% market share). Our projects will enhance the level of competition and security of supply at national level.

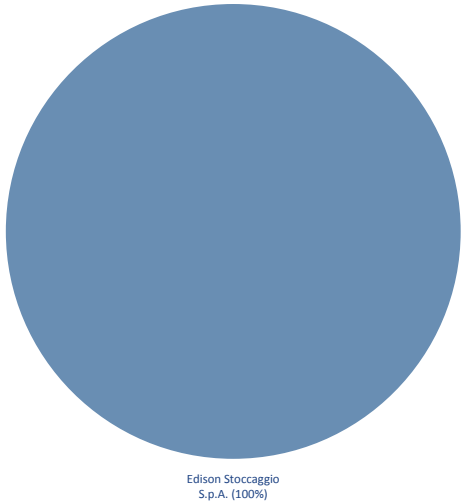
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-237	Palazzo Moroni	Non-FID

Storage Facility

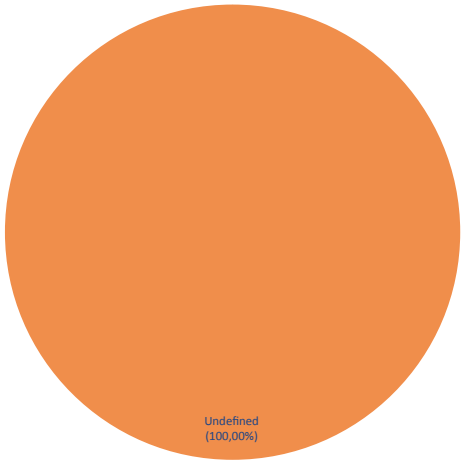
SPONSORS



GENERAL INFORMATION

Promoter	Edison Stoccagio S.p.A.
Operator	Edison Stoccagio S.p.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2014 Q2
Last completed Phase :	FEED

TECHNICAL INFORMATION

Storage facility	
Working volume (mcm)	+66,00
Injectability (mcm/d)	+1,00
Deliverability (mcm/d)	+1,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
UGS - IT - Snam Rete Gas/Edison	Yes	exit	11,00	Storage Italia	Hub Italia
	Yes	entry	11,00	Hub Italia	Storage Italia

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Increase of competition):
The Italian Storage facilities is a market characterized by absence of a different operators, low level of development new storage capacity by the major operator (with the 97% market share). Our projects will enhance the level of competition and security of supply at national level.

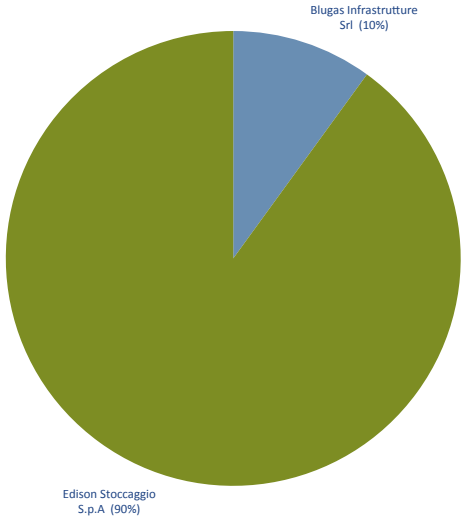
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-F-236	San Potito e Cotignola	FID

Storage Facility

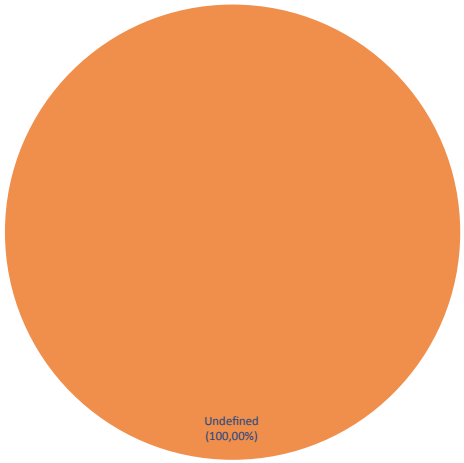
SPONSORS



GENERAL INFORMATION

Promoter	Edison Stoccagio S.p.A.
Operator	Edison Stoccagio S.p.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2029 Q2
FID	2006 Q3
Construction	
Commissioning	2013 Q2
Last completed Phase :	FID

TECHNICAL INFORMATION

Storage facility	
Working volume (mcm)	+868,00
Injectability (mcm/d)	+6,80
Deliverability (mcm/d)	+6,80

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
UGS - IT - Snam Rete Gas/Edison	Yes	exit	74,80	Storage Italia	Hub Italia
	Yes	entry	74,80	Hub Italia	Storage Italia

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration, o SoS and Market Integration (Increase of competition):
The Italian Storage facilities is a market characterized by absence of a different operators, low level of development new storage capacity by the major operator (with the 97% market share). Our projects will enhance the level of competition and security of supply at national level.

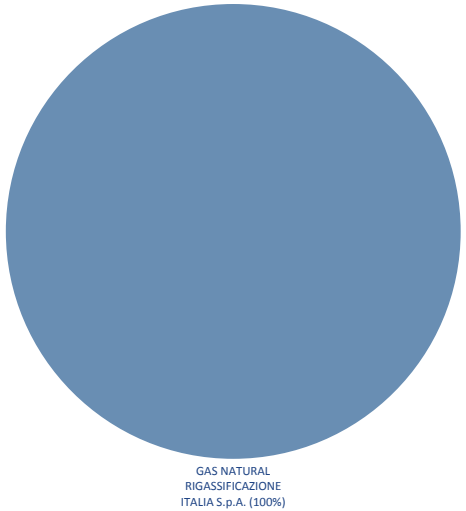
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-217	Zaule - LNG Terminal in Trieste (Italy)	Non-FID

LNG Terminal

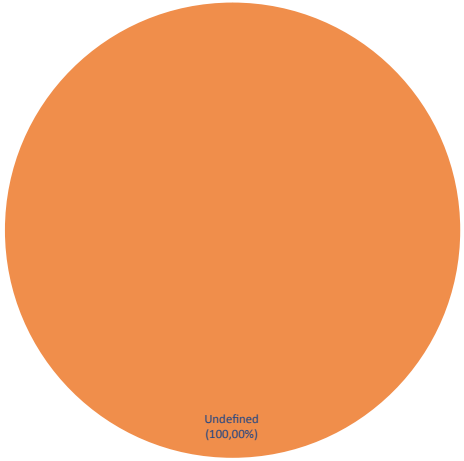
SPONSORS



GENERAL INFORMATION

Promoter	Gas Natural Rigassificazione Italia
Operator	gasNatural Rigassificazione S.p.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.rigassificatoretrieste.gasnatural.com/it/1285085357074/inizio.html

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Not yet
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2013 Q2
FID	2014
Construction	2015 Q1
Commissioning	2018
Last completed Phase :	FEED

TECHNICAL INFORMATION

Regasification facility	Zaule LNG Terminal (Trieste - Italy)
Expected volume (bcm/y)	+8,00
Storage capacity (m3)	+280.000,00
Send-out (mcm/d)	+24,00
Ship size (m3)	145.000,00
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Zaule LNG (Trieste)	Yes	exit	264,00	LNG Terminals Italia	Hub Italia

DESCRIPTION OF THE PROJECT

Onshore regasification terminal with 8 bcm/y capacity. Storage capacity: 2 x 140.000 m3; Send-out capacity: 1.075.000 m3(s)/hour. Single jetty and maximum vessel size of 145.000 m3.

EXPECTED BENEFITS

Security of Supply, Market integration (Italy and North and Central Europe), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Italy), N-1 Regional (Region South - North), Back-up for renewables, Power-to-gas, Decontamination of part of Trieste Industrial Harbour. Boost in economic activity in the city, province and region.

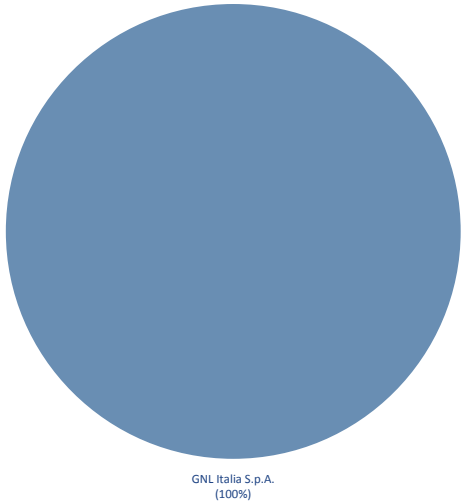
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-216	Panigaglia LNG	Non-FID

LNG Terminal

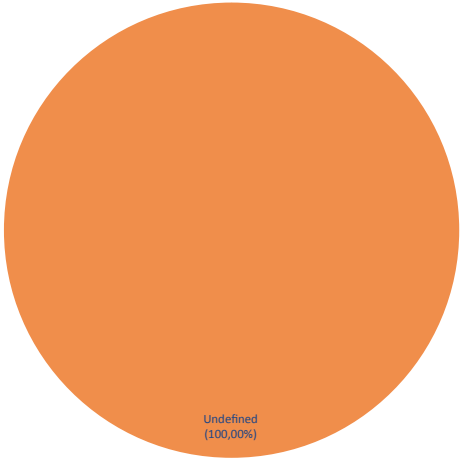
SPONSORS



GENERAL INFORMATION

Promoter	GNL Italia
Operator	GNL Italia
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.gnlitalia.it/en/activities/Innovation-and-research/modernisation-project.html

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Panigaglia LNG
Expected volume (bcm/y)	+8,00
Storage capacity (m3)	+240.000,00
Send-out (mcm/d)	+13,00
Ship size (m3)	140.000,00
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Panigaglia	Yes	exit	153,00	LNG Terminals Italia	Hub Italia

DESCRIPTION OF THE PROJECT

Expansion Project under consideration

EXPECTED BENEFITS

Security of Supply, Diversification of sources, N-1 National, Back-up for renewables,
Extension of transport capacity of Russian gas to the West, Integration of Nord Stream off- and on-Shore in the European gas infrastructure

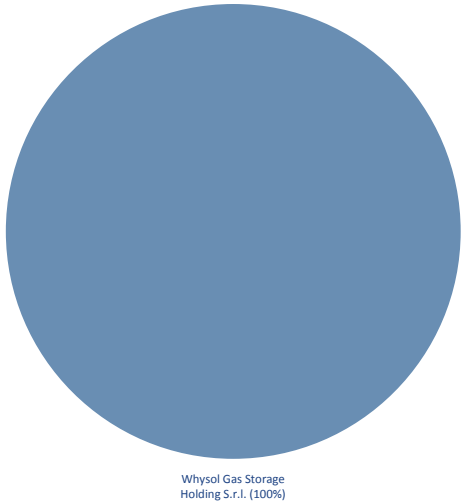
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-242	Cornegliano UGS	Non-FID

Storage Facility

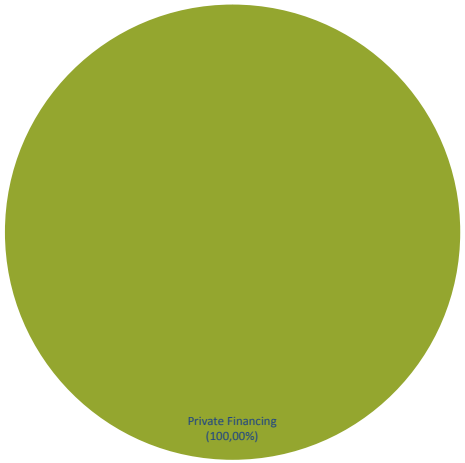
SPONSORS



GENERAL INFORMATION

Promoter	ITAL Gas Storage S.r.l.
Operator	ITAL Gas Storage S.r.l.
TEN-E Project ?	Project of European Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	www.italgasstorage.it

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2011 Q1
FID	2012 Q4
Construction	2012 Q4
Commissioning	2015 Q1
Last completed Phase :	Permitting

TECHNICAL INFORMATION

Storage facility	Cornegliano UGS
Working volume (mcm)	+1.300,00
Injectability (mcm/d)	+27,00
Deliverability (mcm/d)	+27,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Cornegliano	Yes	entry	297,00	Storage Italia	Storage Italia
	Yes	exit	297,00	Storage Italia	Hub Italia

DESCRIPTION OF THE PROJECT

Ital Gas Storage will construct a new gas storage facility located in Lombardy (Italy). The facility will have a working gas volume of 1.3 billion cubic meters (+10% of actual Italian capacity). The maximum injection and withdrawal rate from the facility will be 27 million cubic meters per day (+10% of actual capacity). The project has been fully authorised in March 2011, construction is expected to start by end 2012 and commercial operation of the facility is expected to commence from Q4 2014/Q1 2015.

EXPECTED BENEFITS

Security of Supply, Market integration (Italy, South Europe, Central Europe), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Italy), N-1 Regional (West), Back-up for renewables, Cornegliano UGS will contribute to the development of reverse gas flow from South Europe to Central Europe and North Europe by providing shippers with an important source of flexibility and gas modulation at relatively low cost (the national tariff in Italy is the lowest among Europe).

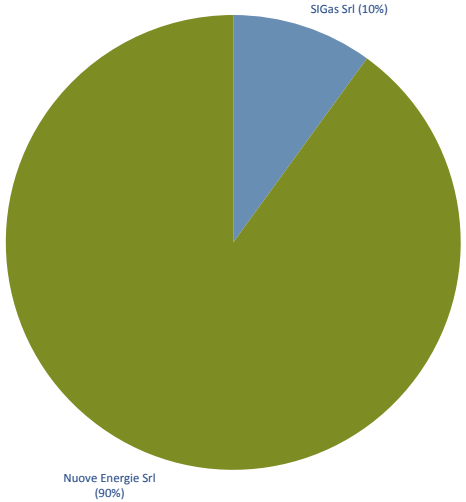
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-198	Porto Empedocle LNG	Non-FID

LNG Terminal

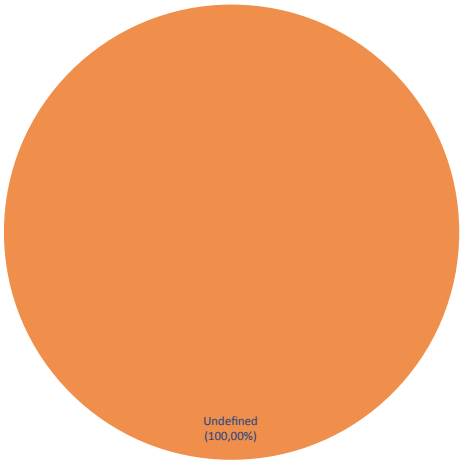
SPONSORS



GENERAL INFORMATION

Promoter	Nuove Energie S.r.l.
Operator	Nuove Energie S.r.l.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.enel.it/it-IT/eventi_news/news/terminale-di-rigassificazione-di-porto-empedocle/p/090027d9819310b8

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Yes
Exemption granted ?	Yes
% Exemption in entry direction	100%
% Exemption in exit direction	100%

SCHEDULE

End of permitting phase	2011 Q3
FID	2013
Construction	
Commissioning	2017 Q2
Last completed Phase :	Permitting

TECHNICAL INFORMATION

Regasification facility	Porto Empedocle LNG
Expected volume (bcm/y)	+8,00
Storage capacity (m3)	+320.000,00
Send-out (mcm/d)	+23,10
Ship size (m3)	155.000,00
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Porto Empedocle LNG	Yes	exit	254,10	LNG Terminals Italia	LNG Terminals Italia

DESCRIPTION OF THE PROJECT

The planned Porto Empedocle LNG Terminal will be located in Italy, in the Sicily Region, cadastral area of Porto Empedocle, for which the promoter received a thirty-year concession. It will consist of:

– two underground storage tanks of 160.000 of m³ of capacity each,

– vaporiser pumps and other treatment facilities required to process LNG and

– a breakwater with mooring jetty and unloading arms.

The LNG Terminal will be able to inject the gas at the standard grid pressure (around 70 bar) and will be connected to the transmission system operated by SnamReteGas by means of a pipeline section specifically built by SnamReteGas.

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes, The LNG terminal will provide some storage capacity within its tanks, allowing to provide flexibility to the system in an area where gas storage is not currently present.

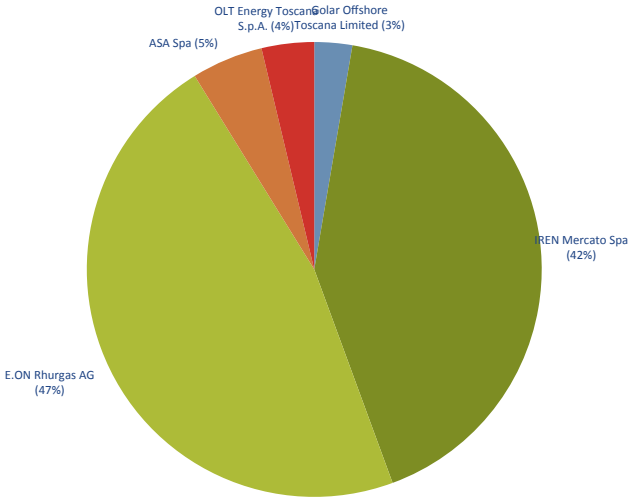
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-F-089	OLT Offshore LNG Toscana SpA	FID

LNG Terminal

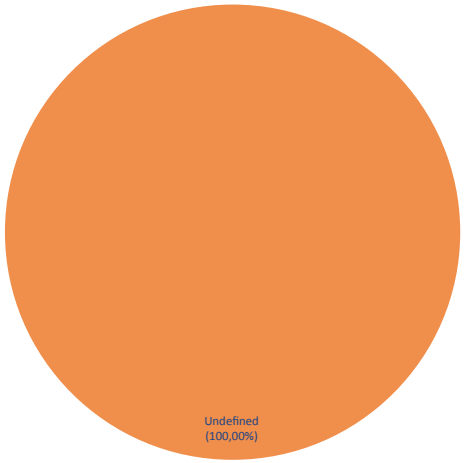
SPONSORS



GENERAL INFORMATION

Promoter	OLT Offshore LNG Toscana S.p.A
Operator	OLT Offshore LNG Toscana S.p.A
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.oltoffshore.it/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Yes
Exemption granted ?	Yes
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2013 Q2
FID	2008 Q1
Construction	2012 Q4
Commissioning	2013 Q2
Last completed Phase :	FID

TECHNICAL INFORMATION

Regasification facility	FSRU Toscana
Expected volume (bcm/y)	+3,75
Storage capacity (m3)	+137.500,00
Send-out (mcm/d)	+11,00
Ship size (m3)	138.000,00
Reloading ability ?	Yes

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
FSRU Toscana	Yes	exit	121,00	LNG Terminals Italia	Hub Italia

DESCRIPTION OF THE PROJECT

The OLT Offshore LNG Toscana project provides for the conversion of an LNG carrrier (Golar Frost) into a floating storage regassification unit (FSRU) permanently anchored about 22 km offshore Tuscany coast. The FSRU is directly connected with the national gas grid throught a 29 km subsea pipeline and 7 km in land pipeline already built by Snam Rete Gas.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes

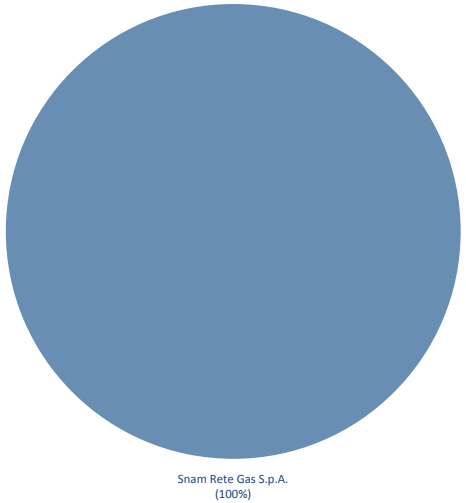
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-007	Adriatica and Tirrenica pipelines	Non-FID

Pipeline including CS

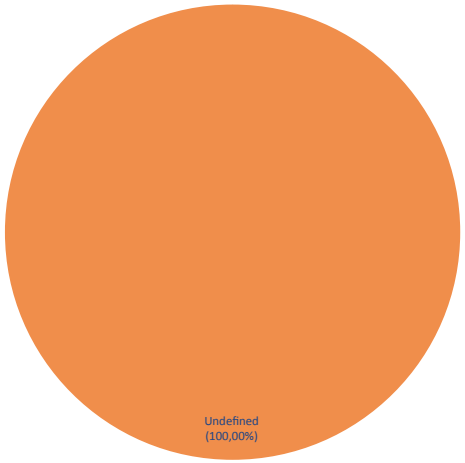
SPONSORS



GENERAL INFORMATION

Promoter	Snam Rete Gas S.p.A.
Operator	Snam Rete Gas S.p.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.snamretegas.it/export/sites/snamretegas/repository/file/ENG/Thermal_Year_20112012/Information_for_User/Capacity_plans/Capacity_and_development_Plan_2011_2012.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	3
Total Pipeline Length (km)	+1.130,00
Total Compressor Power (MW)	+168,00
Maximum Capacity (GWh/d)	+264,00
Expected Load Factor	65,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
	No	entry	264,00		Hub Italia

DESCRIPTION OF THE PROJECT

The project consists in new on-shore and off-shore pipelines and in new compressor stations along the center-south of Italy to permit the increase of transport capacity at new or existing Entry Points in south Italy

EXPECTED BENEFITS

Security of Supply, Diversification of sources, Diversification of routes, N-1 National (Italy), Back-up for renewables, Power-to-gas, Market Integration (Increase of competition), Flexibility of the system

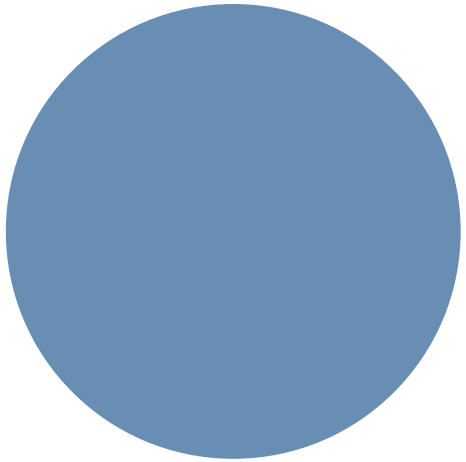
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-214	Cross Border Bi-directional Flows - Phase 2	FID

Pipeline including CS

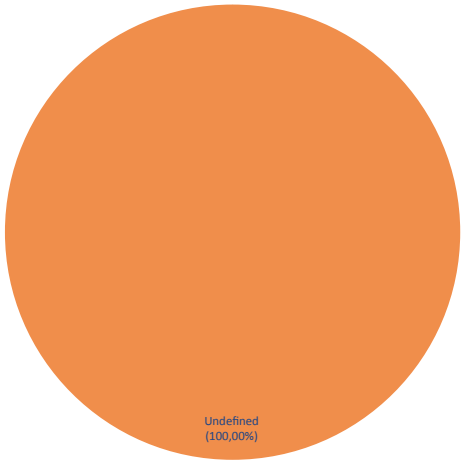
SPONSORS



GENERAL INFORMATION

Promoter	Snam Rete Gas S.p.A.
Operator	Snam Rete Gas S.p.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.snamretegas.it/export/sites/snamretegas/repository/file/ENG/Thermal_Year_20112012/Information_for_User/Capacity_plans/Capacity_and_development_Plan_2011_2012.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2016 Q4
Last completed Phase :	FID

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+80,00
Total Compressor Power (MW)	+95,00
Maximum Capacity (GWh/d)	+375,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Griespass (CH) / Passo Gries (IT)	Yes	exit	375,00	Hub Italia	Hub Switzerland

DESCRIPTION OF THE PROJECT

The project consists in new on-shore pipelines and new compressor stations in the north of Italy and it permits to increase the physical reverse flow capacity available with the phase 1

EXPECTED BENEFITS

Security of Supply, Reverse Flows, Diversification of routes, Back-up for renewables, Power-to-gas, Market Integration (Increase of competition), N-1 Regional, Flexibility of the system, reducing of GHG emissions

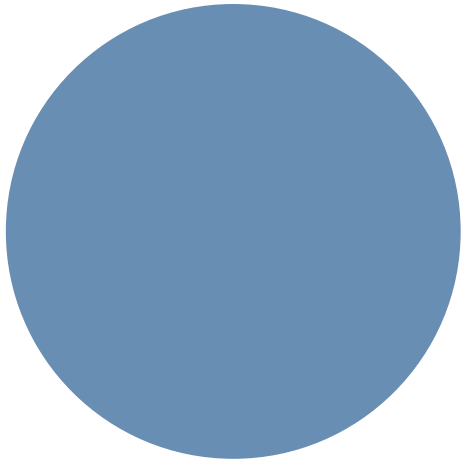
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-213	Cross Border Bi-directional Flows - Phase 1	FID

Pipeline including CS

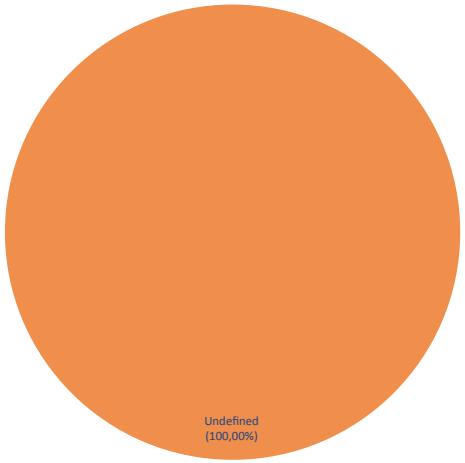
SPONSORS



GENERAL INFORMATION

Promoter	Snam Rete Gas S.p.A.
Operator	Snam Rete Gas S.p.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.snamretegas.it/export/sites/snamretegas/repository/file/ENG/Thermal_Year_20112012/Information_for_User/Capacity_plans/Capacity_and_development_Plan_2011_2012.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2015 Q4
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+370,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+54,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Griespass (CH) / Passo Gries (IT)	Yes	exit	54,00	Hub Italia	Hub Switzerland

DESCRIPTION OF THE PROJECT

The project consists in new on-shore pipelines in the north of Italy and it permits to make available a new service of physical reverse flow capacity

EXPECTED BENEFITS

Security of Supply, Reverse Flows, Diversification of routes, Back-up for renewables, Power-to-gas, Market Integration (Increase of competition), N-1 Regional, Flexibility of the system, reducing of GHG emissions

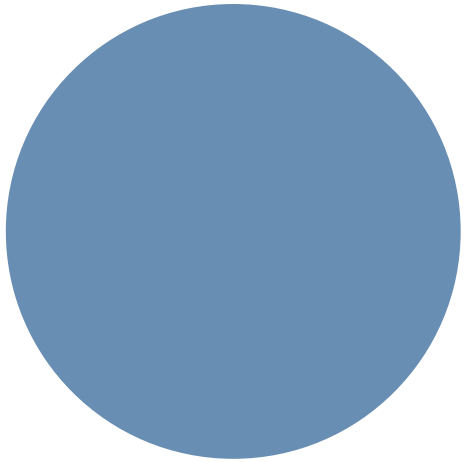
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-008	Development in North East Italy	Non-FID

Pipeline including CS

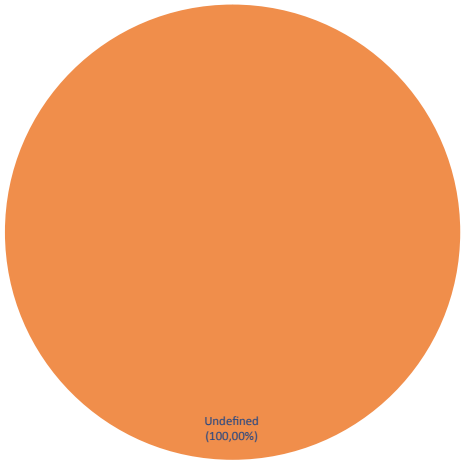
SPONSORS



GENERAL INFORMATION

Promoter	Snam Rete Gas S.p.A.
Operator	Snam Rete Gas S.p.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.snamretegas.it/export/sites/snamretegas/repository/file/ENG/Thermal_Year_20112012/Information_for_User/Capacity_plans/Capacity_and_development_Plan_2011_2012.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+120,00
Total Compressor Power (MW)	+100,00
Maximum Capacity (GWh/d)	+350,00
Expected Load Factor	65,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
	No	entry	350,00		Hub Italia

DESCRIPTION OF THE PROJECT

The project consists in new on-shore pipelines and in a new compressor station in the north east of Italy to permit the increase of transport capacity at new or existing Entry Points in that area

EXPECTED BENEFITS

Security of Supply, Diversification of sources, Diversification of routes, N-1 National (Italy), Back-up for renewables, Power-to-gas, Market Integration (Increase of competition), Flexibility of the system

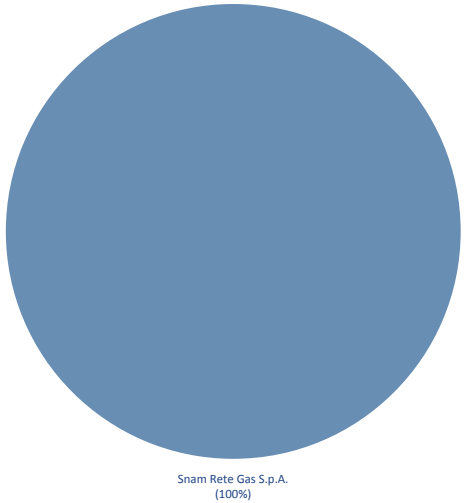
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-215	Panigaglia	Non-FID

Pipeline including CS

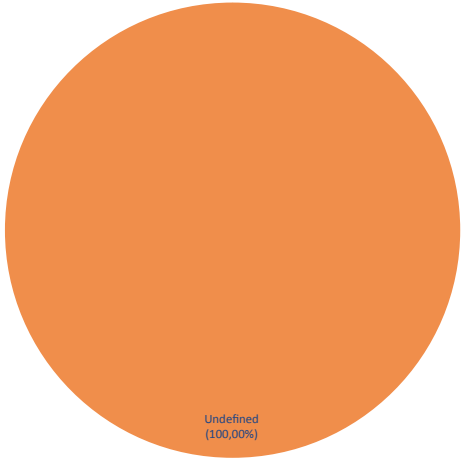
SPONSORS



GENERAL INFORMATION

Promoter	Snam Rete Gas S.p.A.
Operator	Snam Rete Gas S.p.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.snamretegas.it/export/sites/snamretegas/repository/file/ENG/Thermal_Year_20112012/Information_for_User/Capacity_plans/Capacity_and_development_Plan_2011_2012.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+150,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+135,00
Expected Load Factor	65,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Panigaglia	Yes	entry	135,00	LNG Terminals Italia	Hub Italia

DESCRIPTION OF THE PROJECT

The project consists in new on-shore pipelines to permit the increase of transport capacity at the Entry Point interconnected with the existing Panigaglia LNG Terminal

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, N-1 National (ITALY), Back-up for renewables, Market Integration (Increase of competition), Flexibility of the system, reducing of GHG emissions

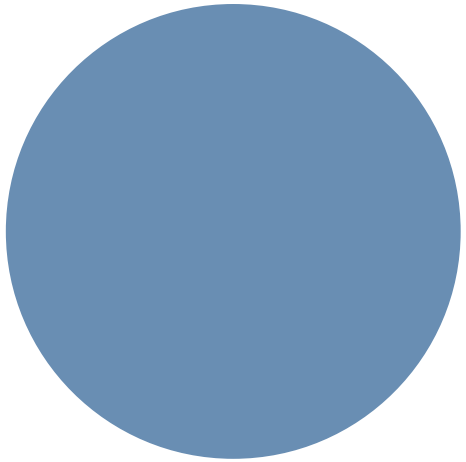
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-009	Second Southern initiative	Non-FID

Pipeline including CS

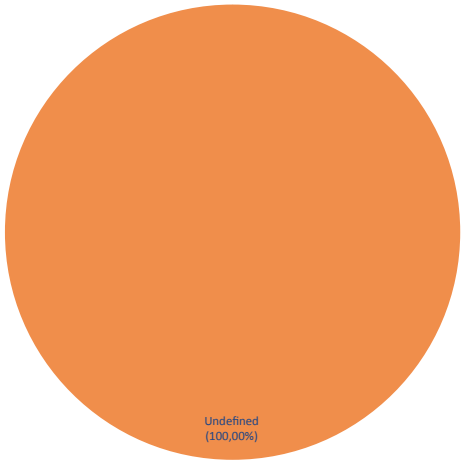
SPONSORS



GENERAL INFORMATION

Promoter	Snam Rete Gas S.p.A.
Operator	Snam Rete Gas S.p.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.snamretegas.it/export/sites/snamretegas/repository/file/ENG/Thermal_Year_20112012/Information_for_User/Capacity_plans/Capacity_and_development_Plan_2011_2012.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+660,00
Total Compressor Power (MW)	+90,00
Maximum Capacity (GWh/d)	+275,00
Expected Load Factor	65,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
	No	entry	275,00		Hub Italia

DESCRIPTION OF THE PROJECT

The project consists in new on-shore and off-shore pipelines and in development of compressor stations along the center-south of Italy to permit the increase of transport capacity at new or existing Entry Points in south Italy

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, N-1 National (ITALY), Back-up for renewables, Power-to-gas, SoS, Market Integration (Increase of competition), Flexibility of the system

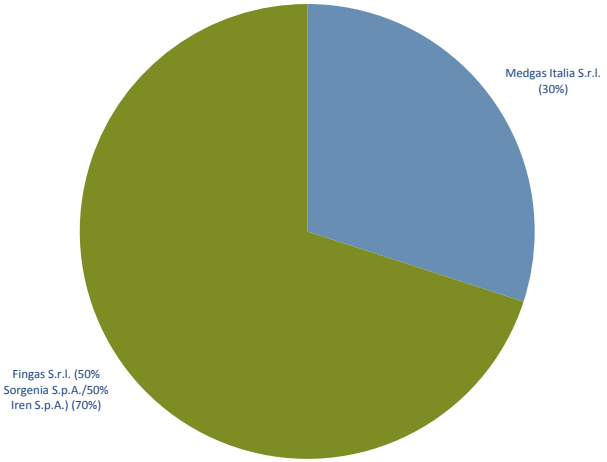
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-088	LNG Medgas Terminal S.r.l.	Non-FID

LNG Terminal

SPONSORS

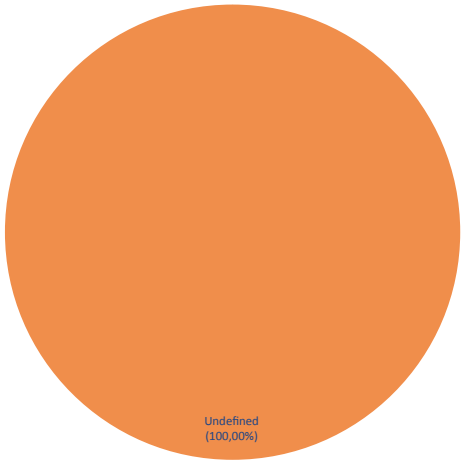


GENERAL INFORMATION

Promoter	Sorgenia S.p.A.
Operator	LNG Medgas Terminal S.r.l.
TEN-E Project ?	Priority Project
Interested by PCI ?	Yes
IGAs	None
Web Link	www.sorgenia.com/

TEN-E Requests	Date of Request	Year Funding Granted
	2/12/08	2010

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	0
Considered Tariff Regime	0
Applied for Exemption ?	Not yet
Exemption granted ?	0
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2012 Q1
FID	2013 Q4
Construction	2016 Q4
Commissioning	2017 Q1
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	LNG Medgas Terminal S.r.l.
Expected volume (bcm/y)	+12,00
Storage capacity (m3)	+640.000,00
Send-out (mcm/d)	+32,90
Ship size (m3)	270.000,00
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Medgas Terminal LNG	Yes	exit	361,90	LNG Terminals Italia	Hub Italia

DESCRIPTION OF THE PROJECT

The LNG Terminal of Gioia Tauro will contribute to the satisfaction of the European and Italian gas needs. Furthermore, the LNG Terminal of Gioia Tauro, by guaranteeing the possibility of buying LNG worldwide, will mitigate the European geopolitical risk, in particular for Italy which is highly dependent on Russian and Algerian imports. This aspect is in line with the specific criteria of the security of supply.

The position of Gioia Tauro is extremely strategic both for cargoes coming from the Suez Channel and from Atlantic basin. In the eventuality of disruptions in gas supplies from North African countries, the Gioia Tauro LNG Terminal would play a crucial role in allowing the supply of natural gas from alternative sources, without affecting the distribution chain that, from the Calabria region, provides natural gas to the rest of Italy and potentially also to Northern Europe.

EXPECTED BENEFITS

Security of Supply, Market integration (Development of Italy as a gas hub and possibility to become an exporting country.), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Italy), N-1 Regional, N-1 criteria completion (regional level): a region is not yet formally defined; the LNG Medgas Terminal will however bring advantages at bith national level and at regional level, considering the nature of a LNG project

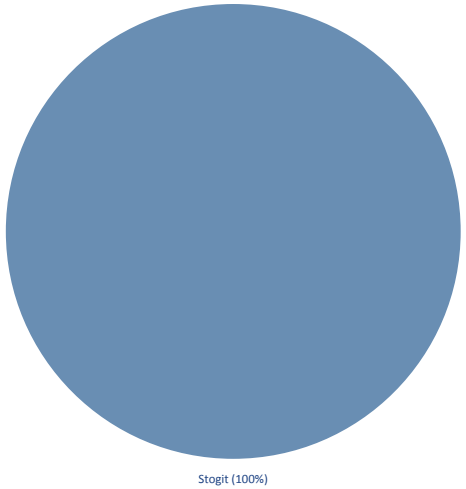
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-F-259	Bordolano	FID

Storage Facility

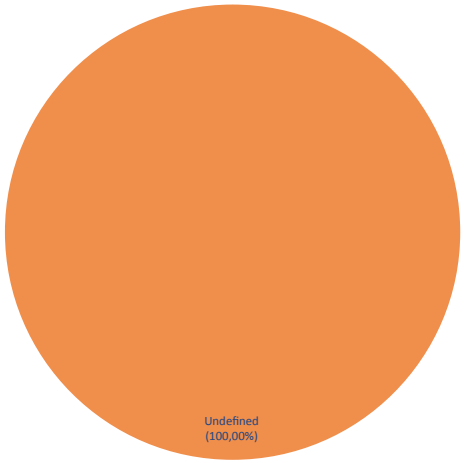
SPONSORS



GENERAL INFORMATION

Promoter	STOGIT
Operator	STOGIT
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.stogit.it/en/activities/Innovation-and-research/Progetto_Bordolano.html

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2013 Q1
FID	2006 Q2
Construction	2015 Q4
Commissioning	2015 Q4
Last completed Phase :	FID

TECHNICAL INFORMATION

Storage facility	Bordolano
Working volume (mcm)	+1.138,00
Injectability (mcm/d)	+14,00
Deliverability (mcm/d)	+19,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
UGS - IT - Snam Rete Gas/STOGIT	Yes	entry	154,00	Hub Italia	Storage Italia
	Yes	exit	209,00	Storage Italia	Hub Italia

DESCRIPTION OF THE PROJECT

Depleted gas fields on-shore (new field)

EXPECTED BENEFITS

Security of Supply, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional, Back-up for renewables, Power-to-gas, Market Integration (increase of competition and market liquidity), Increased flexibility of the system

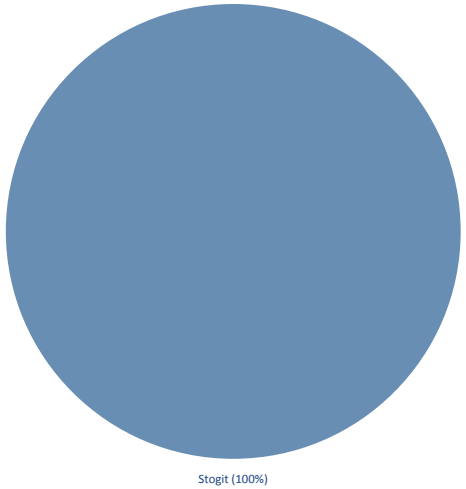
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-F-260	System Enhancements - Stogit - on-shore gas fields	FID

Storage Facility

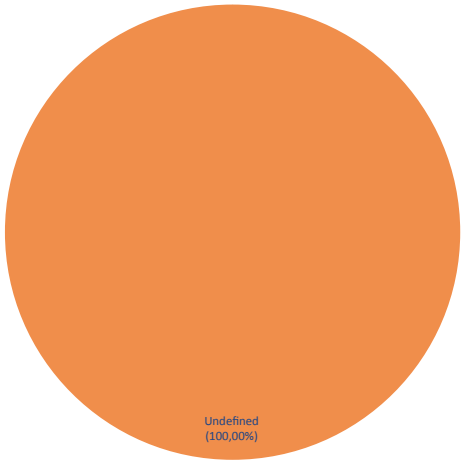
SPONSORS



GENERAL INFORMATION

Promoter	STOGIT
Operator	STOGIT
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2015 Q1
FID	2006 Q2
Construction	2022 Q4
Commissioning	2022 Q4
Last completed Phase :	FID

TECHNICAL INFORMATION

Storage facility	Stogit Enhancements and New Developments
Working volume (mcm)	+1.863,00
Injectability (mcm/d)	
Deliverability (mcm/d)	+18,50

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
UGS - IT - Snam Rete Gas/STOGIT	Yes	exit	203,50	Storage Italia	Hub Italia

DESCRIPTION OF THE PROJECT

The project envisages the development of the following depleted on-shore gas fields:

- Settala

- Fiume Treste

- Minerbio

- Ripalta

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional, Back-up for renewables, Power-to-gas, Market Integration (increase of competition and market liquidity),Increased flexibility of the system

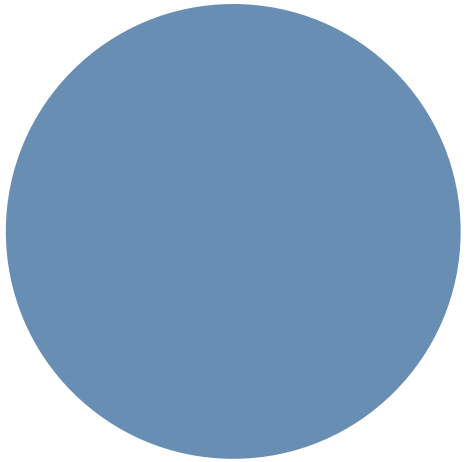
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-002	Alsace Sud	Non-FID

Storage Facility

SPONSORS

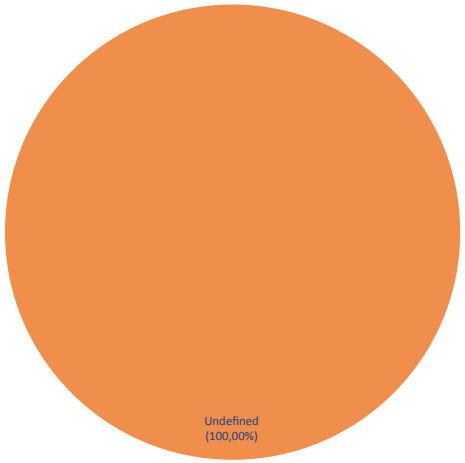


GENERAL INFORMATION

Promoter	Storengy
Operator	Storengy
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

TEN-E Requests	Date of Request	Year Funding Granted
		2005

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Storage facility	Alsace Sud
Working volume (mcm)	+200,00
Injectability (mcm/d)	+3,00
Deliverability (mcm/d)	+9,60

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Alsace Sud	Yes	exit	105,60	Storage France(PEG South)	Hub France(PEG South)
	Yes	entry	33,00	Hub France(PEG North)	Storage France(PEG North)

DESCRIPTION OF THE PROJECT

Creation of a new salt cavity storage site of up to 200 mcm of working gas volume

EXPECTED BENEFITS

Security of Supply, Market Integration (Increase of competition)
The project will contribute to the increase of storage capacity in France, which will enhance security of supply and provide more flexibility to the market thus facilitating competition.

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

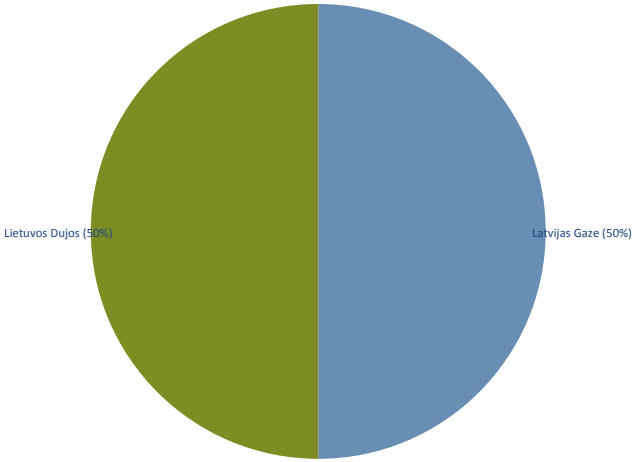
Latvia

TALLINN
Paldiski
ESTONIA
Pärnu
Karksi
Värska
Pskov
Misso
Izborsk
Korneti
Inčukalns
Riga
RIGA
LATVIA
Rezekne
Liepaja
Iecava
Kleména
Daugavpils
Klaipéda
Šiauliai
Syderiai
Visaginas
LITHUANIA
Jurbarkas
Jauniunai
Kaliningradskoye
Šakiai
Kaunas
VILNIUS
Kotlovka
Kaliningrad
RUSSIA
MINSK
GIPL
Tietierowka
EuRoPoL
Kondratki
Wysokoje
BELAR

TRA-N-131	Enhancement of Latvia-Lithuania interconnection	Non-FID

Pipeline including CS

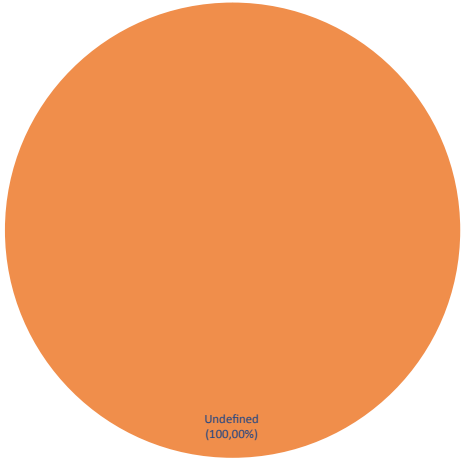
SPONSORS



GENERAL INFORMATION

Promoter	Latvijas Gaze
Operator	Latvijas Gaze
TEN-E Project ?	Priority Project
Interested by PCI ?	Yes
IGAs	None
Web Link	www.lg.lv/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	2021 Q4
Commissioning	2021 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+90,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Kiemenai	Yes	entry	62,20	Hub Lithuania	Hub Latvia
	Yes	exit	62,20	Hub Latvia	Hub Lithuania

DESCRIPTION OF THE PROJECT

In order to further enhace LV-LT interconnection section of gas pipeline in Latvia shall be built and gas metering station in Lithuania upgraded

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Lithuania), Project will significantly increase interoperability of Latvian and Lithuanian gas systems, improve security of supply for Lithuania and will be part of important route connecting common European gas grid with gas systems of the East-Baltic countries.

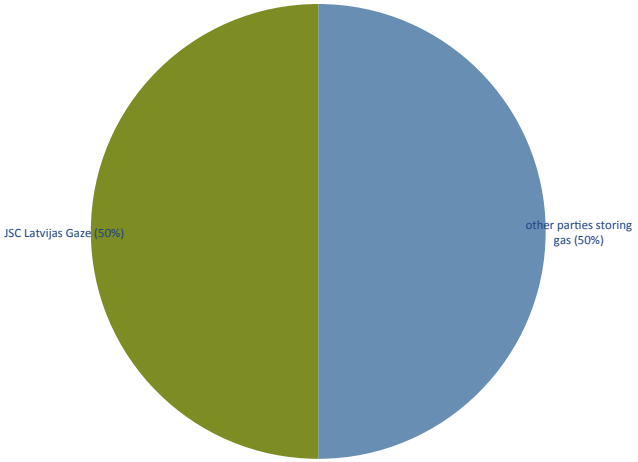
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Union financial assistance	Latvijas Gaze, Lietuvos Dujos	

UGS-N-130	Modernisation of Incukalns Underground Gas Storage	Non-FID

Storage Facility

SPONSORS

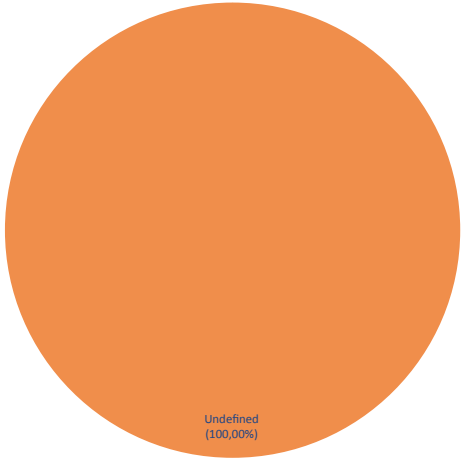


GENERAL INFORMATION

Promoter	Latvijas Gaze
Operator	Latvijas Gaze
TEN-E Project ?	Priority Project
Interested by PCI ?	Yes
IGAs	None
Web Link	www.lg.lv/

TEN-E Requests	Date of Request	Year Funding Granted
	28/04/10	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2013 Q4
Construction	2025 Q4
Commissioning	2025 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Storage facility	Incukalns Underground Gas Storage
Working volume (mcm)	+2.300,00
Injectability (mcm/d)	+17,00
Deliverability (mcm/d)	+30,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
UGS - LV - Latvijas Gaze	Yes	entry	198,00	Storage Latvia	Hub Latvia
	Yes	exit	385,00	Hub Latvia	Storage Latvia
UGS - LV - Latvijas Gaze	Yes	exit	187,00	Hub Latvia	Storage Latvia
	Yes	entry	330,00	Storage Latvia	Hub Latvia

DESCRIPTION OF THE PROJECT

Modernization of existing and construction of new facilities with the aim to increase daily output from 30 to 35 million m3 and to comply with the EN 1918:1

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes, N-1 Regional (BEMIP), Back-up for renewables, The Implementation of the Projects will enhance cross-border interconnection capacity, along with strengthening economic cooperation in the region, building links between Poland and Lithuania, and strengthening the economic cohesion with the common EU grid.

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Union financial assistance	Latvijas Gaze	Other parties keeping gas in the storage

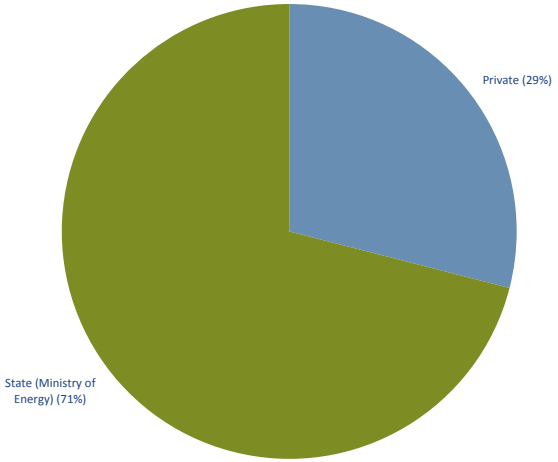
Lithuania

NORD STREAM
Pärnu
Karksi
Värska
Misso
Izborsk
Korneti
Riga
Inčukalns
RIGA
LATVIA
Rezekne
Liepaja
Iecava
Kleménai
Daugavpils
Šiauliai
Klaipéda
Syderiai
Visaginas
LITHUANIA
Jurbarkas
Jauniunai
Kaliningradskoye
Šaklai
Kaunas
VILNIUS
Kotlovka
Kaliningrad
RUSSIA
GIPL
POLAND
Tietierowka
EuRoPoL
Kondratki
Wysokoje
Rembelszczyzna
Pribugskoye
Kobryn
WARSAW
Lodz
Wronów

LNG-F-058	Klaipeda LNG terminal	FID

LNG Terminal

SPONSORS

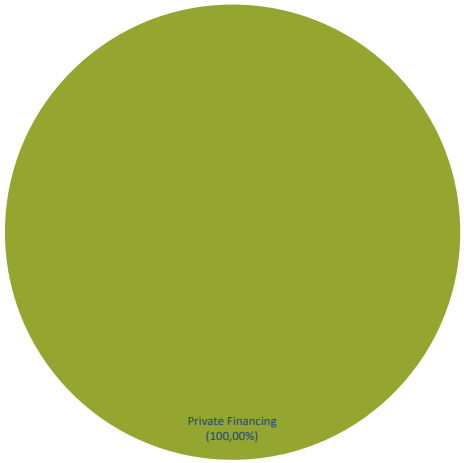


GENERAL INFORMATION

Promoter	Klaipedos Nafta
Operator	AB Klaipėdos Nafta
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.oil.lt/index.php?id=lng&L=1

TEN-E Requests	Date of Request	Year Funding Granted
	1/07/09	2010

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2013 Q2
FID	2012 Q1
Construction	2014 Q4
Commissioning	2014 Q4
Last completed Phase :	FEED

TECHNICAL INFORMATION

Regasification facility	
Expected volume (bcm/y)	+2,00
Storage capacity (m3)	+170.000,00
Send-out (mcm/d)	+5,00
Ship size (m3)	170.000,00
Reloading ability ?	Yes

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Klaipeda (LNG)	Yes	exit	55,00	LNG Terminals Lithuania	Hub Lithuania

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes, N-1 National (Lithuania), Reduce Lithuania's dependence on the single external natural gas supplier;
Ensure diversification of natural gas supply sources;
Create real gas market and ensuring natural gas supply in Lithuania.

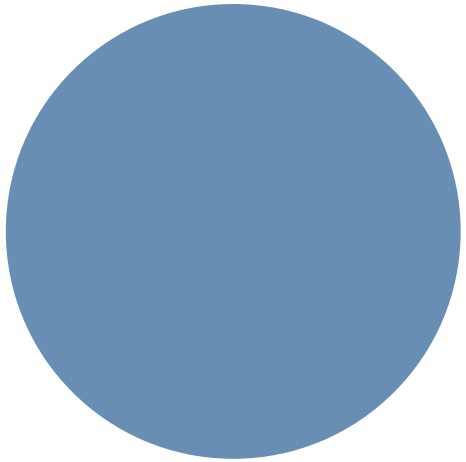
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-238	Enhancement of Capacity of Pipeline Klaipeda-Kiemenai	Non-FID

Pipeline including CS

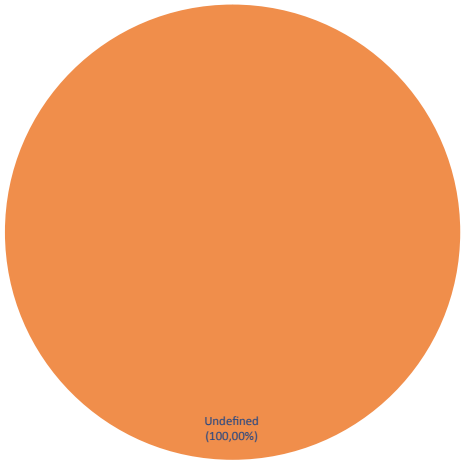
SPONSORS



GENERAL INFORMATION

Promoter	Lietuvos Dujos
Operator	Lietuvos Dujos
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.dujos.lt

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2017 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+110,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+62,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Klaipeda (LNG)	Yes	entry	62,00	LNG Terminals Lithuania	Hub Lithuania

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Diversification of sources, Diversification of routes, N-1 National (Lithuania), N-1 Regional (Baltic States).
This project would provide capacity to transport the gas from LNG terminal in Klaipeda to other Baltic states for the needs of national consumption as well as to the Incukalns underground gas storage (Latvia) as well as would provide an opportunity for the market players of certain Baltic states to diversify gas supply routes and sources and possibly enhance competition in the gas market.

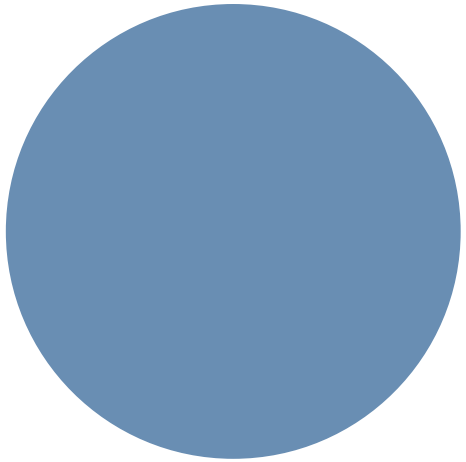
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Support from EU structural funds is expected.		

TRA-F-239	Gas pipeline Jurbarkas-Klaipeda	FID

Pipeline including CS

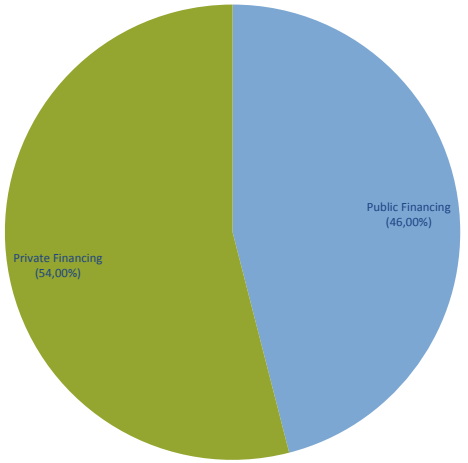
SPONSORS



GENERAL INFORMATION

Promoter	Lietuvos Dujos
Operator	Lietuvos Dujos
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.dujos.lt

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2011 Q4
Construction	2013 Q4
Commissioning	2013 Q4
Last completed Phase :	FID

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+137,60
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, The Klaipeda-Jubarkas gas pipeline will create a circular natural gas transmission system in Lithuania contributing thus to the security of supply.

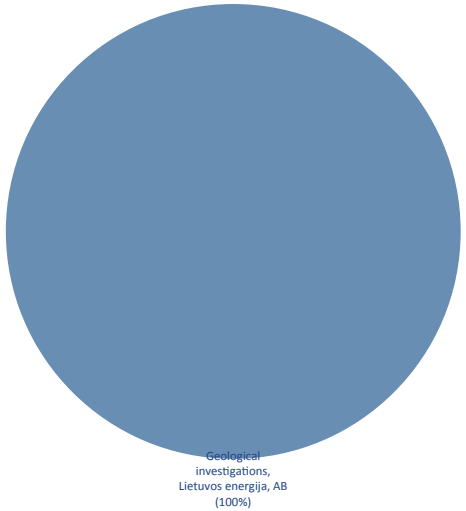
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Support from EU structural funds.	Lietuvos Dujos	

UGS-N-034	Syderiai	Non-FID

Storage Facility

SPONSORS

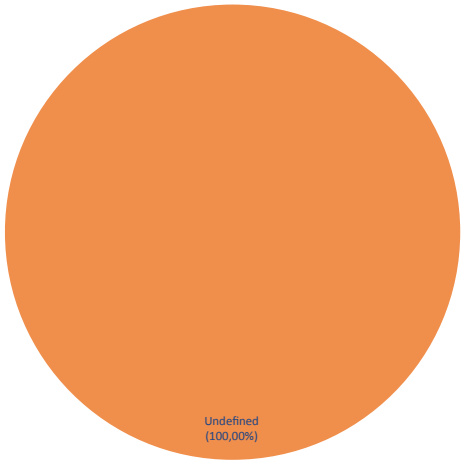


GENERAL INFORMATION

Promoter	Lietuvos energija AB
Operator	Lietuvos energija AB
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	le.lt

TEN-E Requests	Date of Request	Year Funding Granted
	28/02/11	2012
	27/06/08	2010

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2015 Q4
FID	2014 Q3
Construction	2018 Q4
Commissioning	2019 Q4
Last completed Phase :	

TECHNICAL INFORMATION

Storage facility	Syderiai underground gas storage
Working volume (mcm)	+500,00
Injectability (mcm/d)	+5,00
Deliverability (mcm/d)	+10,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Syderiai	Yes	entry	55,00	Hub Lithuania	Storage Lithuania
	Yes	exit	110,00	Storage Lithuania	Hub Lithuania

DESCRIPTION OF THE PROJECT

Expected total capacity – 1 billion m3, storage will create conditions for gas reserve storage in Lithuania, increase the security of supply and contribute to the creation of national gas market

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, The project should create conditions for natural gas reserve storage in Lithuania, increase the security of natural gas supply in the region and contribute to the creation of national gas market

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

entsog

european network
of transmission system operators
for gas

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info@entsog.eu
www.entsog.eu

entsog
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of transmission system operators
for gas

Ten-Year Network Development Plan
2013-2022

Infrastructure Projects

Annex A

A fair partner to all

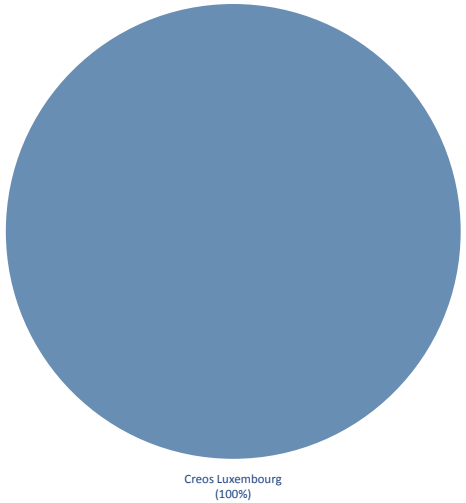
Luxembourg

Loenhout
Obbrücht
Dilsen
Bocholtz
Broichweiden
's-Gravenvoeren
Stolberg
BRETELLA
Eynatten
Raeren/Lichtenbusch
BELGIUM
Bras
TENP
LUX
Petange
Remich
Frankenth
NORD
MEGAL
TENP
Obergailbach
25
Medelsheim
Trois Fontaines
Cerville
TENP

TRA-N-013	OS GRTgaz/Creos	Non-FID

Pipeline including CS

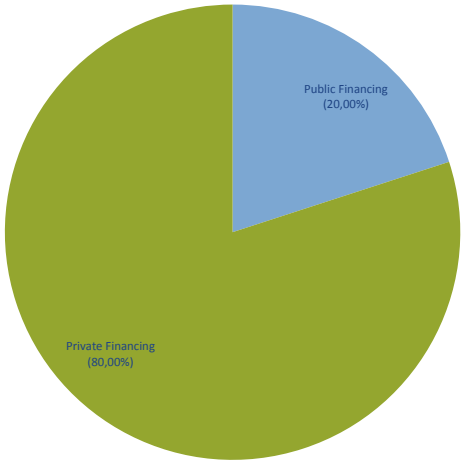
SPONSORS



GENERAL INFORMATION

Promoter	Creos Luxembourg S.A.
Operator	Creos Luxembourg S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014 Q2
FID	2013 Q3
Construction	2014 Q2
Commissioning	2017 Q3
Last completed Phase :	Construction

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+2,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+40,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
New IP France/Luxemburg	Yes	entry	40,00	Hub France(PEG North)	Hub Luxemburg

DESCRIPTION OF THE PROJECT

add entry capacity from France to Lux

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional, Extension of transport capacity of Russian gas to the West, Integration of Nord Stream off- and on-Shore in the European gas infrastructure

COMMENTS ABOUT THE PROJECT FINANCING

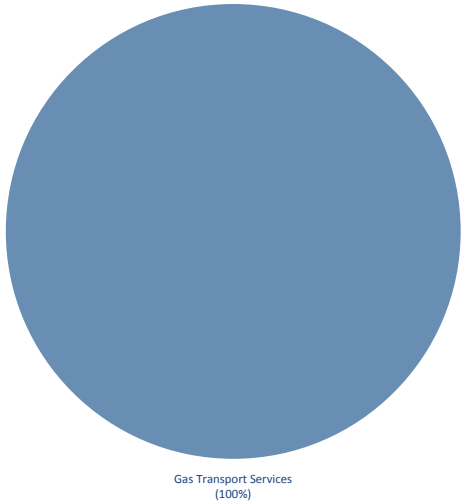
Public financing	Private financing	Multilateral financing

The Netherlands

TRA-N-191	Blending	Non-FID

Pipeline including CS

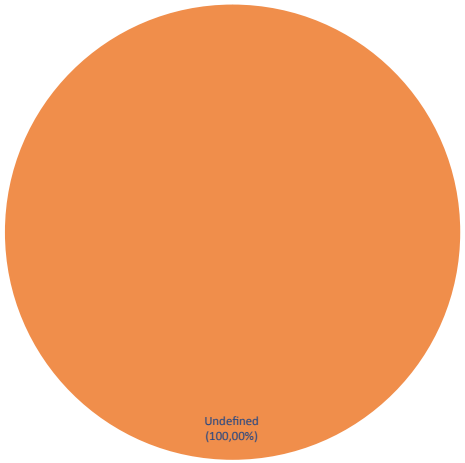
SPONSORS



GENERAL INFORMATION

Promoter	Gasunie Transport Services B.V.
Operator	Gasunie Transport Services B.V.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2020
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
	No	exit	0,00		

DESCRIPTION OF THE PROJECT

Additional blending facilities to allow additional Quality Conversion

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources

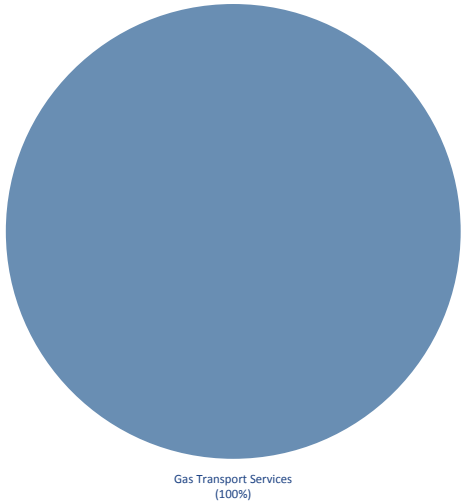
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-192	Entry capacity expansion GATE terminal	Non-FID

Pipeline including CS

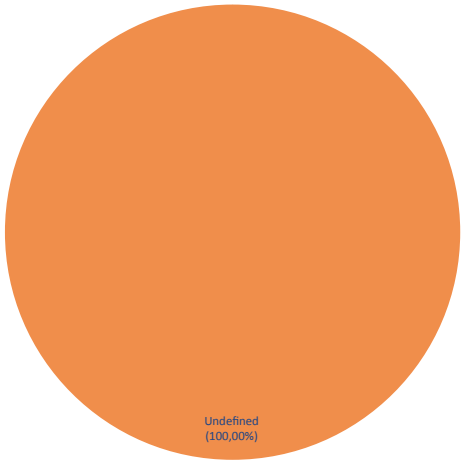
SPONSORS



GENERAL INFORMATION

Promoter	Gasunie Transport Services B.V.
Operator	Gasunie Transport Services B.V.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2016
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+25,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+200,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Gate Terminal (I)	Yes	entry	200,00	LNG Terminals Netherlands	Hub Netherlands

DESCRIPTION OF THE PROJECT

Expansion of entry capacity into GTS network

EXPECTED BENEFITS

Security of Supply, Diversification of sources, Diversification of routes

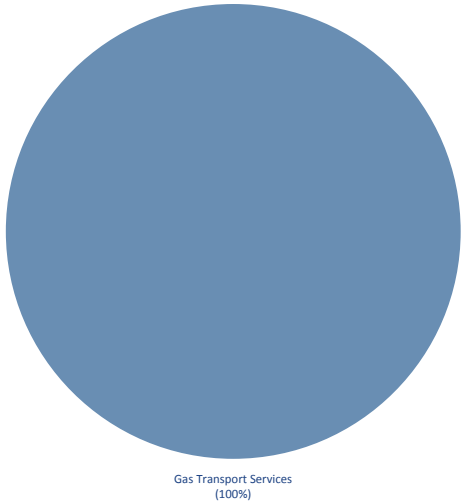
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-193	Gas Compressor Optimisation Program	Non-FID

Pipeline including CS

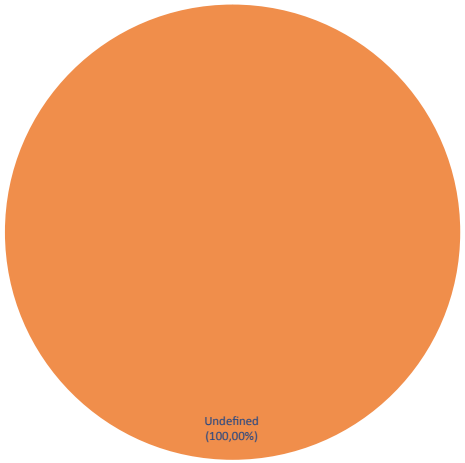
SPONSORS



GENERAL INFORMATION

Promoter	Gasunie Transport Services B.V.
Operator	Gasunie Transport Services B.V.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+540,00
Maximum Capacity (GWh/d)	+3.560,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Hilvarenbeek/'s Gravenvoeren	No	exit	0,00	Hub Netherlands	Hub Belgium
Winterswijk/Zevenaar/Bocholtz	No	exit	0,00	Hub Netherlands	Hub Germany

DESCRIPTION OF THE PROJECT

Project is carried out in order to to comply with Industrial Emissions Directive

EXPECTED BENEFITS

Security of Supply, Market integration (), Diversification of sources, Sustainability by reduction of emissions

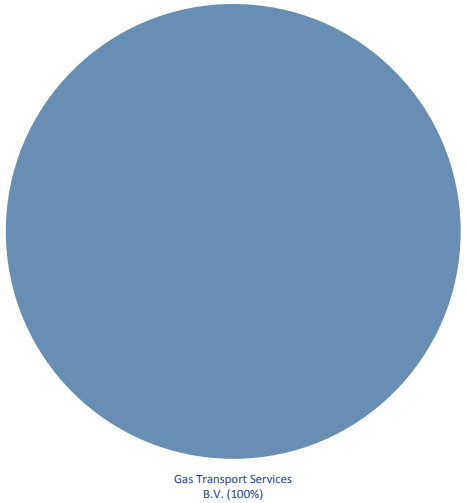
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-268	System Enhancements FID update - Gas Transport Services	FID

Pipeline including CS

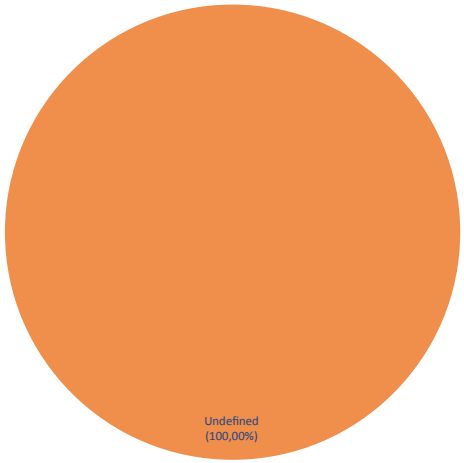
SPONSORS



GENERAL INFORMATION

Promoter	Gasunie Transport Services B.V.
Operator	Gasunie Transport Services B.V.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.integratedopenseason.com

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2014 Q3
Last completed Phase :	FID

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+100,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Virtual IP (GTS) NL-DE	Yes	entry	97,00	Hub Germany	Hub Netherlands
Virtual Ips (GTS) NL - UK	No	exit	0,00	Hub Netherlands	Hub United Kingdom
Virtual Ips (GTS) NL-DE (NCG)	Yes	entry	24,00	Hub Germany(NCG)	Hub Netherlands
Virtual Ips (GTS) NL-DE (Gaspool)	Yes	entry	73,00	Hub Germany(Gaspool)	Hub Netherlands
Virtual IP (GTS) NL-BE	No	entry	0,00	Hub Belgium	Hub Netherlands
	Yes	exit	203,00	Hub Netherlands	Hub Belgium
UGS - NL - GTS/DE	Yes	entry	111,00	Storage Germany	Hub Netherlands

DESCRIPTION OF THE PROJECT

Various system capacity enhancements (further expansion of gas roundabout, Integrated Open Season, connection to Bergermeer Storage)

EXPECTED BENEFITS

Security of Supply, Market integration (increase of competition), Diversification of sources, Diversification of routes, Import, Quality Conversion
Further expansion of the gas roundabout increases SoS since it enables additional import of gas and also connects storages to the gas networks. Furthermore, interconnection capacity between TSOs is increased which increases market integration.

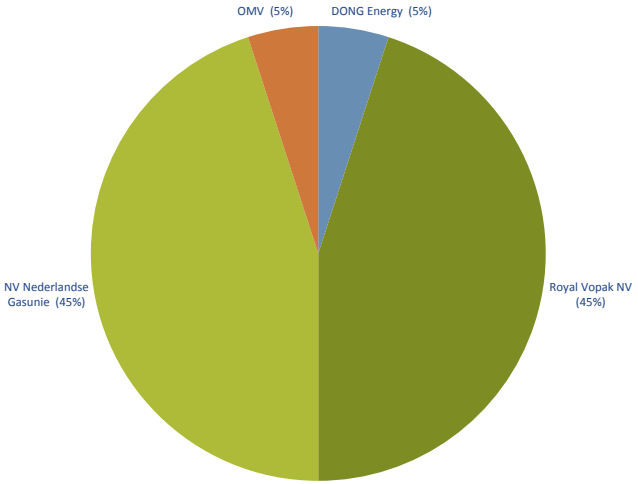
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-050	Gate terminal phase 3	Non-FID

LNG Terminal

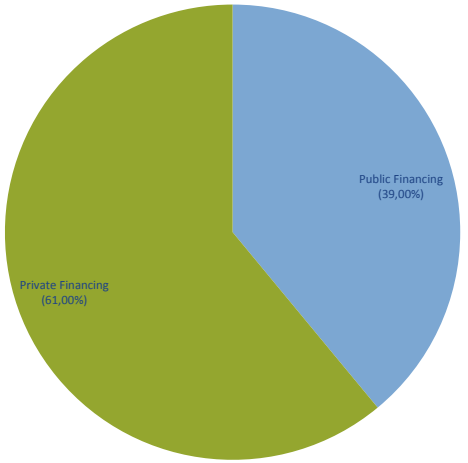
SPONSORS



GENERAL INFORMATION

Promoter	Gate Terminal B.V.
Operator	Gate Terminal B.V.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.gateterminal.com

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Yes
Exemption granted ?	Yes
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2007 Q4
FID	2013 Q3
Construction	2016 Q3
Commissioning	2016 Q3
Last completed Phase :	Permitting

TECHNICAL INFORMATION

Regasification facility	Gate terminal Rotterdam
Expected volume (bcm/y)	+4,00
Storage capacity (m3)	+180.000,00
Send-out (mcm/d)	+11,00
Ship size (m3)	266.000,00
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Gate Terminal (I)	Yes	exit	121,00	LNG Terminals Netherlands	Hub Netherlands

DESCRIPTION OF THE PROJECT

Increase the capacity by 4 BCM p.a. from the current 12 BCM p.a. to 16 BCM p.a.

EXPECTED BENEFITS

Security of Supply, Diversification of sources, Diversification of routes, Back-up for renewables, Market Integration (Increase of competition)
Gate terminal obtained an exempted ex Art 22 Gas Directive 2003/55/EC. In order to obtain an exemption it needed to be demonstrated that Gate terminal enhanced both security of supply and the competition on the gas market.

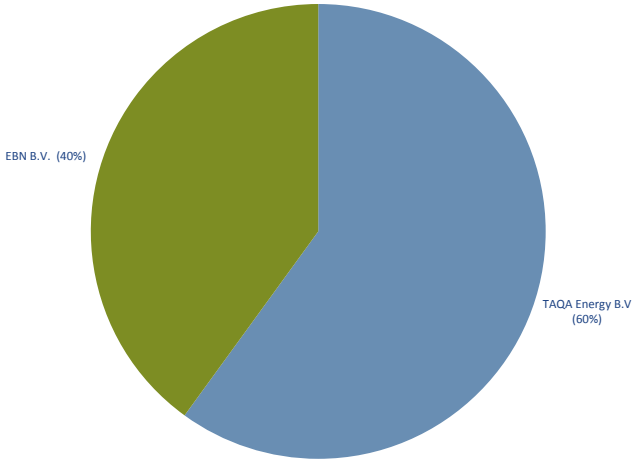
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Unknown	Unknown	

UGS-F-052	Gas Storage Bergermeer (GSB)	FID

Storage Facility

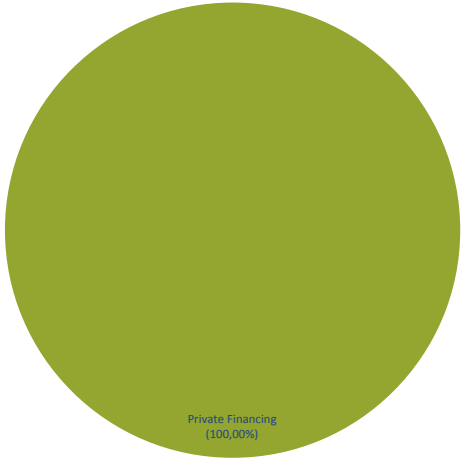
SPONSORS



GENERAL INFORMATION

Promoter	TAQA Gas Storage B.V.
Operator	TAQA Gas Storage B.V.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.gasstoragebergermeer.com/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2012 Q2
FID	2009 Q4
Construction	
Commissioning	2014 Q1
Last completed Phase :	Permitting

TECHNICAL INFORMATION

Storage facility	Gas Storage Bergermeer
Working volume (mcm)	+4.100,00
Injectability (mcm/d)	+42,00
Deliverability (mcm/d)	+57,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Bergermeer	Yes	exit	627,00	Storage Netherlands	Hub Netherlands
	Yes	entry	462,00	Hub Netherlands	Storage Netherlands

DESCRIPTION OF THE PROJECT

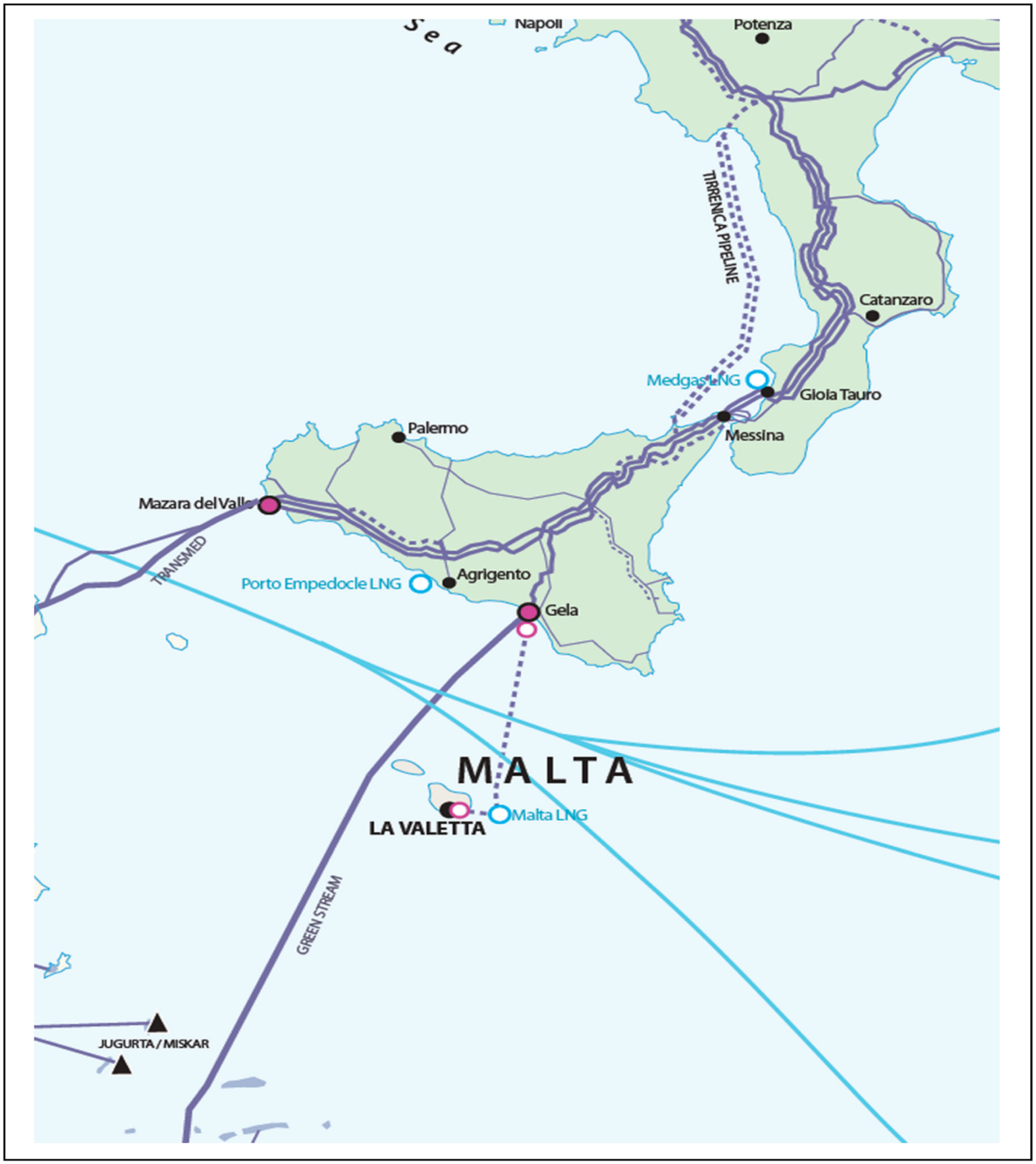
EXPECTED BENEFITS

Security of Supply, Market integration (Trading, infrastructure and transport in northwestern Europe), Diversification of sources, Back-up for renewables, Market Integration (Increase of competition)
Bergermeer Gas Storage will significantly enhance the security of energy supply to Dutch and European consumers, providing a reserve of the equivalent to the annual gas consumption of approximately 1.6 million Dutch households. The planned working volume amounts to 4.1 bcm. It will also be a major contributor to liquidity in the North-West European gas markets.
The project is a valuable contribution towards the ambition the Dutch State to realise the 'gas roundabout of North-West Europe' in The Netherlands.
Once commercially operational, the majority of the capacity of the facility will be made available for third party access. This will contribute to increased competition on the market.

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

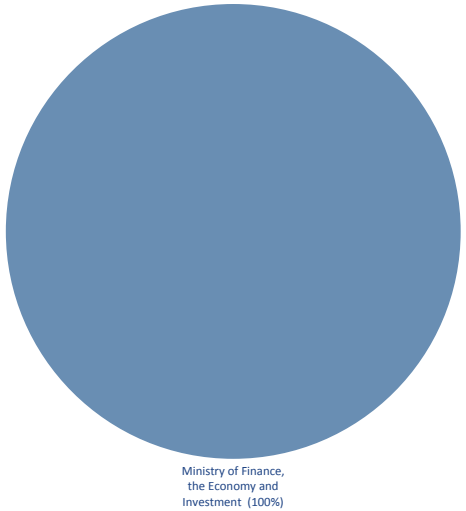
Malta


Napoli
Potenza
TIRRENICA PIPELINE
Catanzaro
Medgas LNG
Gioia Tauro
Palermo
Messina
Mazara del Vallo
TRANSMED
Porto Empedocle LNG
Agrigento
Gela
MALTA
LA VALETTA
Malta LNG
GREEN STREAM
JUGURTA / MISKAR

LNG-N-211	Connection of Malta to the European Gas Network - LNG Regasification Infrastructure	Non-FID

LNG Terminal

SPONSORS

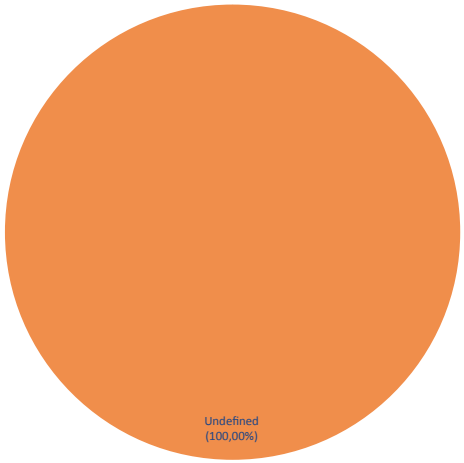


GENERAL INFORMATION

Promoter	Enemalta Corporation
Operator	Enemalta Corporation
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

TEN-E Requests	Date of Request	Year Funding Granted
	28/02/12	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2015 Q3
FID	2013 Q3
Construction	2015 Q4
Commissioning	2018 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Malta FSRU OffshoreTerminal
Expected volume (bcm/y)	+2,00
Storage capacity (m3)	+200.000,00
Send-out (mcm/d)	+5,50
Ship size (m3)	135.000,00
Reloading ability ?	Yes

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Malta FSRU Offshore Terminal	Yes	exit	60,50	Hub Malta	Hub Italia

DESCRIPTION OF THE PROJECT

Malta is a small island Member State with no gas interconnections to the European network, thus the project will: connect Malta to the European Natural Gas Network via a 150 kilometre 25”diameter pipeline to Sicily; and install a Floating LNG Storage and Re-gasification Unit (FSRU) to be supplied with LNG shipments and which would be connected to the Delimara Power Station (via a 12 kilometre pipeline) and to the gas interconnection. The objectives of the proposal are: to connect Malta to the European Gas network and strengthen Malta’s energy security of supply; to deliver Natural Gas (NG) to Malta for electricity generation and to local consumers for commercial, industrial and domestic use; to export natural gas by pipeline to Sicily from the FSRU offshore terminal which will incorporate a 200,000 m3 LNG storage facitilty. This questionnaire addresses the offshore LNG regasification infrastructure part of this project whilst a separate questionnaire addresses the pipelines infrastructure part of the project.

EXPECTED BENEFITS

Security of Supply, Market integration (Malta and Italy), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Malta and Italy), N-1 Regional (Sicily), Back-up for renewables, The project will be ending the isolation that Malta has from the European Gas networks. It will provide diversification of fuels by reducing the current complete dependence on imported liquid fossil fuels. It will provide access to a potentially lower cost fuel for electricity generation and for commercial and domestic use, thereby improving competitiveness and affordability of energy in Malta. It will also deliver energy efficiency gains in generation of electricity and other uses. Natural gas, being a cleaner fuel than the current fossil fuels in use, will contribute to a reduction of energy-related emissions and will be beneficial to reach Climate Change targets. The pipeline connection to Sicily will also serve to increase security of supply by serving as a backup supply option in the case of prolonged interruption of the LNG supply, as natural gas can be sourced from the Italian gas network.

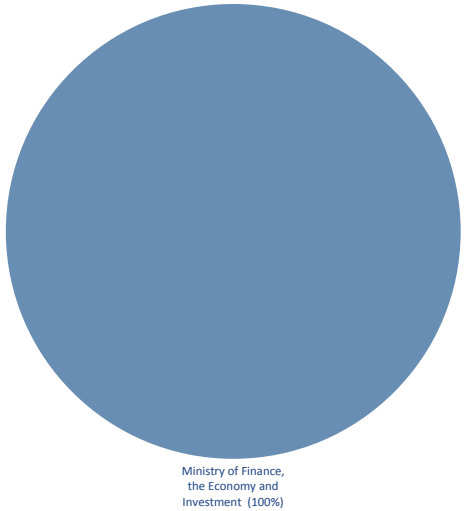
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-031	Connection of Malta to the European Gas Network - Pipelines	Non-FID

Pipeline including CS

SPONSORS

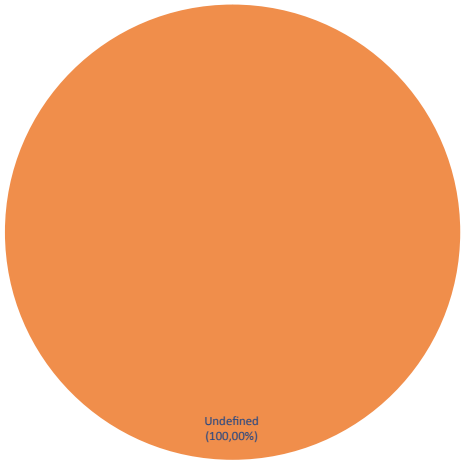


GENERAL INFORMATION

Promoter	Enemalta Corporation
Operator	Enemalta Corporation
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

TEN-E Requests	Date of Request	Year Funding Granted
	28/02/12	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2015 Q3
FID	2013 Q3
Construction	2015 Q4
Commissioning	2018 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+162,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+48,20
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
FSRU (Malta) to Sicily Interconnection	Yes	exit	48,20	LNG Terminals Malta	Hub Italia
FSRU (Malta) to Delimara (Malta) Connection	Yes	exit	12,00	LNG Terminals Malta	Hub Malta

DESCRIPTION OF THE PROJECT

Malta is a small island Member State with no gas interconnections to the European network, thus the project will: connect Malta to the European Natural Gas Network via a 150 kilometre 25”diameter pipeline to Sicily; and install a Floating LNG Storage and Re-gasification Unit (FSRU) to be supplied with LNG shipments and which would be connected to the Delimara Power Station (via a 12 kilometre pipeline) and to the gas interconnection. The objectives of the proposal are: to connect Malta to the European Gas network and strengthen Malta’s energy security of supply; to deliver Natural Gas (NG) to Malta for electricity generation and to local consumers for commercial, industrial and domestic use; to export natural gas by pipeline to Sicily from the FSRU offshore terminal which will incorporate a 200,000 m3 LNG storage facitilty. This questionnaire addresses only the pipelines infrastructure part of this project whilst a separate questionnaire addresses the offshore LNG regasification infrastructure part of the project.

EXPECTED BENEFITS

Security of Supply, Market integration (Malta and Italy), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Malta and Italy), N-1 Regional (Sicily), Back-up for renewables. The project will be ending the isolation that Malta has from the European Gas networks. It will provide diversification of fuels by reducing the current complete dependence on imported liquid fossil fuels. It will provide access to a potentially lower cost fuel for electricity generation and for commercial and domestic use, thereby improving competitiveness and affordability of energy in Malta. It will also deliver energy efficiency gains in generation of electricity and other uses. Natural gas, being a cleaner fuel than the current fossil fuels in use, will contribute to a reduction of energy-related emissions and will be beneficial to reach Climate Change targets. The pipeline connection to Sicily will also serve to increase security of supply by serving as a backup supply option in the case of prolonged interruption of the LNG supply, as natural gas can be sourced from the Italian gas network.

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

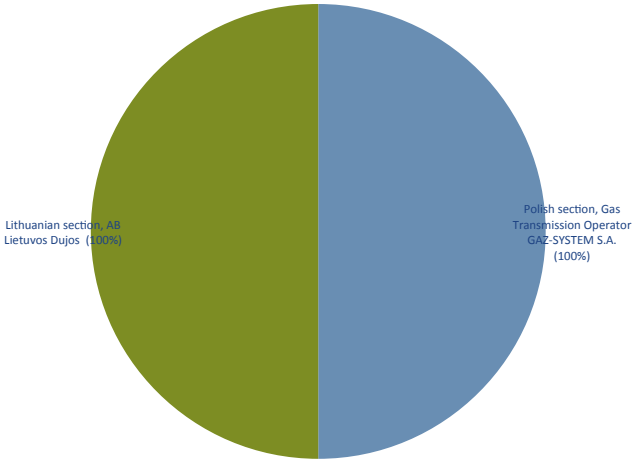
Poland

NORD STREAM
Kleménai
Klaipéda
Šiauliai
Syderiai
LITHUANIA
Jurbarkas
Kaliningradskoye
Šaklai
Kaunas
Kaliningrad
RUSSIA
Kosakowo
Gdansk
Greifswald
Świnoujście
Niechorze
Daszewo
Ploty
Szczecin
OPAL
POLAND
GIPL
Tietierowka
Mallnow
Mogilno
Włocławek
EuRoPoL
Kondratki
Lwówek
Poznan
Wysokoje
Rüdersdorf
Bonikowo
Rembelszczyzna
Pribugskoye
WARSAW
Lodz
Odolanów
Lasów
Jelenlów
Wierzchowice
Wroclaw
Wronów
Tworzeń
Swarzow
Brzeznica
Husow
Katowice
Oświęcim
Rzeszow
Jaroslaw
Kourim
VOB
Cieszyn
Tlanovice
Skoczów
Pogórska Wola
Opary
Štramberk
Drozdwicze
Strachocina
Drozdovychi
Bilche-Volytsya
Lobodice
Uhřice
Kralice
Hostim
Dolní Bojanovice
Dolní Dunajovice
Břeclav
Tvrdonice
Reinthal
Velké Kapušany
Tallesbrunn
Lanzhot
Baumgarten
Uzhgorod
Linz
Schönkirchen / Reyersdorf
VIENNA
Láb*
Thann
Beregovo
Kittsee
BRATISLAVA
Balassagyarmat
Beregdaróc
Tekovo
CEGH
Mosonmagyaróvar
BUDAPEST
Győr
Graz
Hajdúszoboszló
Weltendorf
Csepel
Vecsés
Satu Mare
Ercsi
Adony
South Stream

TRA-N-212	Gas Interconnection Poland-Lithuania (GIPL)	Non-FID

Pipeline including CS

SPONSORS

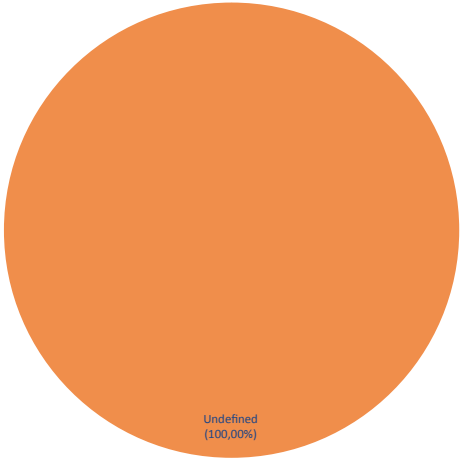


GENERAL INFORMATION

Promoter	GAZ-SYSTEM S.A.
Operator	GAZ-SYSTEM S.A.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	en.gaz-system.pl/nasze-inwestycje/integracja-z-europejski-systemem/polska-litwa/

TEN-E Requests	Date of Request	Year Funding Granted
	30/04/10	2012

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2013 Q4
Construction	
Commissioning	2017
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+562,00
Total Compressor Power (MW)	+2,10
Maximum Capacity (GWh/d)	+68,00
Expected Load Factor	44,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Interconnector PL-LT	Yes	exit	68,00	Hub Poland	Hub Lithuania
	Yes	entry	29,00	Hub Lithuania	Hub Poland
Interconnector PL-LT	No	exit	63,70	Hub Poland	Hub Lithuania

DESCRIPTION OF THE PROJECT

GIPL aims to connect the gas transmission systems in Poland and Lithuania and, consiquently, enable the integration of the isolated gas markets in the Baltic States (and Finland) with Polish and EU gas markets contributing to the creation of the regional gas market, enhancing competition and the security of gas supply. The project will also provide an access to the global LNG market for the Baltic States (via the LNG terminal in Świnoujście). The construction of GIPL, except the above benefits for security and diversification of gas supplies in the Baltic region, will allow to connect the Baltic States with the CEE countries, thus providing strategic link between BEMIP and North-South priority corridors in this part of Europe.

EXPECTED BENEFITS

Security of Supply, Market integration (market areas in the Baltic States and Central-Eastern Europe), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Lithuania and possibly Latvia, Estonia), N-1 Regional (the Baltic Sea region), Back-up for renewables, The very aim of GIPL is the integration of the isolated gas markets of the Baltic States into the EU gas grid, by introducing the alternative gas supply route to the Baltic States. This interconnection will diversify the gas supply sources, increase the security of supply and will serve for the enhancement of competition in the gas market of the Baltic States.
For the Baltic States, GIPL will provide the access both to EU gas spot market and to the global LNG market via LNG terminal in Świnoujście. From long-term perspective, it may also be used for importing shale-gas from Poland, if production of it comes into large scale level. For the Polish market players, GIPL will provide the opportunity of using Latvian Incukalns UGS. Also through GIPL, gas could be supplied to currently non-gasified areas in Poland and Lithuania.

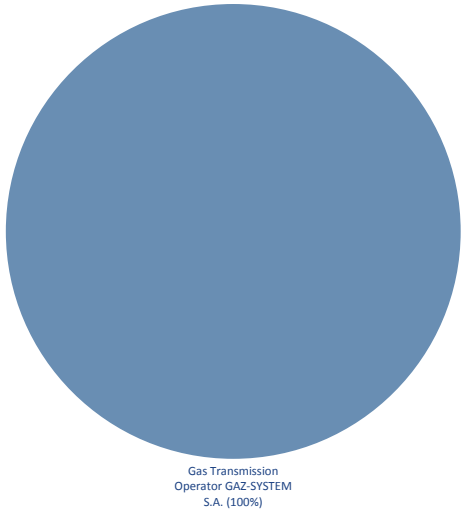
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
TEN-E (obtained for studies), support from other EU funds is expected		

LNG-F-246	LNG terminal in Świnoujście	FID

LNG Terminal

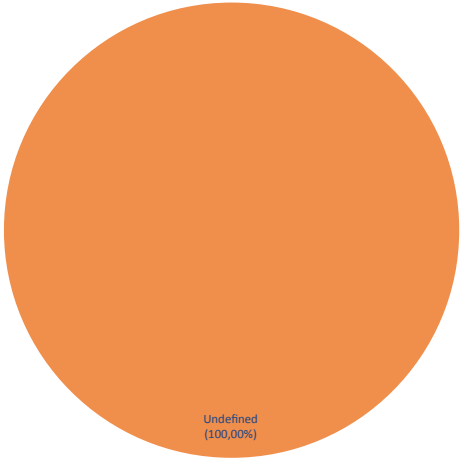
SPONSORS



GENERAL INFORMATION

Promoter	GAZ-SYSTEM S.A.
Operator	Polskie LNG S.A.
TEN-E Project ?	Priority Project
Interested by PCI ?	No
IGAs	None
Web Link	en.gaz-system.pl/terminal-lng/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2010
Construction	
Commissioning	2014
Last completed Phase :	FID

TECHNICAL INFORMATION

Regasification facility	LNG terminal in Świnoujście
Expected volume (bcm/y)	+5,00
Storage capacity (m3)	+320.000,00
Send-out (mcm/d)	+13,68
Ship size (m3)	216.000,00
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Swinoujscie	Yes	exit	150,48	LNG Terminals Poland	Hub Poland

DESCRIPTION OF THE PROJECT

The LNG terminal in Świnoujście will be the first LNG terminal in the Baltic Sea region. It will come on stream in 2014 with annual re-gasification capacity of 5 bcm/y. In the following years, depending on the increase of demand for gas, it will be possible to increase the capacity up to 7,5 bcm/y, without the need to increase the area on which the terminal will be constructed. The terminal in Świnoujście will consist of two storage tanks, each with the capacity of 160 tcm. The LNG terminal in Świnoujście will offer its regasification capacities not only to gas consumers in Poland, but also in the Baltic Sea region (supplies to be directed via Gas Interconnection Poland-Lithuania and/or LNG ships) and in Central-Eastern Europe (supplies within the North-South Gas Interconnections).

EXPECTED BENEFITS

Security of Supply, Diversification of sources, Diversification of routes, N-1 National (Poland and possibly Lithuania, Latvia, Estonia, Denmark, Slovakia and Hungary), N-1 Regional (Baltic Sea region, Central-Eastern Europe), Back-up for renewables, The LNG terminal in Swinoujscie will have an impact on: increasing security of supply in the Baltic Sea and CEE regions by diversifying supply routes, sources (the first new physical source of supply for both regions) and counterparts (access to global LNG market); creating well-interconnected gas infrastructure in the Baltic Sea and CEE regions; eliminating the energy islands, as the terminal in Swinoujscie may play the role of regional LNG terminal for the Baltic States and Finland (transport of gas via Gas Interconnection Poland-Lithuania or transport by LNG vessels); enhancing competition on regional markets; promoting natural gas as a reliable, competitive and environmentally-friendly source of energy e.g. in the transport sector (maritime transport); creating a physical hub in Swinoujscie and/or a virtual hub in Poland; establishing adequate technical conditions necessary to cover the forecasted growth of the gas demand in Poland based on the development of the power generation sector and possible leverage for market coupling potential in the Baltic Sea region and in Central-Eastern Europe.
The LNG terminal in Świnoujście contributes to North-South gas interconnections in Central Eastern and South Eastern Europe, as the supplies from Świnoujście may be directed through upgraded transmission system in Poland (the North-South Corridor in Poland), PL-CZ and PL-SK interconnections towards the South, to other CEE countries.

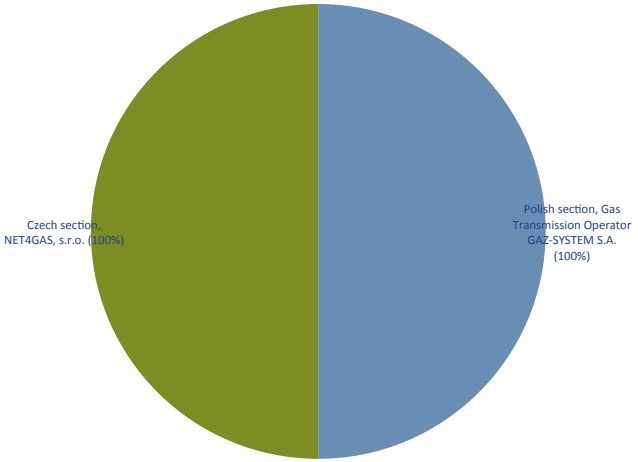
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
EEPR, ERDF (Operational Programme Infrastructure and Environment), TEN-E	Equity, commercial banks	EIB, EBRD

TRA-N-273	PL - CZ interconnection	Non-FID

Pipeline including CS

SPONSORS

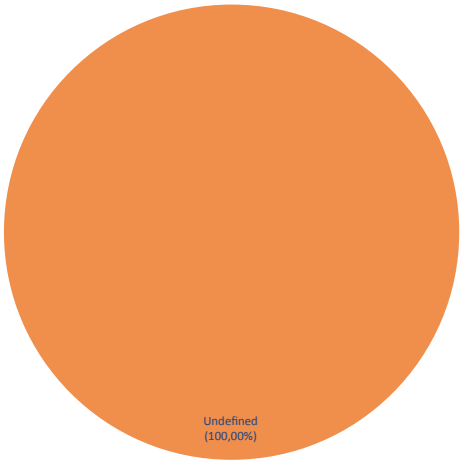


GENERAL INFORMATION

Promoter	GAZ-SYSTEM S.A.
Operator	GAZ-SYSTEM S.A.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	

TEN-E Requests	Date of Request	Year Funding Granted
		Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2014
Construction	
Commissioning	2017
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+107,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+195,90
Expected Load Factor	80,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Interconnector CZ-PL	Yes	exit	150,60	Hub Poland	Hub Czech Republic
	Yes	entry	195,90	Hub Czech Republic	Hub Poland

DESCRIPTION OF THE PROJECT

The project aims to increase the cross-border capacity between Poland and the Czech Republic by establishing a large transportation corridor that will allow for flexible transport of gas in Central-Eastern Europe within the North-South corridor.

EXPECTED BENEFITS

Security of Supply, Market integration (market areas in Central-Eastern Europe), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Poland, possibly Slovakia and Hungary), N-1 Regional (Central-Eastern Europe), Back-up for renewables, Implementation of PL-CZ interconnection will have an impact on:
increasing the security of gas supply and providing the overall flexibility for the CEE region and diversifying the supply routes for the CEE region;
improving European gas grid interconnection;
increasing the security and reliability of the cross-border gas transmission between the Czech Republic and Poland (fulfilment of N-1 rule in Poland);
creating a robust, well-functioning internal market in the Czech Republic and Poland and promoting the competition;
contributing to the creation of an integrated and competitive gas market in the CEE region;
establishing adequate technical conditions necessary to cover the forecasted growth of the gas demand in Poland based on the development of the power generation sector and possible leverage for market coupling potential in Central-Eastern Europe.

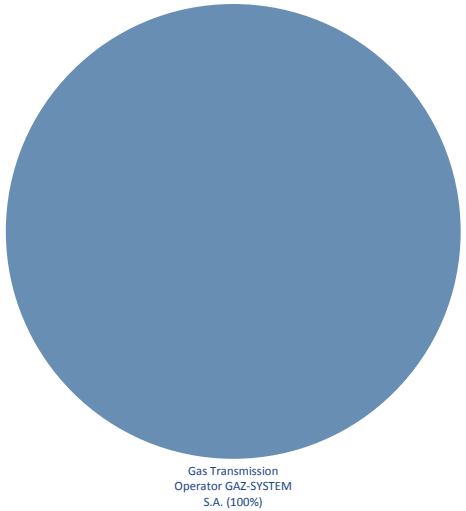
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Support from EU funds is expected		

TRA-N-271	PL - DK interconnection (Baltic Pipe)	Non-FID

Pipeline including CS

SPONSORS

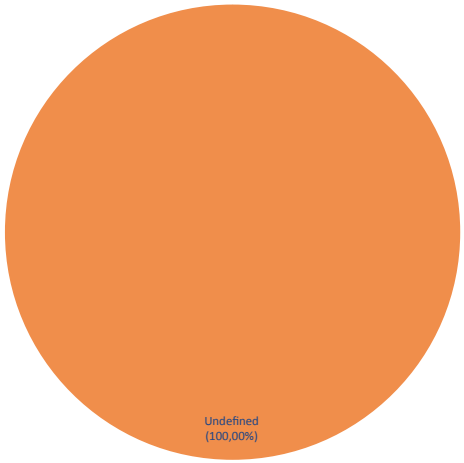


GENERAL INFORMATION

Promoter	GAZ-SYSTEM S.A.
Operator	GAZ-SYSTEM S.A.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	en.gaz-system.pl/nasze-inwestycje/integracja-z-europejski-systemem/baltyckibaltic-pipe/

TEN-E Requests	Date of Request	Year Funding Granted
	30/06/08	2009
	24/04/09	2010

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2015
Construction	
Commissioning	2020
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+324,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+90,40
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Interconnector PL-DK	Yes	exit	90,40	Hub Poland	Hub Denmark
	Yes	entry	90,40	Hub Denmark	Hub Poland

DESCRIPTION OF THE PROJECT

Baltic Pipe aims to connect the gas transmission systems in Poland and Denmark and thus cover the higher import needs of Danish and Swedish markets originating from declining production in the Danish part of the North Sea. The project will also cover the forecasted growth of the gas demand in Poland based on the development of the power generation sector and possible leverage for market coupling potential in the Baltic States and Central-Eastern Europe.

EXPECTED BENEFITS

Security of Supply, Market integration (market areas in the Baltic Sea region and Central-Eastern Europe), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Poland, Denmark), N-1 Regional (the Baltic Sea region), Back-up for renewables, Baltic Pipe will have a significant impact on:
increasing security of supply in the Baltic Sea region by diversifying supply routes, sources and counterparts;
creating well-interconnected gas infrastructure in the Baltic Sea region;
enhancing competition on the regional markets;
promoting natural gas as a reliable, competitive and environmentally-friendly source of energy e.g. in the power generation sector.
The Baltic Pipe project also contributes to North-South gas interconnections in Central Eastern and South Eastern Europe, as the project which will allow to transport gas from North Sea deposits to the CEE countries, namely to the Czech Republic and Slovakia (via the North-South corridor in Poland, PL-CZ and PL-SK interconnections).

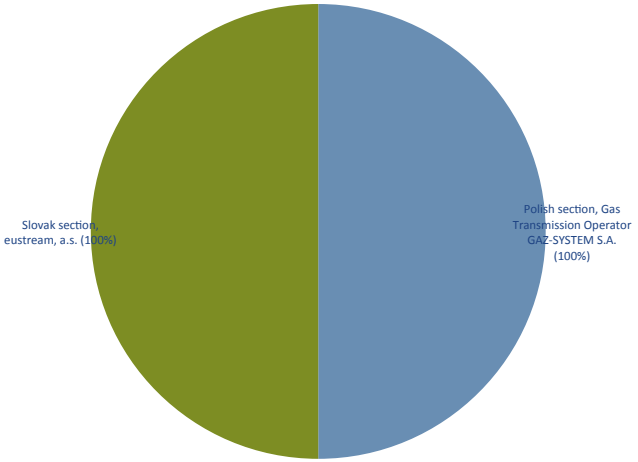
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
TEN-E (obtained), support from other EU funds is expected		

TRA-N-275	PL - SK interconnection	Non-FID

Pipeline including CS

SPONSORS

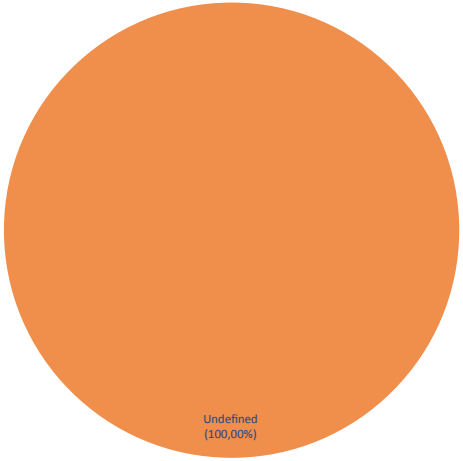


GENERAL INFORMATION

Promoter	GAZ-SYSTEM S.A.
Operator	GAZ-SYSTEM S.A.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	en.gaz-system.pl/nasze-inwestycje/integracja-z-europejski-systemem/polska-slowacja/

TEN-E Requests	Date of Request	Year Funding Granted
	28/02/11	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2014
Construction	
Commissioning	2016
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+180,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+171,70
Expected Load Factor	84,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Interconnector PL - SK	Yes	entry	171,70	Hub Slovakia	Hub Poland
	Yes	exit	129,50	Hub Poland	Hub Slovakia

DESCRIPTION OF THE PROJECT

The main goal of the project is to create an important part of the North-South gas interconnections in Central-Eastern Europe by implementing a missing interconnection between the transmission systems in Poland and Slovakia and, thus, increase the security of gas supplies in Central-Eastern Europe through the diversification of supply sources and routes, as well as integration of Sub-Carpathian Market Area and enhancing market functionality.

EXPECTED BENEFITS

Security of Supply, Market integration (market areas in Central-Eastern Europe), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Poland, Slovakia and possibly Hungary), N-1 Regional (Central-Eastern Europe), Back-up for renewables, Implementation of PL-SK interconnection will have an impact on:
creating the cross-border capacity between Poland and Slovakia by establishing a large transportation corridor that will allow for flexible transport of gas in Central Europe within the North-South axis;
increasing the security of gas supply and diversification of supply routes for the CEE region;
improve European gas grid interconnection;
increasing the security and reliability of the cross-border gas transmission between Slovakia and Poland (contribution to N-1 standard in Poland and Slovakia);
creating a robust, well-functioning internal market in Slovakia and Poland and promote the competition;
establishing adequate technical conditions necessary to cover the forecasted growth of the gas demand in Poland based on the development of the power generation sector and possible leverage for market coupling potential in Central-Eastern Europe.

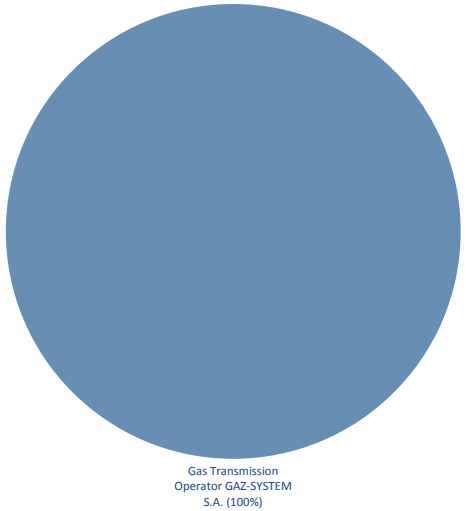
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
TENE (obtained), support from EU funds is expected		

TRA-N-247	The North-South corridor in Western Poland	Non-FID

Pipeline including CS

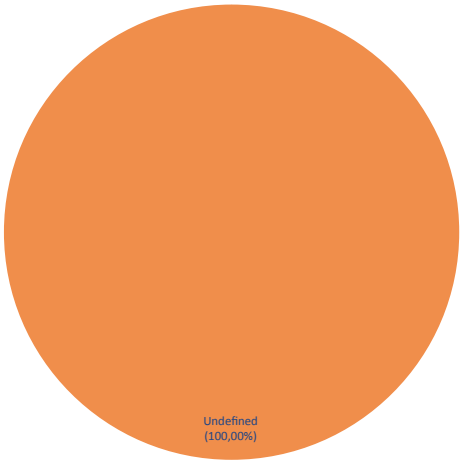
SPONSORS



GENERAL INFORMATION

Promoter	GAZ-SYSTEM S.A.
Operator	GAZ-SYSTEM S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	en.gaz-system.pl/nasze-inwestycje/krajowy-system-przesylowy/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2015
Construction	
Commissioning	2021
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	11
Total Pipeline Length (km)	+913,00
Total Compressor Power (MW)	+2,30
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

The investment tasks within the project constitute essential elements of the planned North-South gas interconnections in Central-Eastern Europe. This corridor consists of two routings on the Polish territory – the basic one that is located in Western and Southern Poland and the complementary routing covering the area of potential unconventional gas deposits in Eastern Poland. Implementation of the project will enhance functionality of transmission system in Western and Southern Poland. It will also enforce the internal system in order to facilitate better operational functioning of the upgraded PL-CZ interconnection, as well as to initiate gas flow on the planned PL-SK interconnection.

EXPECTED BENEFITS

Security of Supply, Market integration (market areas in Central-Eastern Europe), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Poland), N-1 Regional (Central-Eastern Europe), Back-up for renewables, Implementation of the investment tasks within this project will have an impact on:
enhancing functionality of transmission system in Central and Southern Poland in order to facilitate better operational functioning of the upgraded PL-CZ interconnection, as well as to initiate gas flow on the planned PL-SK interconnection.
increasing the security of supply sources, routes and counterparts, as well as to providing the overall flexibility for the CEE region.
improving European gas grid interconnections.
creating a robust, well-functioning internal market in the CEE region, by ensuring high reliability of the cross-border transmission between Poland, the Czech Republic and Slovakia.

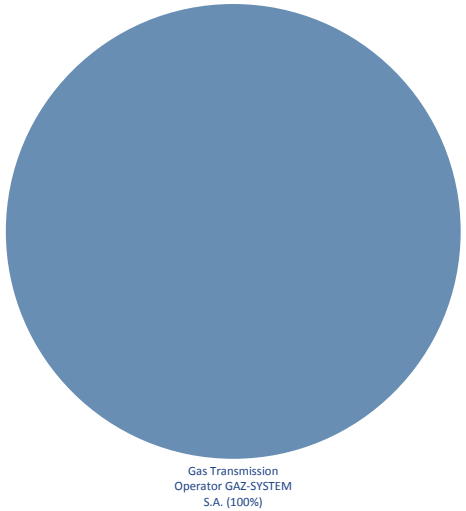
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
support from EU funds is expected		

TRA-N-245	The North-South Gas Corridor in Eastern Poland	Non-FID

Pipeline including CS

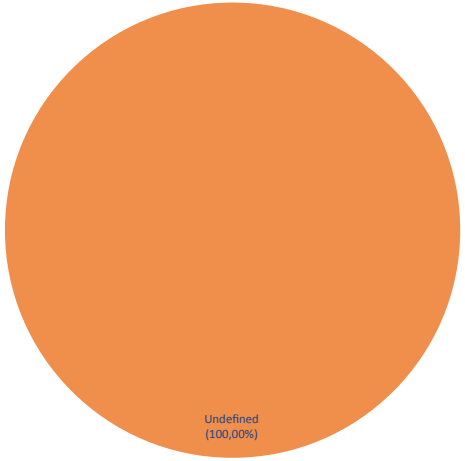
SPONSORS



GENERAL INFORMATION

Promoter	GAZ-SYSTEM S.A.
Operator	GAZ-SYSTEM S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2017
Construction	
Commissioning	2020
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	8
Total Pipeline Length (km)	+378,00
Total Compressor Power (MW)	+18,30
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

The investment tasks within the project constitute essential elements of the planned North-South gas interconnections in Central Eastern and South Eastern Europe. The corridor consists of two routings on the Polish territory – the basic one that is located in western and southern Poland and the complementary routing covering the area of potential unconventional gas deposits in Eastern Poland and being connected to two interconnectors, i.e. Poland – Lithuania (GIPL) and Poland – Slovakia. Implementation of the project will allow for significant volumes of gas to be transported by means of PL-SK interconnection. It will also enhance the access to the USG Strachocina that have large expansion potential and may serve as essential security of supply infrastructure in the CEE region.

EXPECTED BENEFITS

Security of Supply, Market integration (market areas in Central-Eastern Europe and the Baltic States), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Poland and possibly Lithuania, Latvia, Estonia.), N-1 Regional (Central-Eastern Europe, Baltic Sea region), Back-up for renewables, Implementation of the investment tasks within this project will allow for significant volumes of gas to be transported by means of PL-SK interconnection. They will also enhance the access to the USG Strachocina that have large expansion potential and may serve as essential security of supply infrastructure in the CEE region.
The projects in eastern Poland are located in the area which offers the possibility to extract unconventional gas. If reserves are confirmed, the transmission infrastructure in Eastern Poland might well be used to transport unconventional gas to the Baltic states (via Gas Interconnection Poland-Lithuania) and CEE countries (via PL-SK and PL-CZ interconnections).
Construction of the pipelines within this project, together with completion of the PL-SK interconnection and GIPL, will definitely have a positive impact on the competition in the CEE and Baltic regions, as the project will provide a possibility to open the market for more gas suppliers. This would in turn mean ending the state of major dependency on one single gas supplier for the countries in the respective regions thanks to the potential access to gas deliveries from new sources.

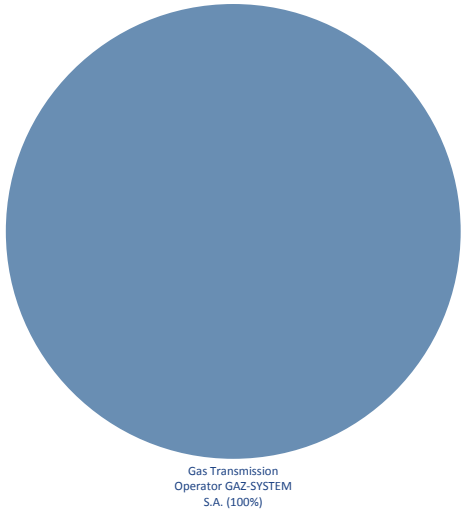
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-248	Upgrade of gas infrastructure in northern and central Poland	FID

Pipeline including CS

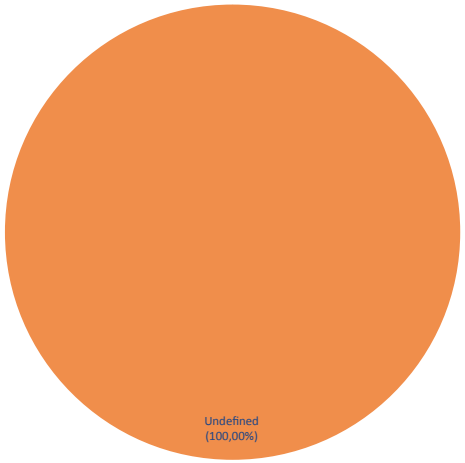
SPONSORS



GENERAL INFORMATION

Promoter	GAZ-SYSTEM S.A.
Operator	GAZ-SYSTEM S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	en.gaz-system.pl/nasze-inwestycje/krajowy-system-przesylowy/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2007
Construction	
Commissioning	2014
Last completed Phase :	FID

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	5
Total Pipeline Length (km)	+887,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

The project consists of the internal pipelines that are currently being constructed in northern and central Poland with the aim to enhance functionality of the transmission system in Poland and, thus, provide adequate techincal conditions to distribute natural gas supplied to the LNG terminal in Świnoujście. The project is strictly linked to the development of gas infrastructure within the North-South gas interconnections in Central Eastern and South Eastern Europe. Implementation of the internal pipelines will contribute to increasing the security of supply sources, routes and counterparts, as well as to providing the overall flexibility for the gas market in Poland and the whole CEE region.

EXPECTED BENEFITS

Security of Supply, Market integration (market areas in the Central-Eastern Europe and possibly in the Baltic States), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Poland and possibly Slovakia, Hungary, Lithuania, Latvia and Estonia), N-1 Regional (Central-Eastern Europe, Baltic Sea region), Back-up for renewables,

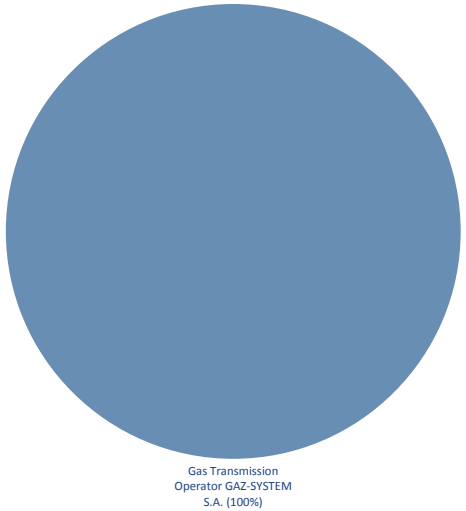
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
EEPR, ERDF (Operational Programme Infrastructure and Environment)	Equity, commercial banks	

TRA-N-274	Upgrade of PL-DE interconnection in Lasów	Non-FID

Pipeline including CS

SPONSORS

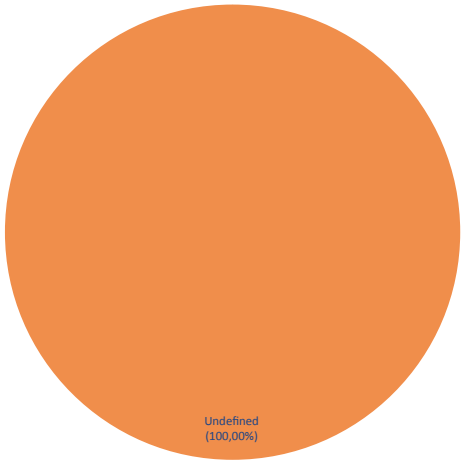


GENERAL INFORMATION

Promoter	GAZ-SYSTEM S.A.
Operator	GAZ-SYSTEM S.A.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	en.gaz-system.pl/nasze-inwestycje/

TEN-E Requests	Date of Request	Year Funding Granted
		2012

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2012
Construction	
Commissioning	2015
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	4
Total Pipeline Length (km)	+106,00
Total Compressor Power (MW)	+8,10
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Lasów	Yes	entry	42,00	Hub Germany(Gaspool)	Hub Poland

DESCRIPTION OF THE PROJECT

The main objective of the project is to modernize and expand the transmission system near PL-DE interconnection in Lasów with a view to upgrading the capacity of the interconnection point in Lasow from 1,5 up to 3 bcm/y. The upgraded PL-DE interconnection in Lasów will improve security of gas supplies, increase reliability of cross-border transmission infrastructure between Poland and Germany and will contribute to well-interconnected gas network in the CEE region. The upgrade of PL-DE interconnection in Lasow up to 3 bcm/y requires modernization of the transmission systems both in Poland and in Germany.

EXPECTED BENEFITS

Security of Supply, Market integration (integration of market areas in Central-Eastern Europe and Western Europe (GASPOOL in Germany)), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Poland), N-1 Regional (Central-Eastern Europe), Back-up for renewables, The upgraded PL-DE interconnection in Lasów will have an impact on:
improving security of gas supplies and increasing reliability of cross-border transmission infrastructure between Poland and Germany;
creating well-interconnected gas network in the CEE region;
enhancing the access of gas market players in the CEE region to a developed, competitive and diversified Western European gas market (Germany);
establishing adequate technical conditions necessary to cover the forecasted growth of the gas demand in Poland based on the development of the power generation sector and possible leverage for market coupling potential in Central-Eastern Europe.

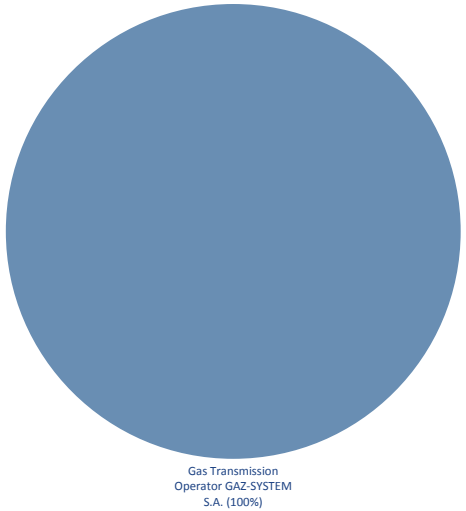
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Support from EU funds is expected		

TRA-N-276	Upgrade of the entry points in Lwówek and Włocławek on the Yamal-Europe pipeline	Non-FID

Pipeline including CS

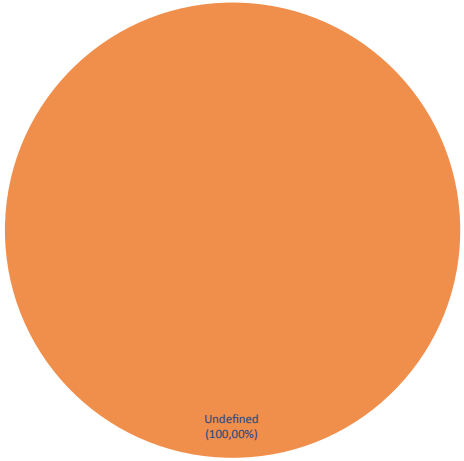
SPONSORS



GENERAL INFORMATION

Promoter	GAZ-SYSTEM S.A.
Operator	GAZ-SYSTEM S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2015
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+219,60
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Lwowek	Yes	entry	36,60	Hub Poland	Hub Poland
Wloclawek	Yes	entry	183,00	Hub Poland	Hub Poland

DESCRIPTION OF THE PROJECT

The main objective of the project is to upgrade the capacity of the entry points in Lwówek and Wloclawek on the Yamal-Europe pipeline. The project will enable to benefit from the economies of scale, as relatively low investment costs will significantly increase the possibility of gas deliveries via physical reverse flow (currently virtual reverse flow is available only) on the Yamal-Europe pipeline to entry into the transmission system in Poland and later on in the Baltic States (via Gas Interconnection Poland-Lithuania) and other CEE countries (via the North-South Gas Interconnections). This will in turn enhance the access of gas markets players in these countries to well-developed market area in Germany.

EXPECTED BENEFITS

Security of Supply, Market integration (integration of market areas in the Baltic Sea region and Central-Eastern Europe with Western Europe (GASPOOL and NetConnect in Germany)), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Poland and possibly Lithuania, Latvia, Estonia, Slovakia, Hungary), N-1 Regional (the Baltic Sea region, Central-Eastern Europe), Back-up for renewables, The upgrade of the capacity of the entry points in Lwowek and Wloclawek on the Yamal-Europe pipeline will have an impact on:
enhancing competition in Poland and other countires in the Baltic and CEE regions by significantly facilitating the access to the Western European gas markets (in particular GASPOOL and NetConnect in Germany);
increasing security of supply in the Baltic Sea and CEE regions by diversifying supply routes and counterparts (the access to the Western European gas markets);
creating well-interconnected gas infrastructure between Western Europe (Germany), the Baltic Sea and CEE regions;
contributing to elimination of the energy islands, as the project may constitute a source of gas supplies for the Baltic States and Finland (via Gas Interconnection Poland-Lithuania);
establishing adequate technical conditions necessary to cover the forecasted growth of the gas demand in Poland based on the development of the power generation sector and possible leverage for market coupling potential in the Baltic Sea region and in Central-Eastern Europe.

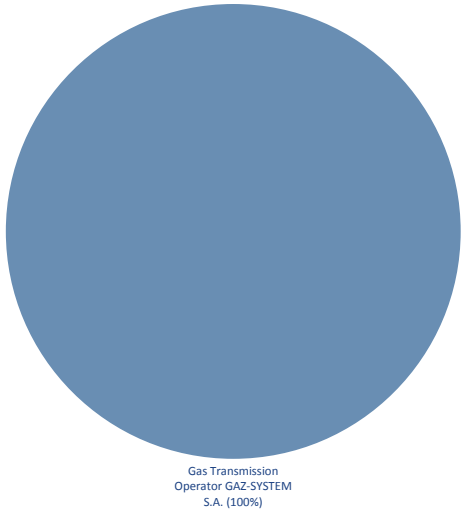
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Support from EU funds is expected		

LNG-N-272	Upgrade of the LNG terminal in Świnoujście	Non-FID

LNG Terminal

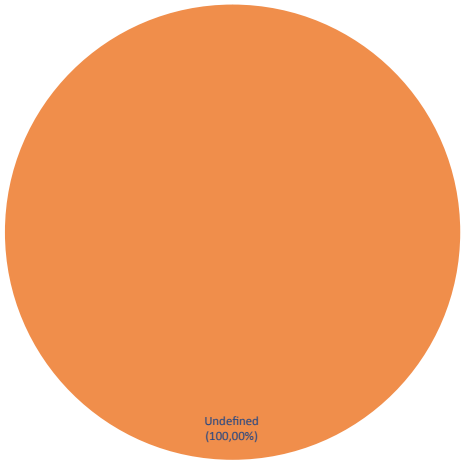
SPONSORS



GENERAL INFORMATION

Promoter	GAZ-SYSTEM S.A.
Operator	Polskie LNG S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	en.gaz-system.pl/terminal-lng/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2014
Construction	
Commissioning	2020
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	LNG terminal in Świnoujście
Expected volume (bcm/y)	+2,50
Storage capacity (m3)	+160.000,00
Send-out (mcm/d)	+6,84
Ship size (m3)	216.000,00
Reloading ability ?	Yes

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Swinoujscie	Yes	exit	75,24	LNG Terminals Poland	Hub Poland

DESCRIPTION OF THE PROJECT

The main objective of the project is to upgrade the capacity of the LNG terminal in Swinoujście from 5 up to 7,5 bcm/y. The project will enable to benefit from the economies of scale, as relatively low investment costs (no need to construct the facility from scratch, the majority of costs will be related to the construction of the 3rd storage tank) may bring further benefits to gas consumers in the Baltic Sea area and the CEE region (increase of SoS, competition and liquidity, decrease of gas prices).

EXPECTED BENEFITS

Security of Supply, Diversification of sources, Diversification of routes, N-1 National (Poland and possibly Lithuania, Latvia, Estonia, Denmark, Slovakia and Hungary), N-1 Regional (Baltic Sea region, Central-Eastern Europe), Back-up for renewables, The extension of the LNG terminal in Swinoujscie will have an impact on:
increasing security of supply in the Baltic Sea and CEE regions by diversifying supply routes, sources (the first new physical source of supply for both regions) and counterparts (access to global LNG market);
creating well-interconnected gas infrastructure in the Baltic Sea and CEE regions;
eliminating the energy islands, as the terminal in Swinoujscie may play the role of regional LNG terminal for the Baltic States and Finland (transport of gas via Gas Interconnection Poland-Lithuania or transport by LNG vessels);
enhancing competition on regional markets;
promoting natural gas as a reliable, competitive and environmentally-friendly source of energy e.g. in the transport sector (maritime transport);
creating a physical hub in Swinoujscie and/or a virtual hub in Poland;
establishing adequate technical conditions necessary to cover the forecasted growth of the gas demand in Poland based on the development of the power generation sector and possible leverage for market coupling potential in the Baltic Sea region and in Central-Eastern Europe.
The LNG terminal in Świnoujście contributes to North-South gas interconnections in Central Eastern and South Eastern Europe, as the supplies from Świnoujście may be directed through upgraded transmission system in Poland (the North-South Corridor in Poland), PL-CZ and PL-SK interconnections towards the South, to other CEE countries.

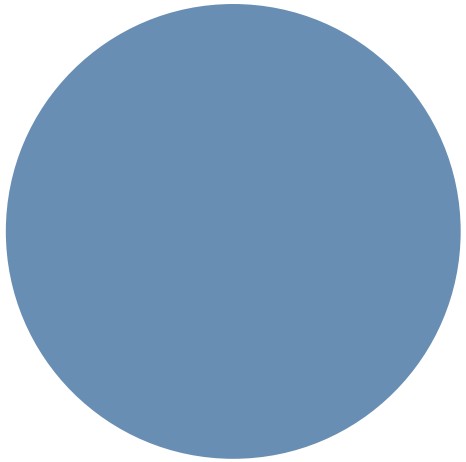
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Support from EU funds is expected		

UGS-F-199	KPMG Kosakowo	FID

Storage Facility

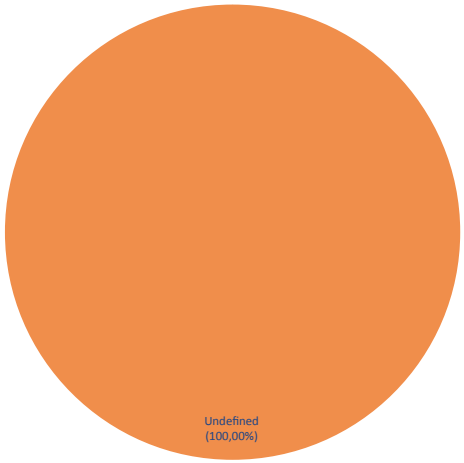
SPONSORS



GENERAL INFORMATION

Promoter	PGniG
Operator	Operator Systemu Magazynowania Sp. Z o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2021
FID	2007 Q1
Construction	2021
Commissioning	2021
Last completed Phase :	FID

TECHNICAL INFORMATION

Storage facility	KPMG Kosakowo
Working volume (mcm)	+250,00
Injectability (mcm/d)	+2,40
Deliverability (mcm/d)	+9,60

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
UGS - PL - Gaz-System/Magazynowania	No	exit	105,60	Storage Poland	Hub Poland
	Yes	entry	26,40	Storage Poland	Hub Poland
UGS - PL - Gaz-System/Magazynowania	Yes	exit	105,60	Storage Poland	Hub Poland
	No	entry	26,40	Hub Poland	Storage Poland

DESCRIPTION OF THE PROJECT

Construction of new underground gas storage (KPMG) to secure uninterrupted gas supplies in northern Poland.

EXPECTED BENEFITS

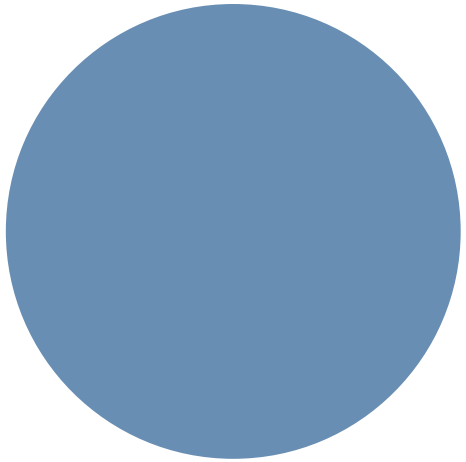
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-F-200	KPMG Mogilnio	FID

Storage Facility

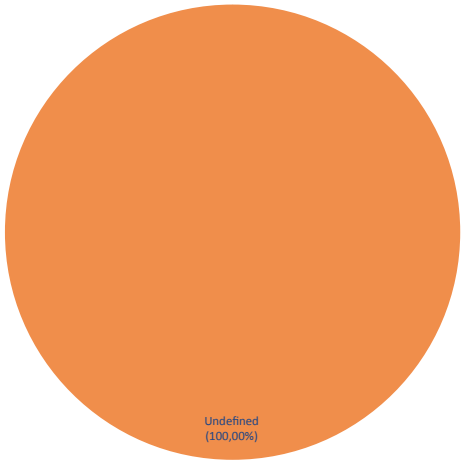
SPONSORS



GENERAL INFORMATION

Promoter	PGniG
Operator	Operator Systemu Magazynowania Sp. Z o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2020
FID	2007 Q4
Construction	2020
Commissioning	2020
Last completed Phase :	FID

TECHNICAL INFORMATION

Storage facility	KPMG Mogilno
Working volume (mcm)	+800,00
Injectability (mcm/d)	+9,60
Deliverability (mcm/d)	+20,64

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
UGS - PL - Gaz-System/Magazynowania	Yes	entry	105,60	Hub Poland	Storage Poland
	No	entry	105,60	Hub Poland	Storage Poland
UGS - PL - Gaz-System/Magazynowania	No	exit	227,04	Storage Poland	Hub Poland
	Yes	exit	227,04	Storage Poland	Hub Poland

DESCRIPTION OF THE PROJECT

Under gas storage (KPMG) extension in order to increase working gas capacity

EXPECTED BENEFITS

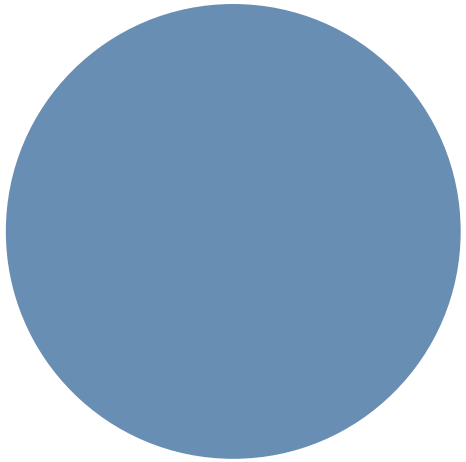
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-F-201	PMG Brzeznica	FID

Storage Facility

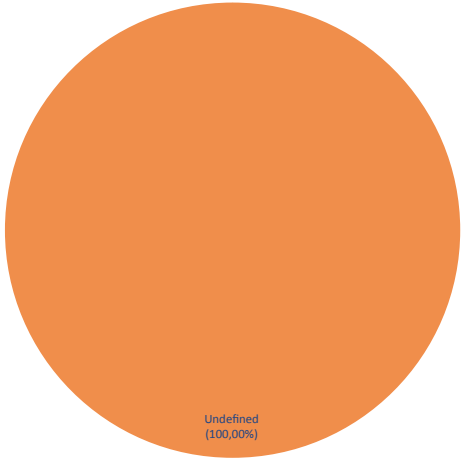
SPONSORS



GENERAL INFORMATION

Promoter	PGniG
Operator	Operator Systemu Magazynowania Sp. Z o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2016 Q2
FID	2010 Q1
Construction	2015 Q4
Commissioning	2016 Q2
Last completed Phase :	FID

TECHNICAL INFORMATION

Storage facility	PMG Brzeznica
Working volume (mcm)	+100,00
Injectability (mcm/d)	+1,44
Deliverability (mcm/d)	+1,44

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
UGS - PL - Gaz-System/Magazynowania	No	entry	15,84	Hub Poland	Storage Poland
	No	exit	15,84	Storage Poland	Hub Poland
UGS - PL - Gaz-System/Magazynowania	Yes	entry	15,84	Hub Poland	Storage Poland
	Yes	exit	15,84	Storage Poland	Hub Poland

DESCRIPTION OF THE PROJECT

Underground gas storage (PMG) extension in order to increase working gas capacity injection and withdrawal rates. Instalation of compressor station to allow for a more flexible operation.

EXPECTED BENEFITS

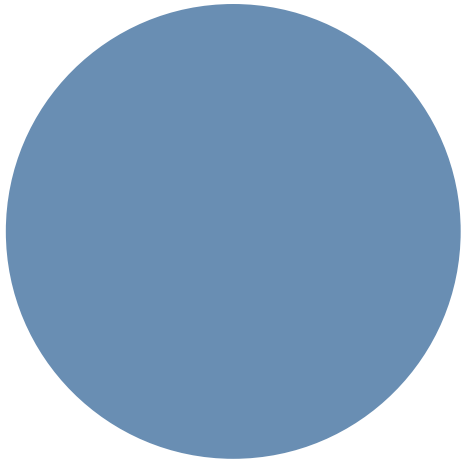
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-F-202	PMG Husów	FID

Storage Facility

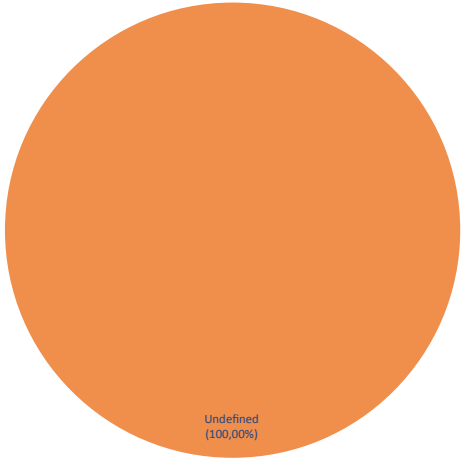
SPONSORS



GENERAL INFORMATION

Promoter	PGniG
Operator	Operator Systemu Magazynowania Sp. Z o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2015 Q2
FID	2010 Q4
Construction	2014 Q3
Commissioning	2015 Q2
Last completed Phase :	FID

TECHNICAL INFORMATION

Storage facility	PMG Husów
Working volume (mcm)	+500,00
Injectability (mcm/d)	+3,68
Deliverability (mcm/d)	+5,76

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
UGS - PL - Gaz-System/Magazynowania	No	exit	63,36	Storage Poland	Hub Poland
	Yes	entry	40,48	Hub Poland	Storage Poland
UGS - PL - Gaz-System/Magazynowania	Yes	exit	63,36	Storage Poland	Hub Poland
	No	entry	40,48	Hub Poland	Storage Poland

DESCRIPTION OF THE PROJECT

Underground gas storage (PMG) extension in order to increase working gas capacity injection and withdrawal rates. Instalation of additional compressor station to allow for a more flexible opeartion.

EXPECTED BENEFITS

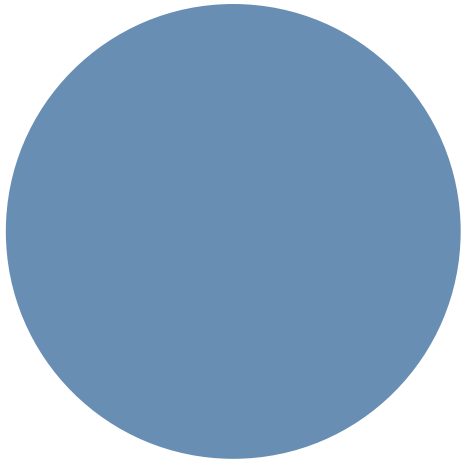
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-F-220	PMG Wierzchowice	FID

Storage Facility

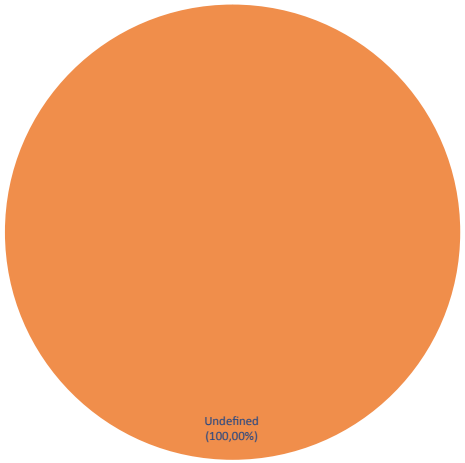
SPONSORS



GENERAL INFORMATION

Promoter	PGniG
Operator	Operator Systemu Magazynowania Sp. Z o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014 Q2
FID	2007 Q1
Construction	2013 Q4
Commissioning	2014 Q2
Last completed Phase :	FID

TECHNICAL INFORMATION

Storage facility	PMG Wierzchowice
Working volume (mcm)	+1.200,00
Injectability (mcm/d)	+6,00
Deliverability (mcm/d)	+9,60

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
UGS - PL - Gaz-System/Magazynowania	Yes	exit	105,60	Storage Poland	Hub Poland
	No	exit	105,60	Storage Poland	Hub Poland
UGS - PL - Gaz-System/Magazynowania	No	entry	66,00	Hub Poland	Storage Poland
	Yes	entry	66,00	Hub Poland	Storage Poland

DESCRIPTION OF THE PROJECT

Underground gas storage (PMG) extension in order to increase working gas capacity, injection and withdrawal rates

EXPECTED BENEFITS

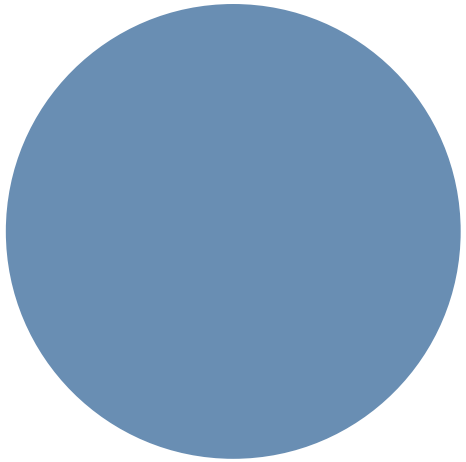
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-219	PMG Wierzchowice extension	Non-FID

Storage Facility

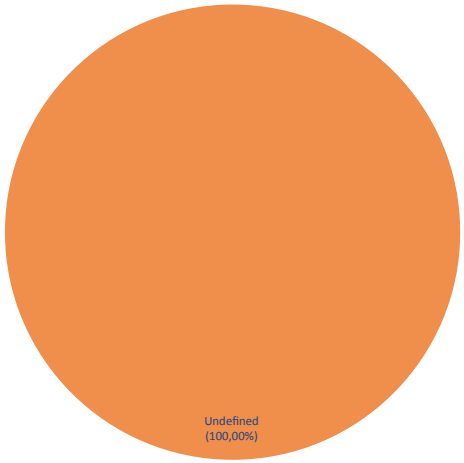
SPONSORS



GENERAL INFORMATION

Promoter	PGniG
Operator	Operator Systemu Magazynowania Sp. Z o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2014
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

Storage facility	PMG Wierzchowice
Working volume (mcm)	+2.000,00
Injectability (mcm/d)	+18,00
Deliverability (mcm/d)	+25,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
UGS - PL - Gaz-System/Magazynowania	No	entry	198,00	Hub Poland	Storage Poland
	No	exit	275,00	Storage Poland	Hub Poland
UGS - PL - Gaz-System/Magazynowania	Yes	exit	275,00	Storage Poland	Hub Poland
	Yes	entry	198,00	Hub Poland	Storage Poland

DESCRIPTION OF THE PROJECT

Underground gas storage (PMG) extension in order to increase working gas capacity.

EXPECTED BENEFITS

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

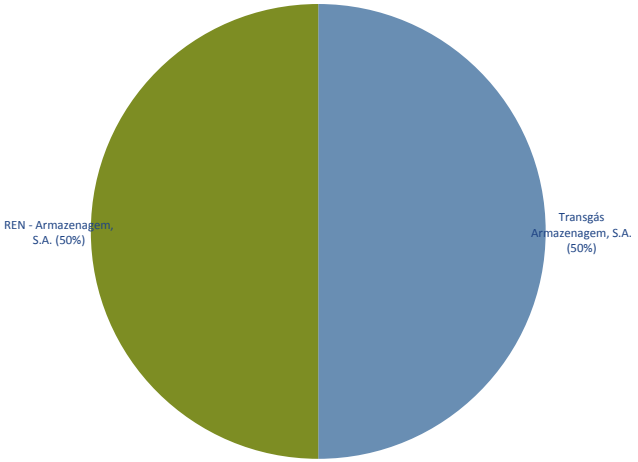
Portugal

Pontevedra
Ourense
Tuy
Valença do Minho
Bragança
Zamora
Mangualde
Celorico
Salamanca
Cantalhede
Carriço
Guarda
Carriço
Ávila
PORTUGAL
MS-ATR
LISBON
Cáceres
SPAIN
Campo Maior
Badajoz
Sines
Las Barreras
Cordoba
Huelva
Huelva
Sevilla
El Ruedo
POSEIDON
Marismas
Cádiz
Málaga

UGS-F-081	Carriço UGS development	FID

Storage Facility

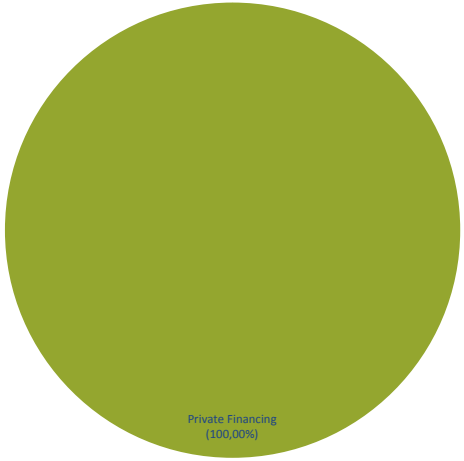
SPONSORS



GENERAL INFORMATION

Promoter	REN - Gasodutos, S.A.
Operator	REN Armazenagem
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.ren.pt

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	2014 Q2
Commissioning	2014 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Storage facility	Armazenamento Subterraneo do Carrico
Working volume (mcm)	+178,00
Injectability (mcm/d)	+1,00
Deliverability (mcm/d)	+3,60

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
UGS - PT - REN Gasodutos/REN Amazenagem	Yes	exit	42,90	Storage Portugal	Hub Portugal
	Yes	entry	11,90	Hub Portugal	Storage Portugal

DESCRIPTION OF THE PROJECT

Carriço UGS is based on caverns leached in a salt dome. Surface plant includes the facilities for injection and withdrawal of natural gas from the caverns in operation.
The expansion of the Carriço UGS infrastructure is a multi step / multi stage long term project mainly due to the fact that the average construction time of a salt cavern is about three years and there is a limitation to the number of caverns that can be developed simultaneously (currently two). Presently there is one new cavern under construction (leaching phase) and another one which will start filling in with gas (cushion gas and operating gas) in the 1st quarter of 2013. As for the remainder salt caverns, they may be regarded as planned since they have been integrated in the companies' business plans, together with the later capacity increase of the gas station.

EXPECTED BENEFITS

Security of Supply, Market integration, N-1 National (Portugal), REN applied for PIC label for one salt cavern - RENC-8 (total estimated investment of 38,8 M€). Transgás also applied for PIC label of two salt caverns (TGC-7s and TGC-9s). The increase of storage capacity will contribute to SoS in an effective manner. It will also provide the resources for optimized management of market players' gas portfolios. Operationally, the increased storage capacity will contribute to a more efficient use of the transmission system. The capacity up-grade of the gas station will contribute to the N-1 criteria completion at a national level.

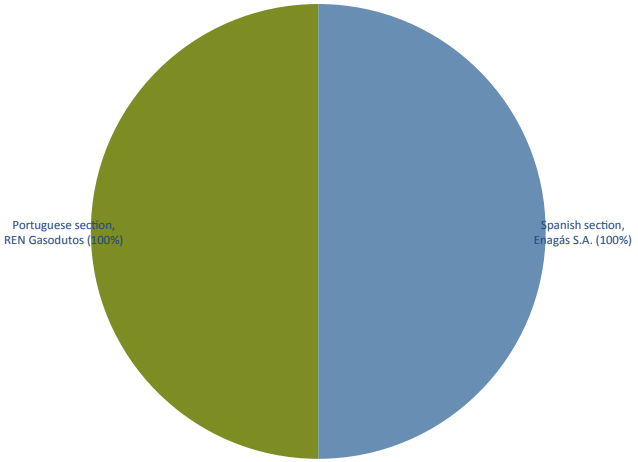
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
	100% financing by REN Armazenagem and Transgás Armazenagem of their respective investments (two independent concessionaires)	

TRA-N-284	PT-ES Interconnector Cantanhede Compressor Station	Non-FID

Pipeline including CS

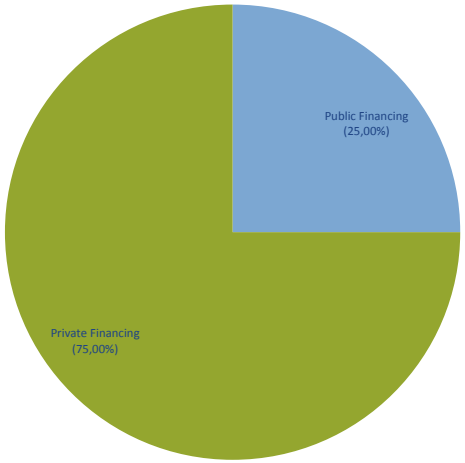
SPONSORS



GENERAL INFORMATION

Promoter	REN - Gasodutos, S.A.
Operator	REN - Gasodutos, S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.ren.pt

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2017 Q4
FID	2016 Q4
Construction	2018 Q1
Commissioning	2019 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+12,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Mangualde (PT) / Zamora (ES) (3rd Spain / Portugal IP)	Yes	entry	42,00	Hub Spain	Hub Portugal
	Yes	exit	47,00	Hub Portugal	Hub Spain

DESCRIPTION OF THE PROJECT

The 3RD IP PORTUGAL-SPAIN is located in the priority corridor North-South in Western Europe, and involves Portugal and Spain by crossing the border between both Member States.

This project will connect both gas systems between Celorico da Beira (Portugal) and Zamora (Spain). It consists of a new set of pipelines and compression reinforcement in both countries.

EXPECTED BENEFITS

Security of Supply, Market integration (Portugal and Spain hubs), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Portugal), Back-up for renewables, The new PT-ES interconnection will contribute to compliance with N-1 criterion for SoS (infrastructure standard) in Portugal and meet additional interconnection capacity requirements above existing IP's, increasing the short and long term resilience of the system. It will also create access axis between the UGS facilities of Carriço (PT) and Yela (ES).

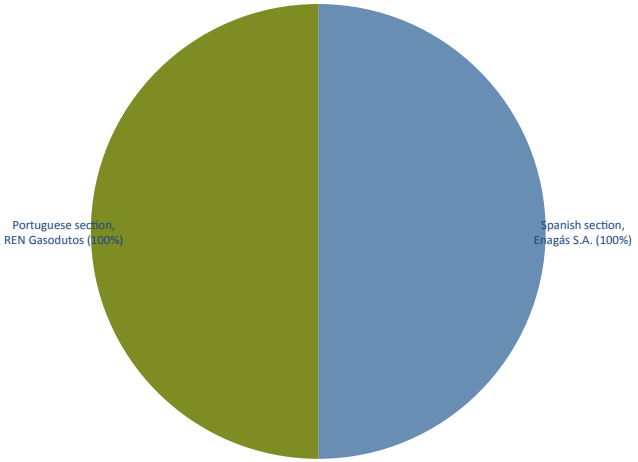
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
EEPR: € 10.7 mil	REN financing of the remaining part of the investment	

TRA-N-285	PT-ES Interconnector Pipeline Cantanhede-Mangualde	Non-FID

Pipeline including CS

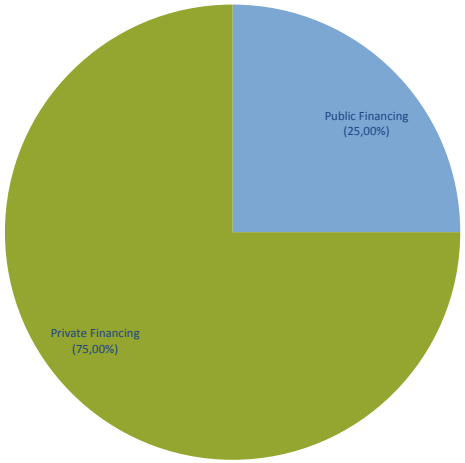
SPONSORS



GENERAL INFORMATION

Promoter	REN - Gasodutos, S.A.
Operator	REN - Gasodutos, S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.ren.pt

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2019 Q4
FID	2018 Q4
Construction	2020 Q1
Commissioning	2021 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+67,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+142,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Mangualde (PT) / Zamora (ES) (3rd Spain / Portugal IP)	Yes	exit	45,00	Hub Portugal	Hub Spain
	Yes	entry	25,00	Hub Spain	Hub Portugal

DESCRIPTION OF THE PROJECT

The 3RD IP PORTUGAL-SPAIN is located in the priority corridor North-South in Western Europe, and involves Portugal and Spain by crossing the border between both Member States.

This project will connect both gas systems between Celorico da Beira (Portugal) and Zamora (Spain). It consists of a new set of pipelines and compression reinforcement in both countries.

EXPECTED BENEFITS

Security of Supply, Market integration (Portugal and Spain hubs), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Portugal), Back-up for renewables, The new PT-ES interconnection will contribute to compliance with N-1 criterion for SoS (infrastructure standard) in Portugal and meet additional interconnection capacity requirements above existing IP's, increasing the short and long term resilience of the system. It will also create access axis between the UGS facilities of Carriço (PT) and Yela (ES).

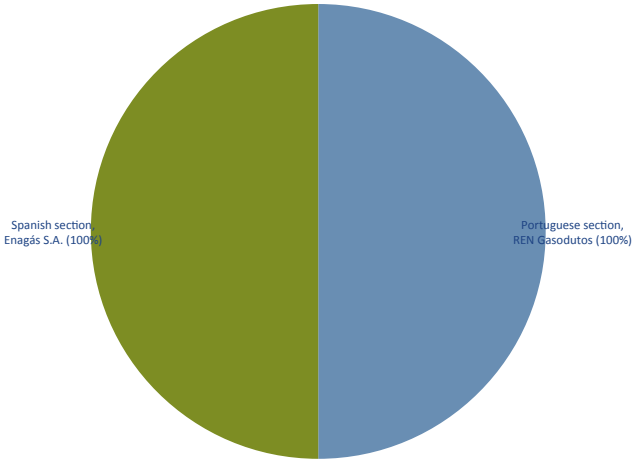
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
EEPR: € 10.7 mil	REN financing of the remaining part of the investment	

TRA-N-283	PT-ES Interconnector Pipeline Spanish Border-Celorico	Non-FID

Pipeline including CS

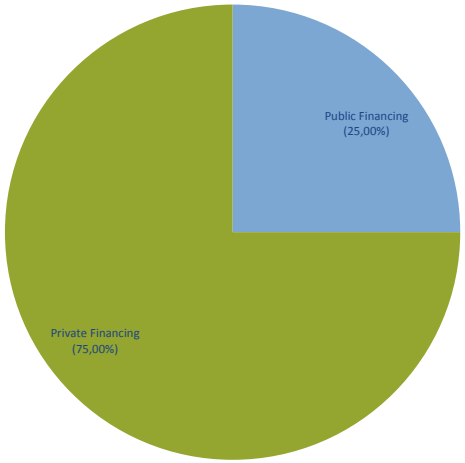
SPONSORS



GENERAL INFORMATION

Promoter	REN - Gasodutos, S.A.
Operator	REN - Gasodutos, S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.ren.pt

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014 Q4
FID	2013 Q4
Construction	2015 Q1
Commissioning	2017 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+158,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Mangualde (PT) / Zamora (ES) (3rd Spain / Portugal IP)	Yes	entry	75,00	Hub Spain	Hub Portugal
	Yes	exit	50,00	Hub Portugal	Hub Spain

DESCRIPTION OF THE PROJECT

The 3RD IP PORTUGAL-SPAIN is located in the priority corridor North-South in Western Europe, and involves Portugal and Spain by crossing the border between both Member States.

This project will connect both gas systems between Celorico da Beira (Portugal) and Zamora (Spain). It consists of a new set of pipelines and compression reinforcement in both countries.

EXPECTED BENEFITS

Security of Supply, Market integration (Portugal and Spain hubs), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Portugal), Back-up for renewables, The new PT-ES interconnection will contribute to compliance with N-1 criterion for SoS (infrastructure standard) in Portugal and meet additional interconnection capacity requirements above existing IP's, increasing the short and long term resilience of the system. It will also create access axis between the UGS facilities of Carriço (PT) and Yela (ES).

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
EEPR: € 10.7 mil	REN financing of the remaining part of the investment	

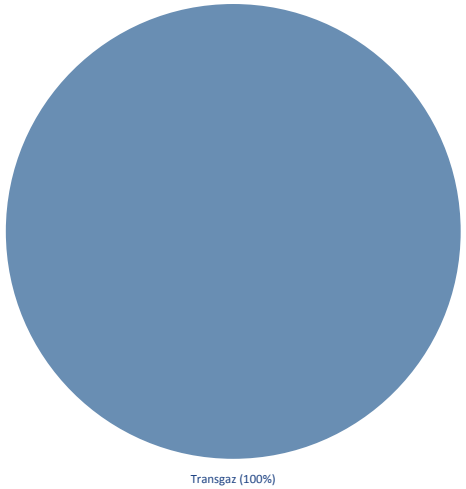
Romania

Rzeszow
Jaroslaw
Drozdwicze
Opary
Ugers'ko
Lviv
Strachocina
Drozdovychi
Bil'che-Volytsya
Dashava
Bogorodchany
Ivano-Frankivsk
Velké Kapusany
Uzhgorod
Oleksivka
Beregdaroc
Beregovo
Tekovo
Medlesu Aurit
MOLDOVA
CHISINAU
Satu Mare
Roman-Margineni
Tirgu-Mures
Sarmasel
Kaushany
Nadas-Prod-Seletin
Cetatea de Balta
Csanadpalota
Arad
Orlovka
Isaccea
ROMANIA
Brasov
Banatski Dvor
Bilciuresti
Urziceni
Horezu
Balaceanca
Constanta
BUCHAREST
Mehadinti
Ghercesti
Silistra
Negru Voda
Giurgiu
Ruse
Dobrich
Zajecar
Kozloduy
Oryahovo
Pleven
Vama
SOUTH STREAM
Black Sea CNG
Chiren
Nabucco-West
Dimitrovgrad
SOFIA
BULGARIA
Burgas
UNMI KOSOVO
Pristina
Dupnitsa
Stara Zagora
Malkoclar
Zidilovo
SKOPJE
FYRO MACEDONIA
Petrich
Kula
Sidirokastron
Xanthi
Drama
Komotini
Kipi
Marmara Ereglisi
Istanbul
Tekirdag
Kuzey Marmara Ereglisi
South Stream
IGB
ITB
WHITE STREAM (option 1)

TRA-N-132	AGRI Pipeline - Romanian section (East-West Pipeline)	Non-FID

Pipeline including CS

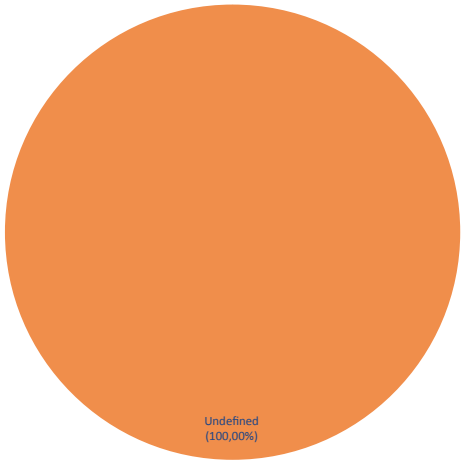
SPONSORS



GENERAL INFORMATION

Promoter	Transgaz
Operator	Transgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2015
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+850,00
Total Compressor Power (MW)	+42,00
Maximum Capacity (GWh/d)	+231,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
East-West Pipeline RO-HU (AGRI)	Yes	exit	168,00	Hub Romania	Hub Hungary

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (RO, HU and HU neighbours), Diversification of sources, Diversification of routes, N-1 National (For RO, N-1 inrcreases from 1,65 to 1,73), Power-to-gas, Biogas

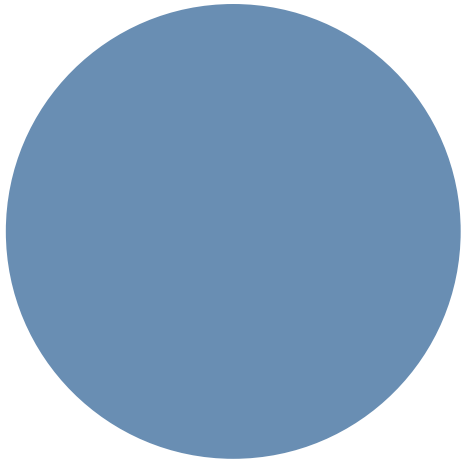
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-139	Integration of the transit and transmission system - reverse flow Isaccea	FID

Pipeline including CS

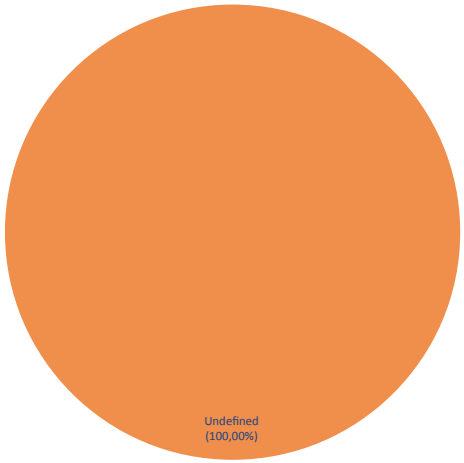
SPONSORS



GENERAL INFORMATION

Promoter	Transgaz
Operator	Transgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2010
Construction	
Commissioning	2013
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+147,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Isaccea (RO) - Orlovka (UA)	No	entry	0,00	Hub Bulgaria	Hub Romania
	Yes	entry	147,00	Transit Ukraine	Hub Bulgaria

DESCRIPTION OF THE PROJECT

The project implies the construction of a connection pipeline between the DN 1000 Pipeline (Transit 1 Bulgaria) and the NTS, with the possibility to meter the natural gas volumes transmitted in both directions.

EXPECTED BENEFITS

Security of Supply, Market integration (RO, BG, UKR), Reverse Flows, Diversification of sources, Power-to-gas, Biogas

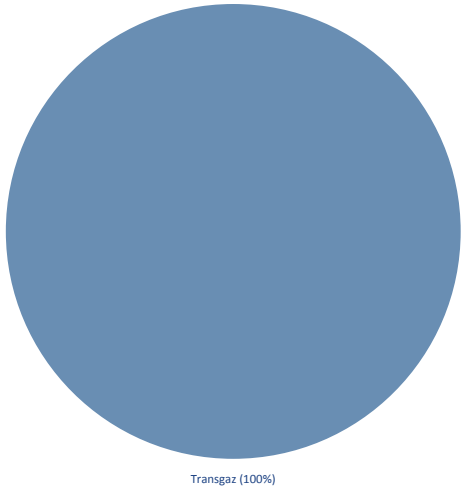
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-142	Reverse flow at Negru Voda	FID

Pipeline including CS

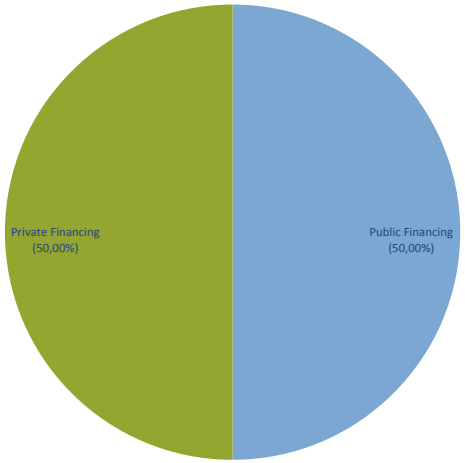
SPONSORS



GENERAL INFORMATION

Promoter	Transgaz
Operator	Transgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2010
Construction	
Commissioning	2013
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+168,00
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Negru Voda I	Yes	entry	168,00	Hub Bulgaria	Hub Romania
	No	entry	0,00	Transit Ukraine	Hub Bulgaria
Negru Voda I	No	exit	0,00	Hub Bulgaria	Transit Ukraine
	No	exit	0,00	Hub Romania	Hub Bulgaria

DESCRIPTION OF THE PROJECT

Upgrades of technical installation currently existing at the GMS Negru Voda in order to ensure reverse flow capacity with the possibility to measure such capacity.

EXPECTED BENEFITS

Security of Supply, Market integration (RO; BG; UKR), Reverse Flows, Diversification of sources, Power-to-gas, Biogas

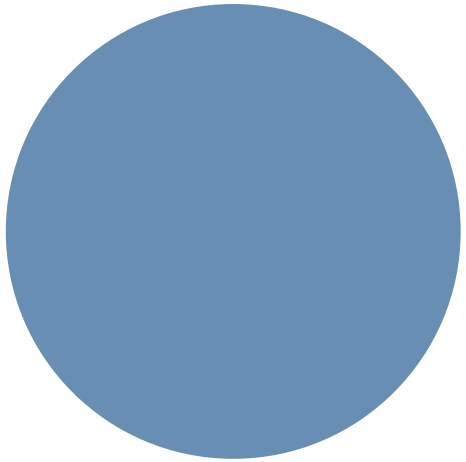
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-126	Reverse flow on the interconnector Romania - Hungary	Non-FID

Pipeline including CS

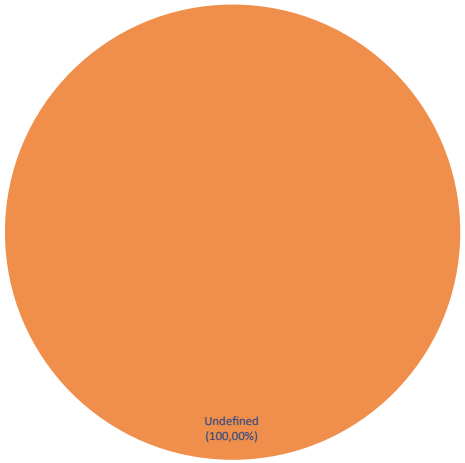
SPONSORS



GENERAL INFORMATION

Promoter	Transgaz
Operator	Transgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2013 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+12,60
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Csanadpalota	Yes	exit	12,60	Hub Romania	Hub Hungary

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (RO and HU markets), Reverse Flows, Diversification of sources, Power-to-gas, Biogas

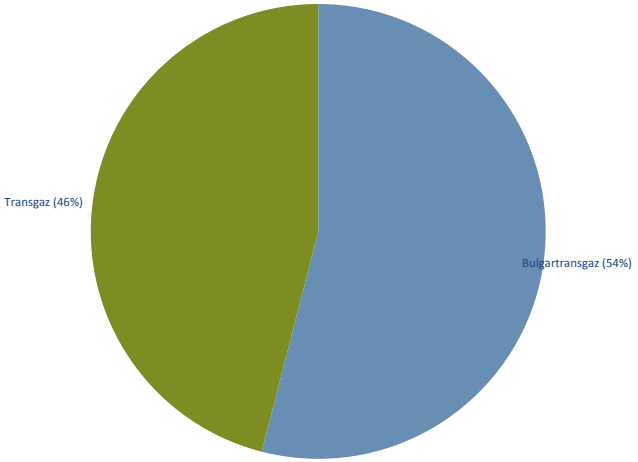
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-029	RO-BG Interconnection	FID

Pipeline including CS

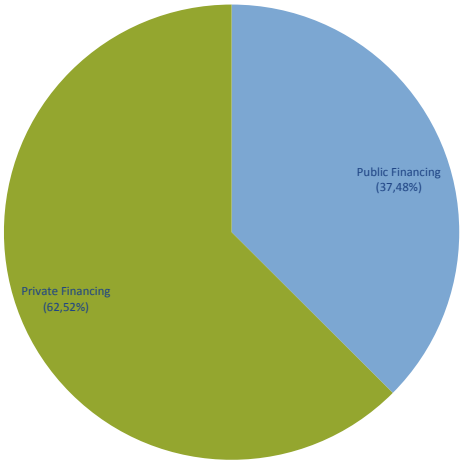
SPONSORS



GENERAL INFORMATION

Promoter	Transgaz
Operator	Transgaz
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.transgaz.ro

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2011 Q4
FID	2010 Q4
Construction	2013 Q2
Commissioning	2013 Q2
Last completed Phase :	Supply contract

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+25,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+14,38
Expected Load Factor	1,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Interconnector Bulgaria-Romania (IBR)	Yes	entry	14,38	Hub Bulgaria	Hub Romania
	Yes	exit	14,38	Hub Romania	Hub Bulgaria

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Diversification of sources, Diversification of routes, Diversification of sources of energy, routes and supplies; increasing the degree of interconnectivity between the gas transmission systems of the two countries; safety, reliability and interoperability of interconnected energy networks, including enabling bidirectional gas flows; contribution to the establishment of the South-Eastern European regional gas market.

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

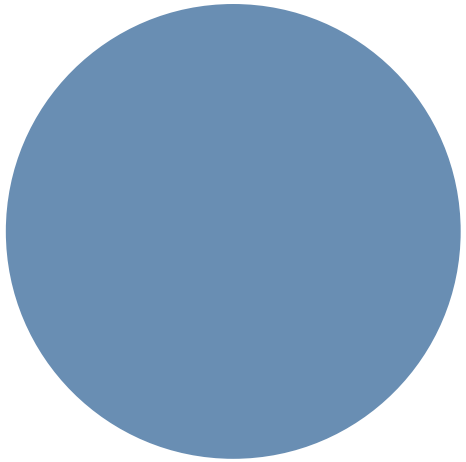
Slovakia

Wierzchowice
Tworzeń
Swarzow
Brzeznica
Husow
Katowice
Oświęcim
STORK II
Cieszyn
Skoczów
STORK
Pogórska Wola
Rzeszow
Třanovice
Štramberk
Drozdwicze
Strachocina
Dolní Bojanovice
Tvrdonice
Břeclav
SLOVAKIA
Velké Kapušany
Lanžhot
Baumgarten
Láb*
BRATISLAVA
Balassagyarmat
Beregdaróc
Mosonmagyarovar
BUDAPEST
Győr
Hajdúszoboszló
Százhalombatta
Csepel
Vecsés
Ercsi
South Stream
Adony
Pusztaederics
Kardoskút-Pusztaszolos
Nabucco-West
HUNGARY
Varosföld
Szöreg-1
Csanadpalota
Zsana-Nord
MGP
Arad

TRA-N-190	Poland - Slovakia interconnection	Non-FID

Pipeline including CS

SPONSORS

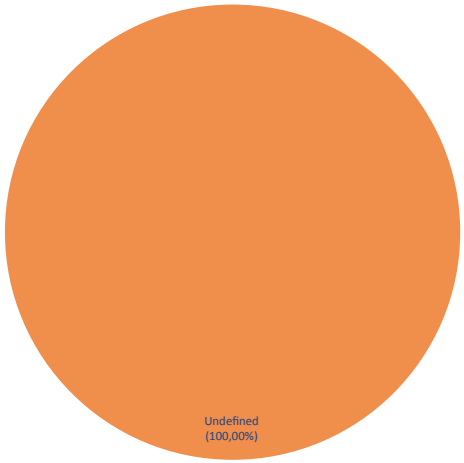


GENERAL INFORMATION

Promoter	eustream, a.s.
Operator	eustream, a.s.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	www.eustream.sk/en_transmission-system/en_pl-sk-interconnector

TEN-E Requests	Date of Request	Year Funding Granted
	28/02/11	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2014
Construction	2016
Commissioning	2016 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+180,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+176,90
Expected Load Factor	84,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Interconnector PL - SK	Yes	exit	176,90	Hub Slovakia	Hub Poland
	Yes	entry	132,10	Hub Poland	Hub Slovakia

DESCRIPTION OF THE PROJECT

To build interconnection between SK&PL transmission sys. and thus increase the SoS in CEE reg. & contribute to establishing a well-functioning internal gas market

EXPECTED BENEFITS

Security of Supply, Market integration (CEE region), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Poland, Slovakia, Hungary), N-1 Regional (CEE region), Back-up for renewables, Power-to-gas

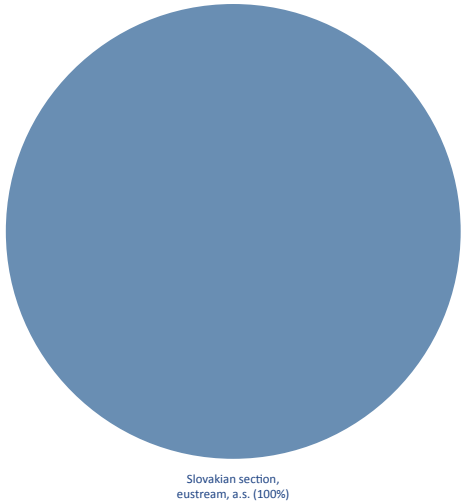
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-016	Slovakia - Hungary interconnection	FID

Pipeline including CS

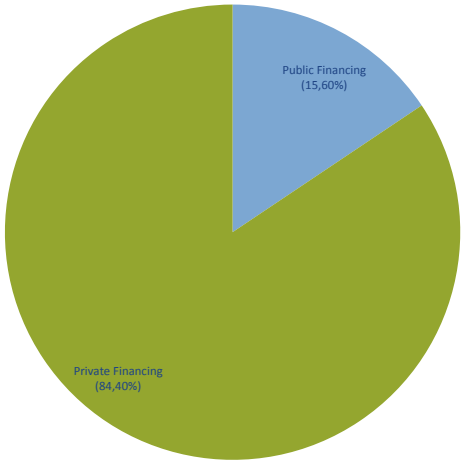
SPONSORS



GENERAL INFORMATION

Promoter	eustream, a.s.
Operator	eustream, a.s.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	1
Web Link	www.eustream.sk/en_transmission-system/en_sk-hu-interconnector

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2012 Q1
FID	2010 Q1
Construction	2014 Q2
Commissioning	2014 Q4
Last completed Phase :	Supply contract

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+115,00
Total Compressor Power (MW)	+7,00
Maximum Capacity (GWh/d)	+127,40
Expected Load Factor	80,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Balassagyarmat	Yes	entry	50,90	Hub Hungary	Hub Slovakia
	Yes	exit	127,40	Hub Slovakia	Hub Hungary

DESCRIPTION OF THE PROJECT

Creation of a missing interconnection between SK and HU and thus increase the SoS in CEE region, and enhance market integration and functionality.

EXPECTED BENEFITS

Security of Supply, Market integration (CEE region), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Slovakia, Hungary), N-1 Regional (CEE region), Back-up for renewables, Power-to-gas

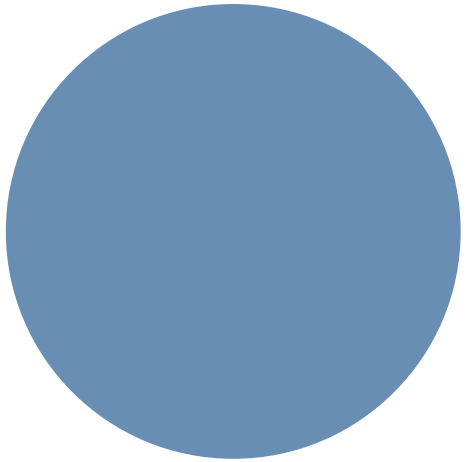
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Interconnector Slovakia – Hungary: EEPR: € 3.3 mil.	eustream, a.s.	

TRA-F-017	System Enhancements - Eustream	FID

Pipeline including CS

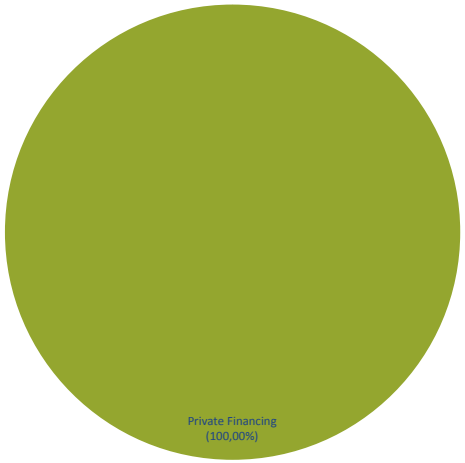
SPONSORS



GENERAL INFORMATION

Promoter	eustream, a.s.
Operator	eustream, a.s.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.eustream.sk.

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2010
Construction	2016
Commissioning	2017
Last completed Phase :	FID

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Modernization and Upgrade of the Network and Replacement of Technologies due to Environmental Norms

EXPECTED BENEFITS

Security of Supply, Market integration, Back-up for renewables, Power-to-gas, Modernization and upgrade of the network and replacement of technologies due to environmental norms.

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
	eustream, a.s.	

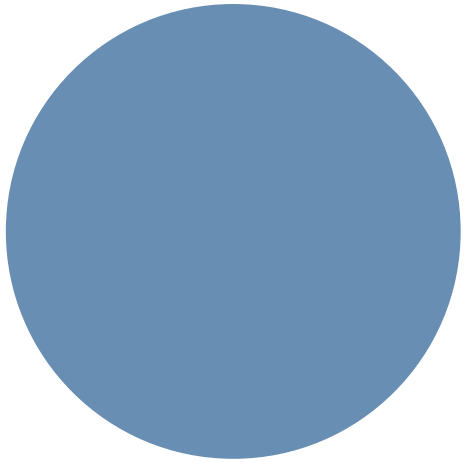
Slovenia

TGL
USTRIA
Graz
Weitendorf
Arnoldstein
Klagenfurt
TAG II
TAG I
SOL
Murfeld
Cersak
South Stream
Rogatec
Sempeter
LJUBLJANA
Gorizia
ZAGREB
SLOVENIA
Lučko
Okoli
Karlovac
Umag
Rijeka
Omisalj
LNG RV
CROATIA
Vodnjan
Krk
Pula
Gospič
Zadar

TRA-N-093	CS Ajdovščina (2nd phase - 4th and 5th unit on M3/1 pipeline of total power up to 20 MW)	Non-FID

Pipeline including CS

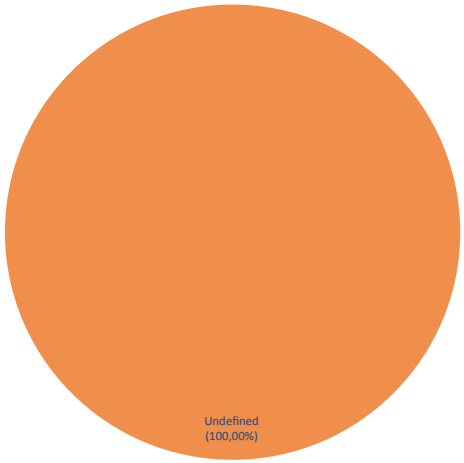
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+20,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Cross-border transmission.

EXPECTED BENEFITS

Removing bottlenecks of transmission system and increase of its capacities up to the existing capacities of neighbouring transmission system operators (first phase).
Ensuring additional capacities for further market development and transits, including reverse flows (second phase).

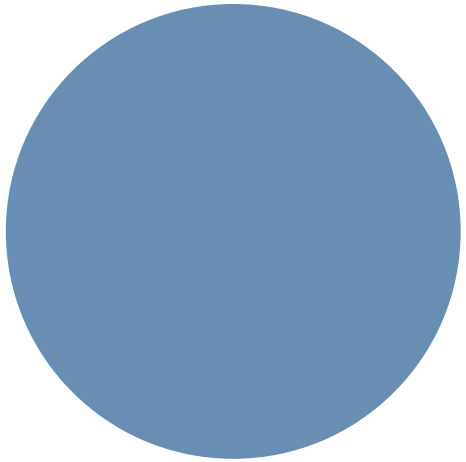
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-092	CS Ajdovščina (3rd unit up to 5 MW)	Non-FID

Pipeline including CS

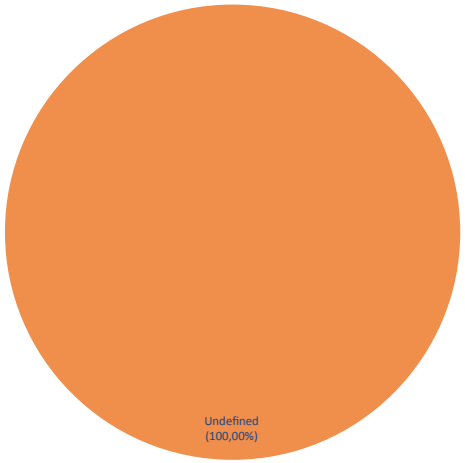
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2016
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+5,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Adjustment to operating parameters of the transmission system of the Italian TSO.
Reverse flow.

EXPECTED BENEFITS

Removing bottlenecks of transmission system and increase of its capacities up to the existing capacities of neighbouring transmission system operators (first phase).
Ensuring additional capacities for further market development and transits, including reverse flows (second phase).

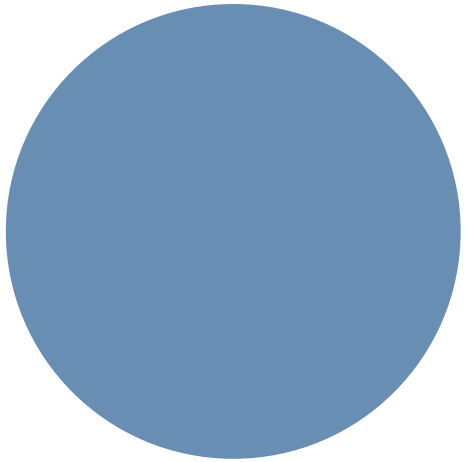
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-094	CS Kidričevo (2nd phase - up to 3 units with total power up to 30 MW)	Non-FID

Pipeline including CS

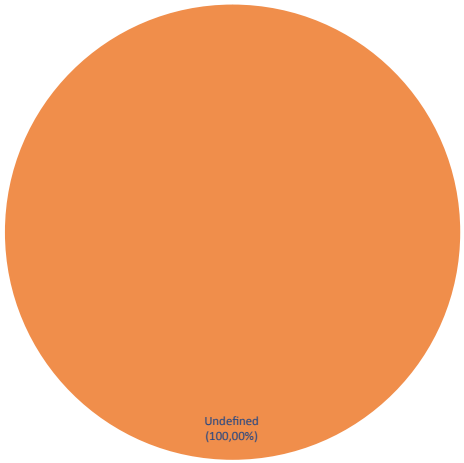
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2016
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+30,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Takeover of natural gas from cross-border transmission pipeline to M2/1 pipeline.

EXPECTED BENEFITS

Removing bottlenecks of transmission system and increase of its capacities up to the existing capacities of neighbouring transmission system operators (first phase).
Ensuring additional capacities for further market development and transits, including reverse flows (second phase).

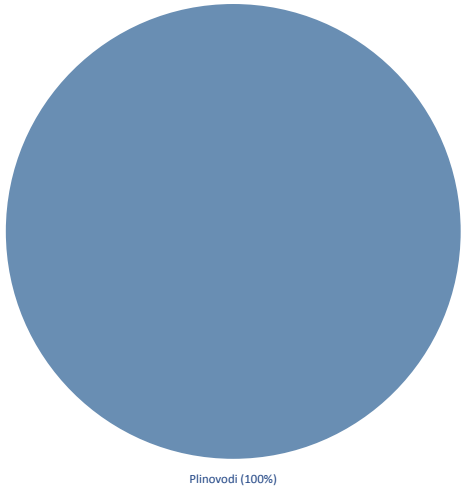
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-096	CS Kidričevo (3rd unit 3,5 MW)	FID

Pipeline including CS

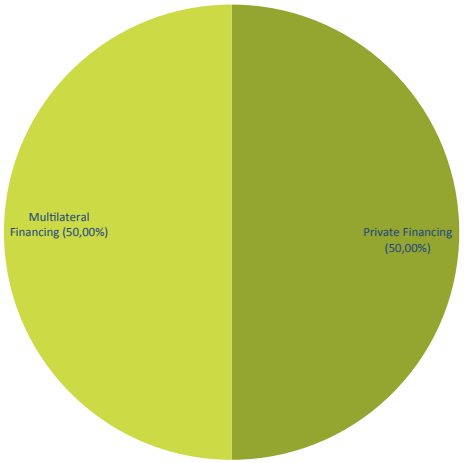
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2011
Construction	
Commissioning	2014
Last completed Phase :	FEED

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+3,50
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Increasing the capacity of the transmission system.

EXPECTED BENEFITS

Removing bottlenecks of transmission system and increase of its capacities up to the existing capacities of neighbouring transmission system operators (first phase).
Ensuring additional capacities for further market development and transits, including reverse flows (second phase).

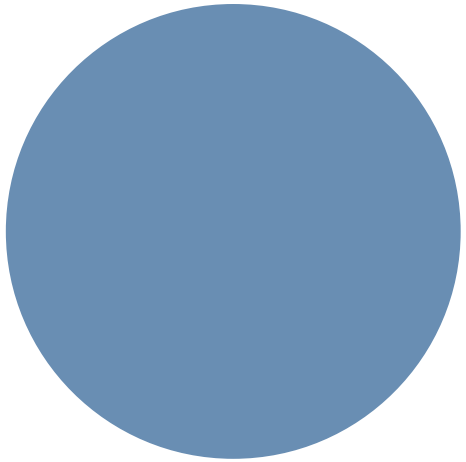
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-095	CS Rogatec (up to 2 MW)	Non-FID

Pipeline including CS

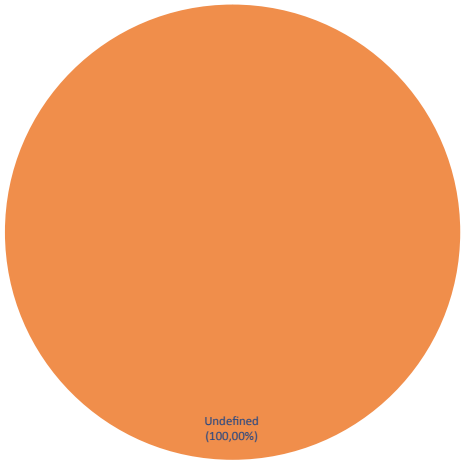
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+2,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Connection to the transmission system of the Croatian TSO.
Reverse flow.

EXPECTED BENEFITS

Removing bottlenecks of transmission system and increase of its capacities up to the existing capacities of neighbouring transmission system operators (first phase).
Ensuring additional capacities for further market development and transits, including reverse flows (second phase).

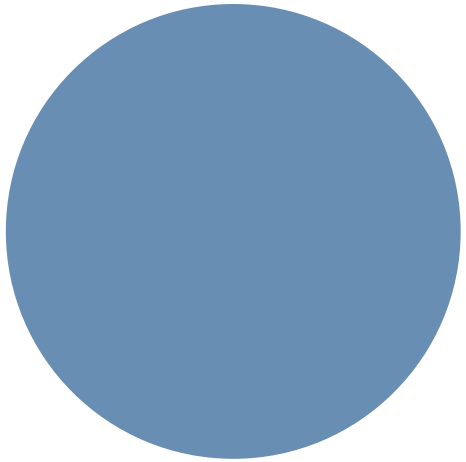
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-102	CS Vodice II (on M2/1 pipeline up to 3 units with total power up to 30 MW)	Non-FID

Pipeline including CS

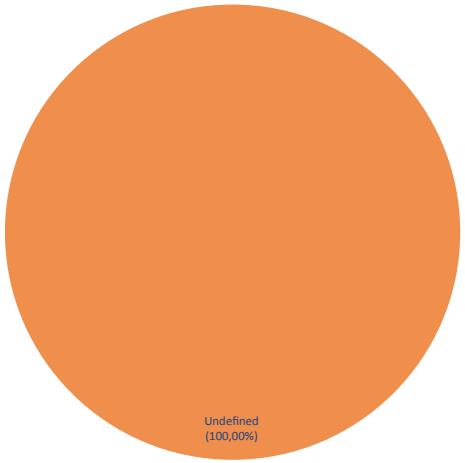
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+30,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Compressor station on the M2/1 pipeline for cross-border transmission.

EXPECTED BENEFITS

Removing bottlenecks of transmission system and increase of its capacities up to the existing capacities of neighbouring transmission system operators (first phase).
Ensuring additional capacities for further market development and transits, including reverse flows (second phase).

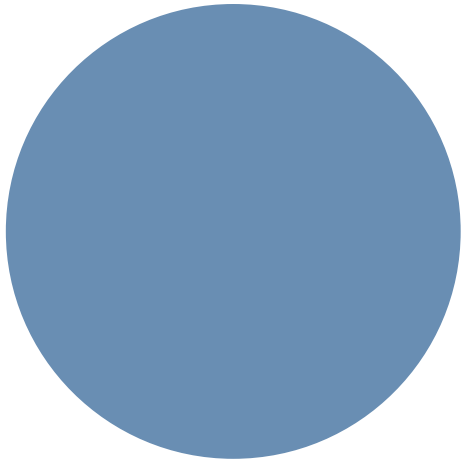
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-103	Godovič - Žiri - Škofja Loka	Non-FID

Pipeline including CS

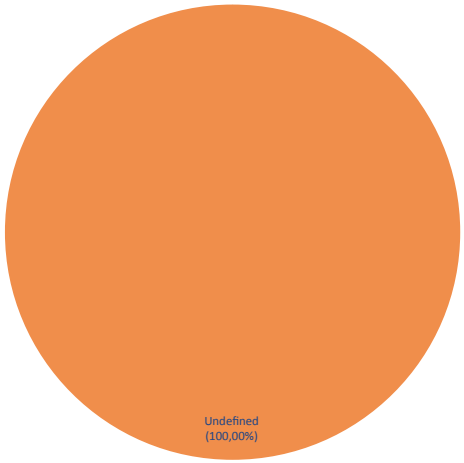
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+44,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Connecting new municipalities. Transmission system loop.

EXPECTED BENEFITS

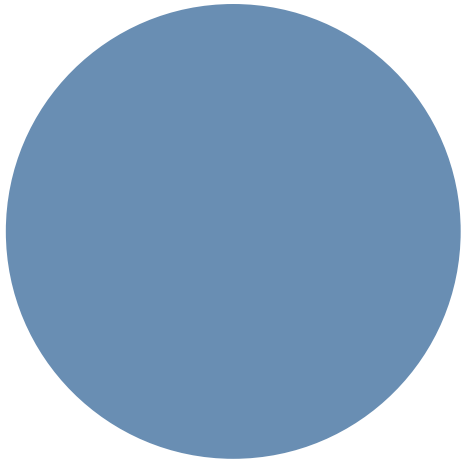
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-109	M1/3 SLO-A border crossing	Non-FID

Pipeline including CS

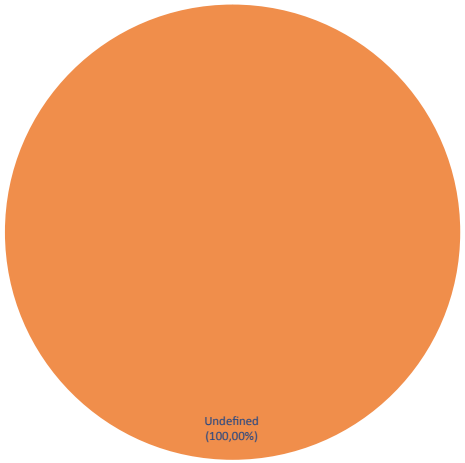
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+0,20
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+181,35
Expected Load Factor	70,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
	No	entry	181,35	Hub Austria	Hub Slovenia

DESCRIPTION OF THE PROJECT

Adjustment to operating parameters of the transmission system of the Austrian TSO, with parallel connection to the existing pipeline.

EXPECTED BENEFITS

Removing bottlenecks of transmission system and increase of its capacities up to the existing capacities of neighbouring transmission system operators (first phase)
Ensuring additional capacities for further market development and transits, including reverse flows (second phase)

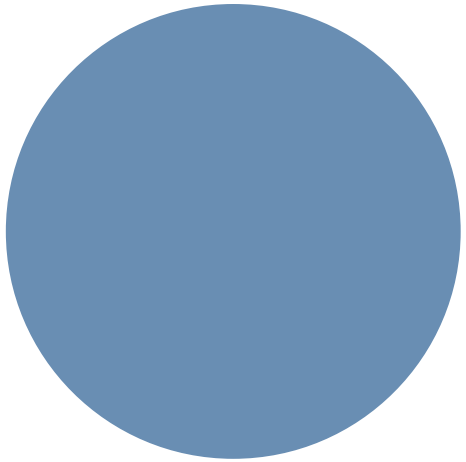
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-100	M10 Vodice - Rateče	Non-FID

Pipeline including CS

SPONSORS

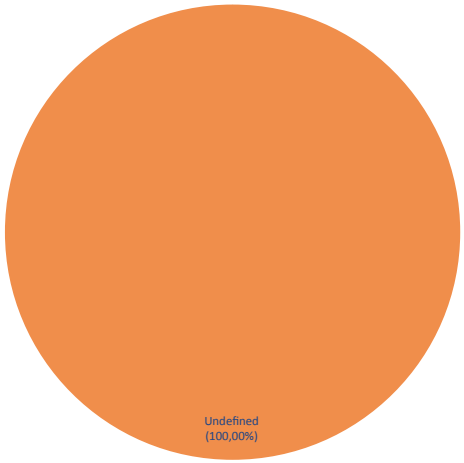


GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

TEN-E Requests	Date of Request	Year Funding Granted
	28/02/11	Not yet
	1/04/10	2011

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Not yet
Exemption granted ?	Not yet
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2017
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+79,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+289,00
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Tarvisio (IT) /Rateče (SI)	No	exit	754,00	Hub Slovenia	Hub Italia
	Yes	exit	289,00	Hub Slovenia	Hub Italia

DESCRIPTION OF THE PROJECT

Cross-border transmission.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional

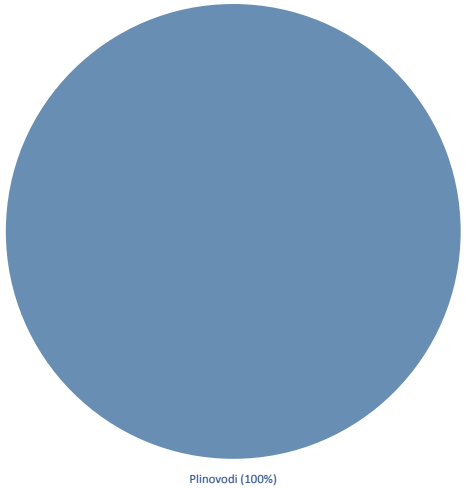
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-104	M2/1 Rogaška Slatina – Trojane	FID

Pipeline including CS

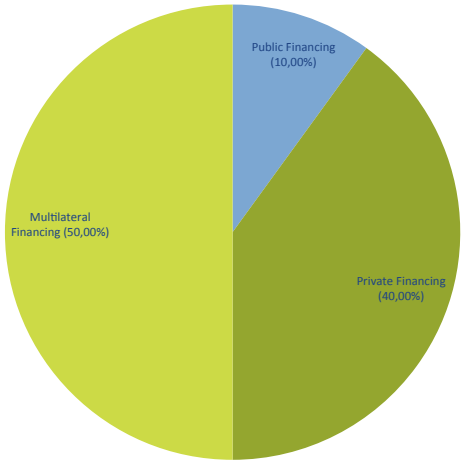
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2010
Construction	2013
Commissioning	2014
Last completed Phase :	Supply contract

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+65,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+13,97
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Increasing the capacity of the transmission system.

EXPECTED BENEFITS

Removing bottlenecks of transmission system and increase of its capacities up to the existing capacities of neighbouring transmission system operators (first phase)
Ensuring additional capacities for further market development and transits, including reverse flows (second phase)

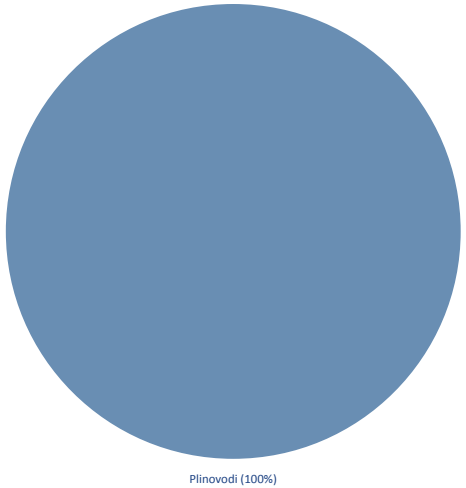
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-097	M2/1 Trojane – Vodice	FID

Pipeline including CS

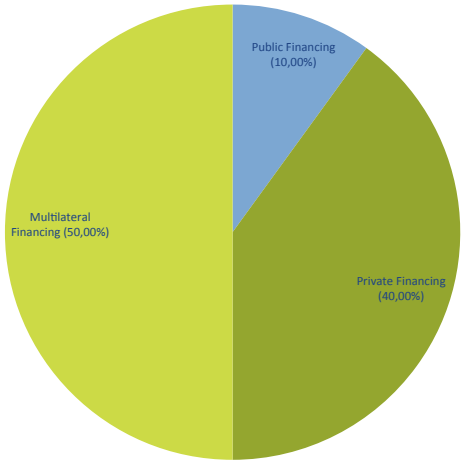
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2010
Construction	2013
Commissioning	2014
Last completed Phase :	Supply contract

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+34,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+13,97
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Increasing the capacity of the transmission system.

EXPECTED BENEFITS

Removing bottlenecks of transmission system and increase of its capacities up to the existing capacities of neighbouring transmission system operators (first phase)
Ensuring additional capacities for further market development and transits, including reverse flows (second phase)

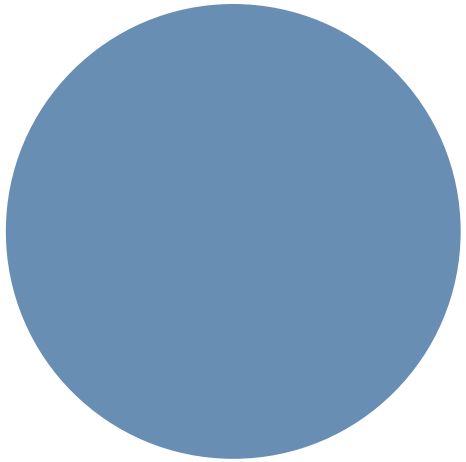
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-108	M3 pipeline reconstruction from CS Ajdovščina to Šempeter/Gorizia	Non-FID

Pipeline including CS

SPONSORS

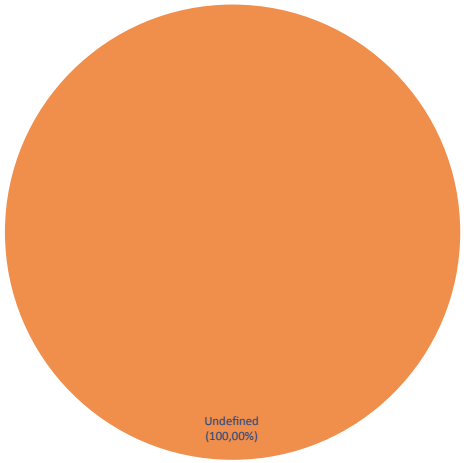


GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

TEN-E Requests	Date of Request	Year Funding Granted
	1/04/10	2011

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+31,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+25,40
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Šempeter/Gorizia	Yes	exit	25,40	Hub Slovenia	Hub Italia
	Yes	exit	62,99	Hub Slovenia	Hub Italia

DESCRIPTION OF THE PROJECT

Adjustment to operating parameters of the transmission system of the Italian TSO.

EXPECTED BENEFITS

Removing bottlenecks of transmission system and increase of its capacities up to the existing capacities of neighbouring transmission system operators (first phase)
Ensuring additional capacities for further market development and transits, including reverse flows (second phase)

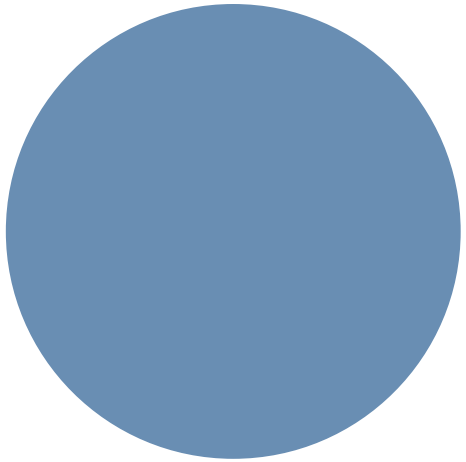
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-099	M3/1a Gorizia/Šempeter - Ajdovščina	Non-FID

Pipeline including CS

SPONSORS

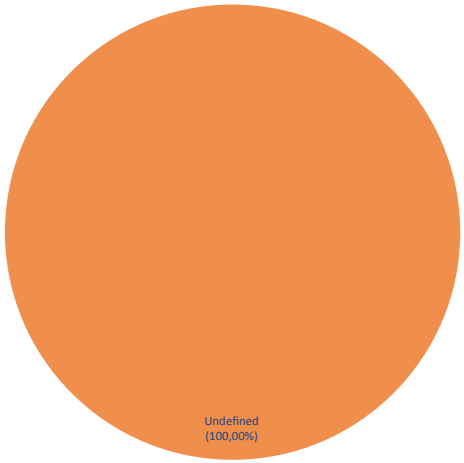


GENERAL INFORMATION

Promoter	**Plinovodi d.o.o.**
Operator	**Plinovodi d.o.o.**
TEN-E Project ?	**Project of Common Interest**
Interested by PCI ?	**Yes**
IGAs	**None**
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

TEN-E Requests	Date of Request	Year Funding Granted
	28/02/11	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	**Negotiated (e.g. Exemption)**
Considered Tariff Regime	**Negotiated (e.g. Exemption)**
Applied for Exemption ?	**Not yet**
Exemption granted ?	**Not yet**
% Exemption in entry direction	**0%**
% Exemption in exit direction	**0%**

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	**2017**
Last completed Phase :	**Planned**

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	**1**
Total Pipeline Length (km)	**+29,00**
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	**+102,00**
Expected Load Factor	**75,00%**

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Gorizia (IT) /Šempeter (SI)	Yes	exit	340,00	Hub Slovenia	Hub Italia
	No	exit	102,00	Hub Slovenia	Hub Italia

DESCRIPTION OF THE PROJECT

Cross-border transmission.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional

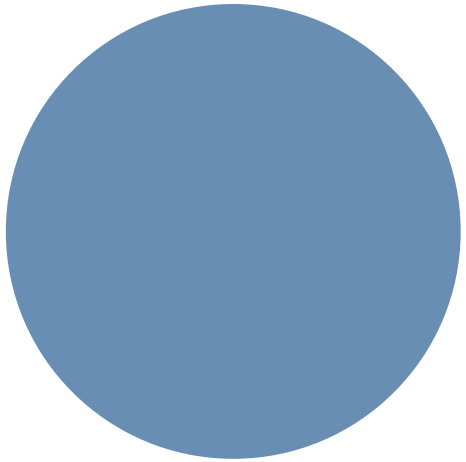
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-262	M3/1b Ajdovščina - Kalce	Non-FID

Pipeline including CS

SPONSORS

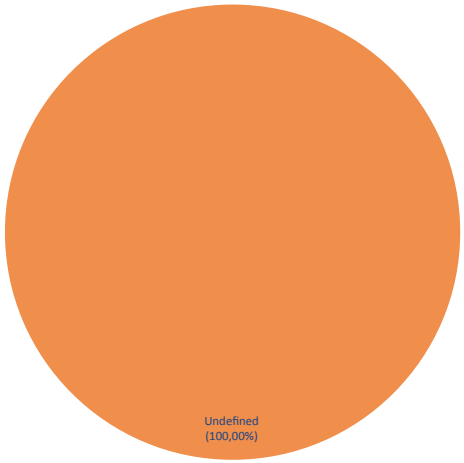


GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

TEN-E Requests	Date of Request	Year Funding Granted
	28/02/11	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Not yet
Exemption granted ?	Not yet
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2017
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+24,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+102,00
Expected Load Factor	75,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Cross-border transmission.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional

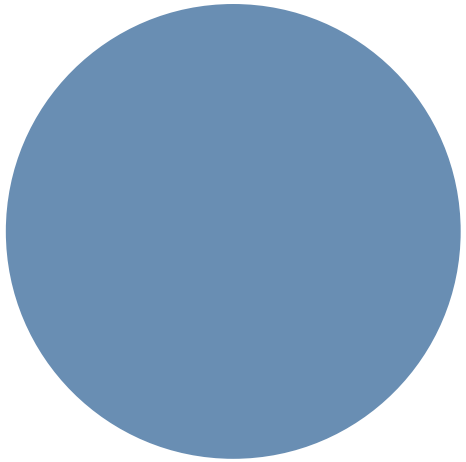
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-261	M3/1c Kalce - Vodice	Non-FID

Pipeline including CS

SPONSORS

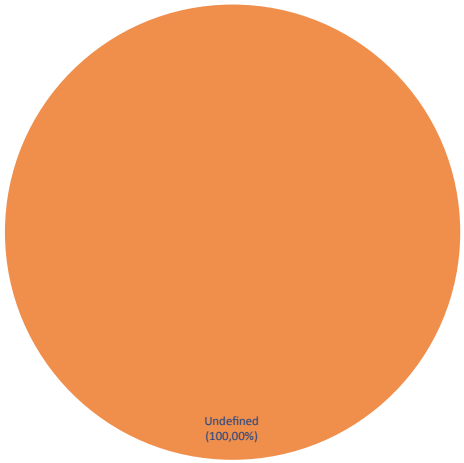


GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

TEN-E Requests	Date of Request	Year Funding Granted
	28/02/11	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Not yet
Exemption granted ?	Not yet
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2017
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+47,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+289,00
Expected Load Factor	75,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Cross-border transmission.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional

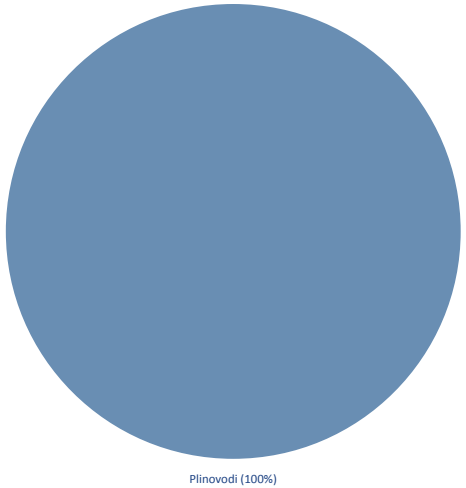
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-105	M5 + R51 Vodice – TE-TOL	FID

Pipeline including CS

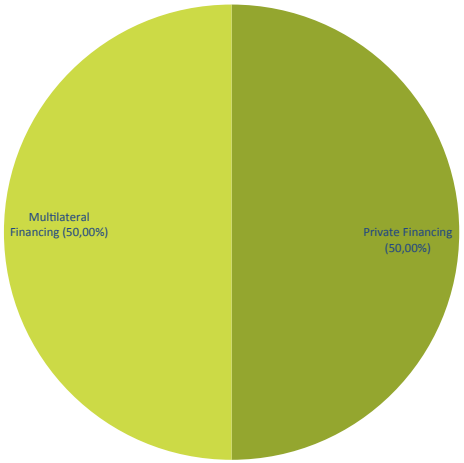
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2006
Construction	
Commissioning	2015
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+19,50
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+13,97
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Connection to the CHP station TE-TOL for the Municipality of Ljubljana.

EXPECTED BENEFITS

Removing bottlenecks of transmission system and increase of its capacities up to the existing capacities of neighbouring transmission system operators (first phase)
Ensuring additional capacities for further market development and transits, including reverse flows (second phase)

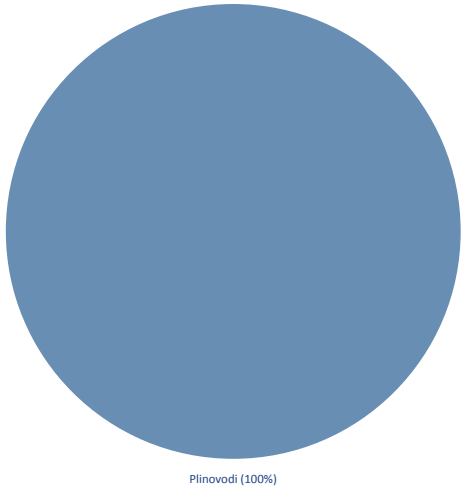
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-106	M5 Jarše - Novo mesto	Non-FID

Pipeline including CS

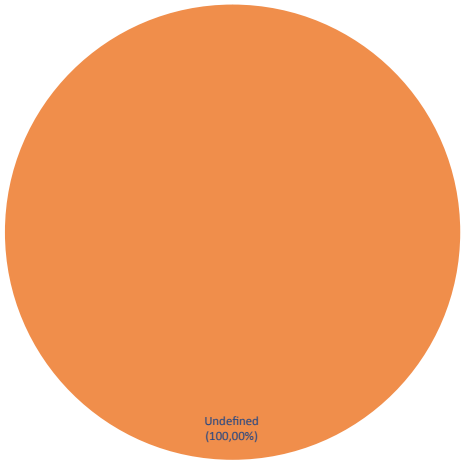
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+66,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Connecting new municipalities. Transmission system loop.

EXPECTED BENEFITS

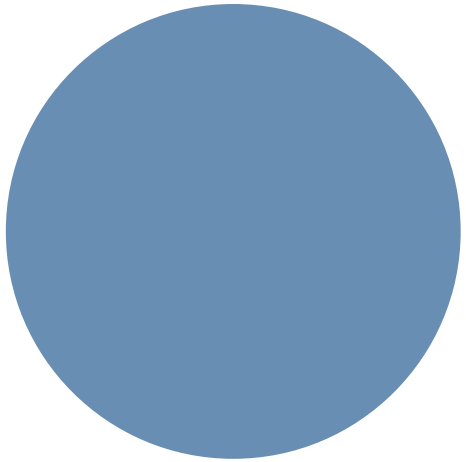
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-107	M6 Ajdovščina - Lucija	Non-FID

Pipeline including CS

SPONSORS

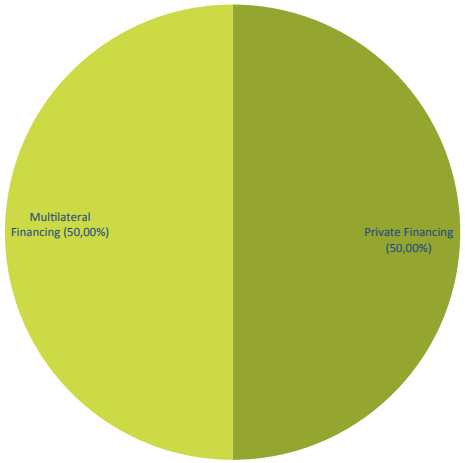


GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

TEN-E Requests	Date of Request	Year Funding Granted
	28/02/11	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2015
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+73,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+2,31
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
San Dorligo della Valle (IT) /Osp (SI)	Yes	entry	6,10	Hub Italia	Hub Slovenia

DESCRIPTION OF THE PROJECT

Connecting the Coastal-Karst region and the DSO in the Municipality of Koper.

EXPECTED BENEFITS

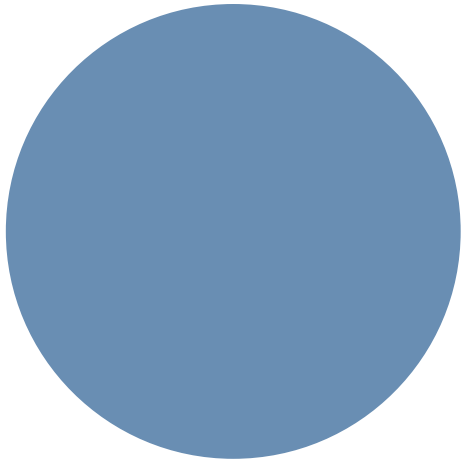
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-101	M8 Kalce - Jelšane	Non-FID

Pipeline including CS

SPONSORS

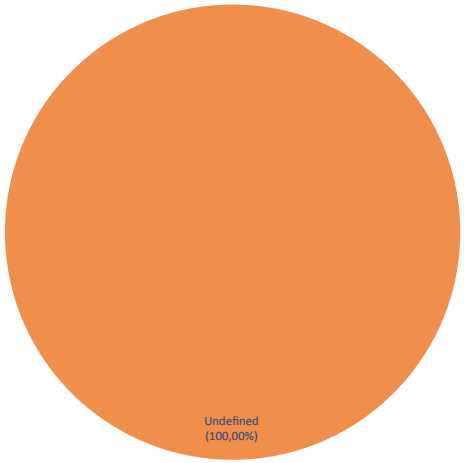


GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

TEN-E Requests	Date of Request	Year Funding Granted
	27/02/12	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2017
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+51,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+414,00
Expected Load Factor	80,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Zlobin (Croatia) - Rupa (Slovenia)	Yes	entry	414,00	Hub Croatia	Hub Slovenia

DESCRIPTION OF THE PROJECT

Interconnector with the transmission system of the Croatian TSO.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional

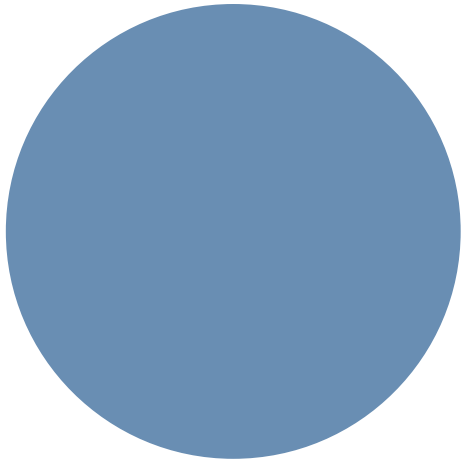
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-098	M9a Lendava - Kidričevo (including CS Kidričevo 3rd phase with up to 5 units of total power up to 80 MW)	Non-FID

Pipeline including CS

SPONSORS

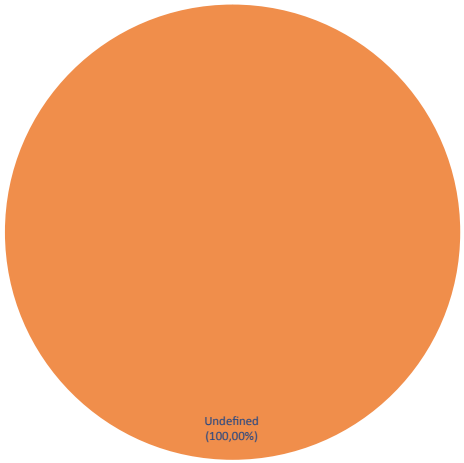


GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

TEN-E Requests	Date of Request	Year Funding Granted
	28/02/11	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Not yet
Exemption granted ?	Not yet
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2016
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+72,00
Total Compressor Power (MW)	+80,00
Maximum Capacity (GWh/d)	+288,00
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Interconnector SI-HU	No	entry	819,00	Hub Hungary	Hub Slovenia
	Yes	entry	288,00	Hub Hungary	Hub Slovenia

DESCRIPTION OF THE PROJECT

Cross-border transmission.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional

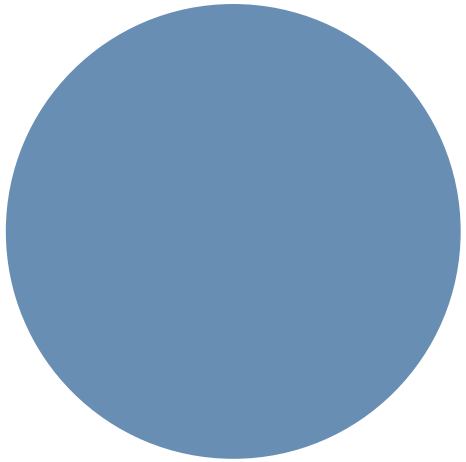
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-263	M9b Kidričevo - Vodice (including CS Vodice I - 4 units with total power up to 60 MW)	Non-FID

Pipeline including CS

SPONSORS

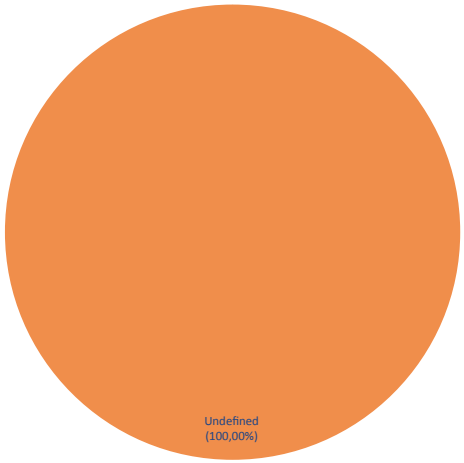


GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

TEN-E Requests	Date of Request	Year Funding Granted
	27/02/12	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Not yet
Exemption granted ?	Not yet
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2018
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+115,00
Total Compressor Power (MW)	+60,00
Maximum Capacity (GWh/d)	+288,00
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Cross-border transmission.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional

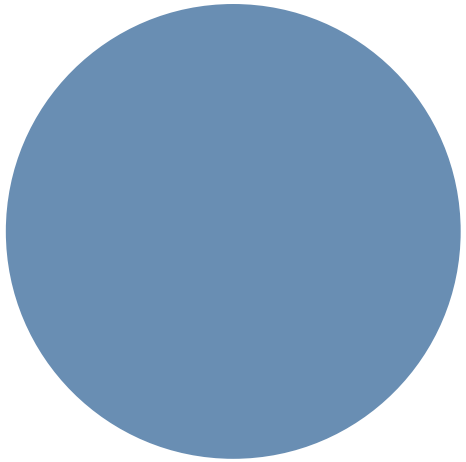
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-111	M9c Interconnector with Croatia	Non-FID

Pipeline including CS

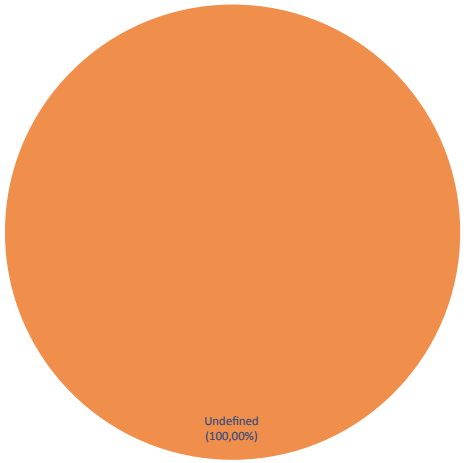
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Not yet
Exemption granted ?	Not yet
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2016
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+30,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+288,00
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Zlobin (Croatia) - Rupa (Slovenia)	No	entry	288,00	Hub Croatia	Hub Slovenia
	No	entry	819,00	Hub Croatia	Hub Slovenia

DESCRIPTION OF THE PROJECT

Cross-border transmission.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional

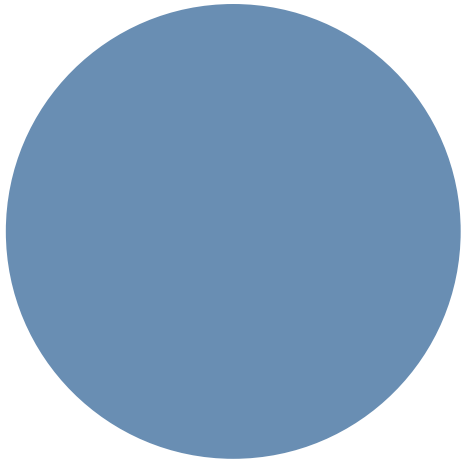
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-110	MRS Šempeter - reconstruction	FID

Pipeline including CS

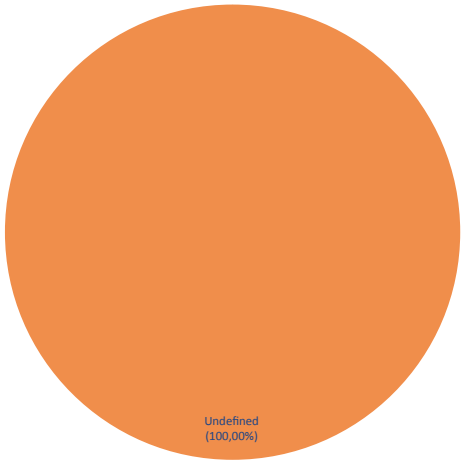
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2012
Construction	2014
Commissioning	2014
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Gorizia (IT) /Šempeter (SI)	Yes	exit	25,00	Hub Slovenia	Hub Italia

DESCRIPTION OF THE PROJECT

Adjustment to operating parameters of the transmission system to the Italian TSO. Reverse flow.

EXPECTED BENEFITS

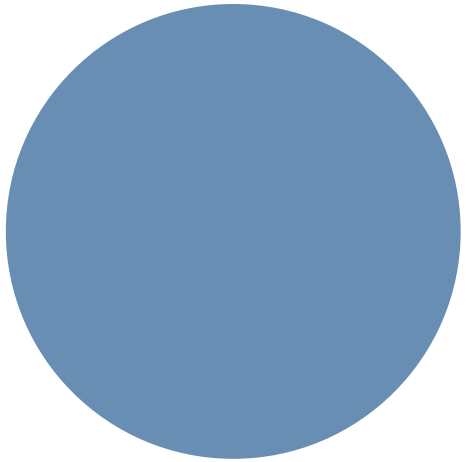
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-112	R15/1 Lendava - Kidričevo	Non-FID

Pipeline including CS

SPONSORS

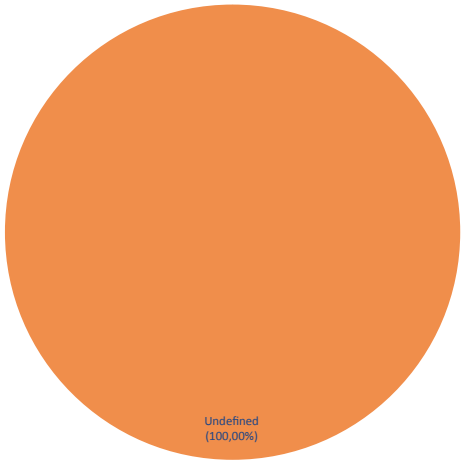


GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	1
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

TEN-E Requests	Date of Request	Year Funding Granted
	1/04/10	Not yet
	27/02/12	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2018
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+70,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+38,00
Expected Load Factor	70,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Interconnector SI-HU	No	entry	38,00	Hub Hungary	Hub Slovenia

DESCRIPTION OF THE PROJECT

Interconnector with the transmission system of the Hungarian TSO.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional

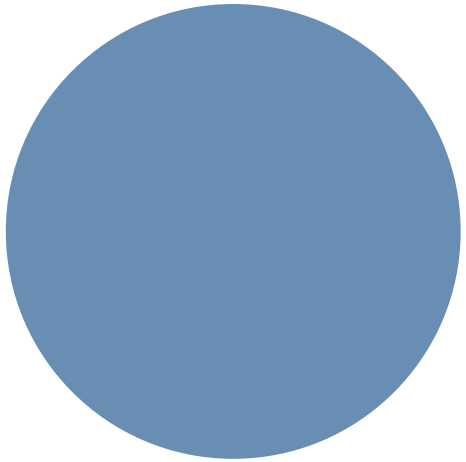
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-122	R21AZ Zreče Loop (Slovenske Konjice 2nd phase)	Non-FID

Pipeline including CS

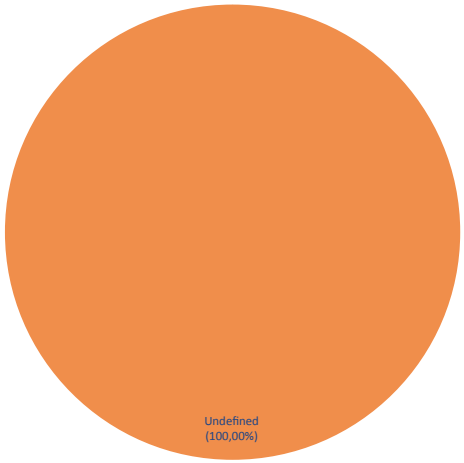
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+21,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Transmission system loop. Connecting the DSO in the Municipality of Oplotnica.

EXPECTED BENEFITS

Removing bottlenecks of transmission system and increase of its capacities up to the existing capacities of neighbouring transmission system operators (first phase)
Ensuring additional capacities for further market development and transits, including reverse flows (second phase)

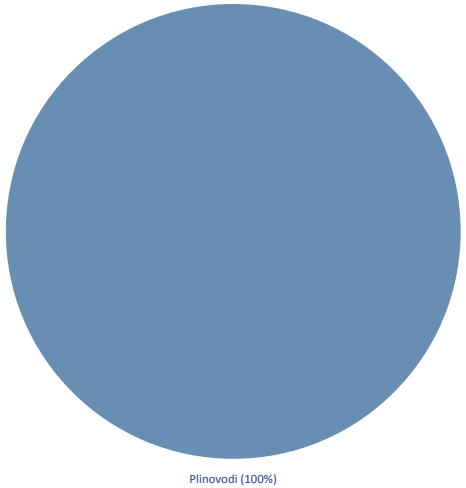
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-119	R25/1 Trojane - Hrastnik	Non-FID

Pipeline including CS

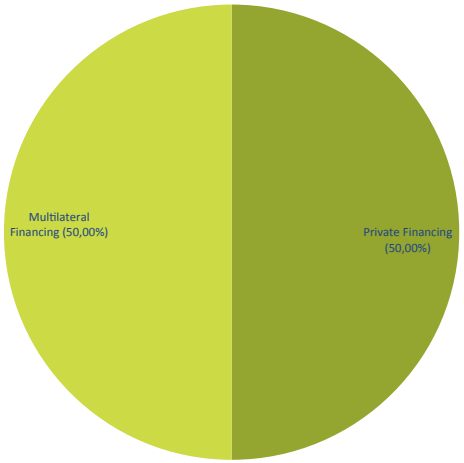
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+21,50
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+13,72
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Increasing the capacity of the transmission system for the region. Connection to the power station.

EXPECTED BENEFITS

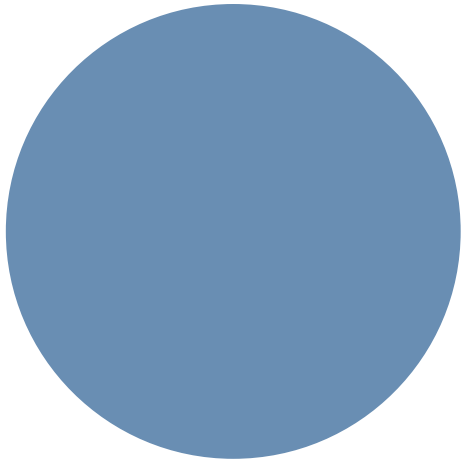
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-121	R297B Šenčur - Cerklje	Non-FID

Pipeline including CS

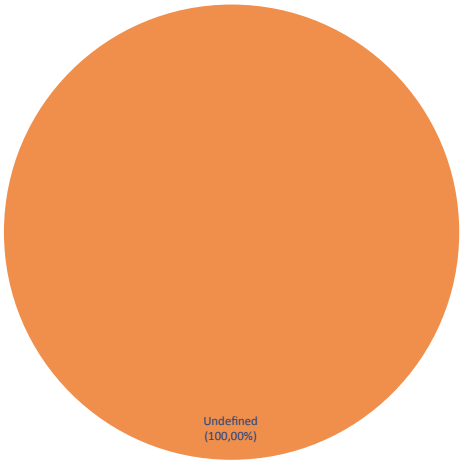
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+4,50
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+2,54
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Connectng the DSO in the Municipality of Cerklje.

EXPECTED BENEFITS

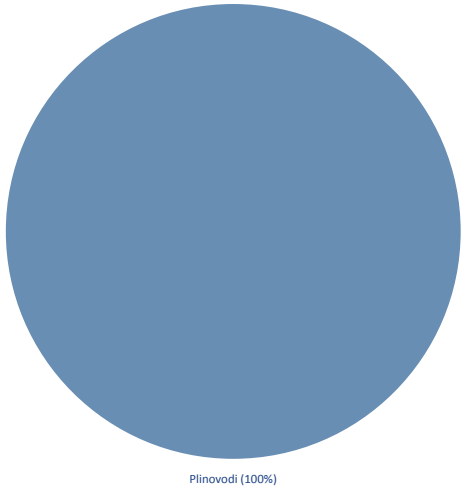
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-113	R38 Kalce - Godovič	Non-FID

Pipeline including CS

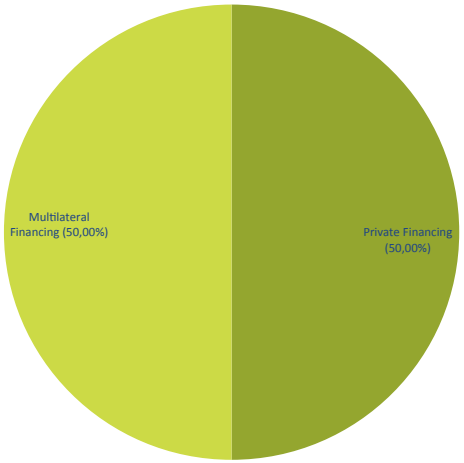
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+11,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+1,52
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Connecting the DSO in the Municipality of Idrija.

EXPECTED BENEFITS

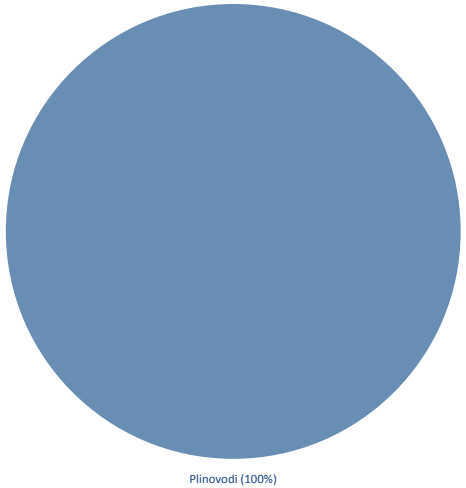
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-118	R45 Novo mesto - Bela Krajina	Non-FID

Pipeline including CS

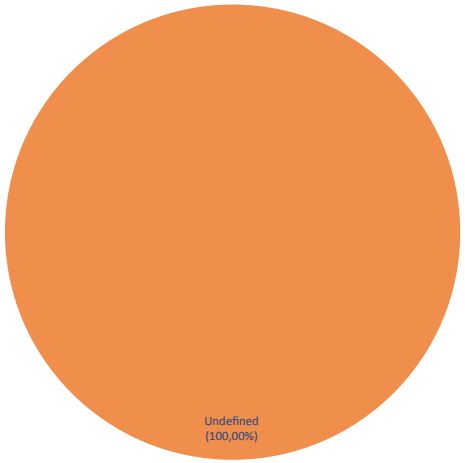
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+39,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+3,15
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Connecting three municipalities in Bela Krajina region (Southeast Slovenia).

EXPECTED BENEFITS

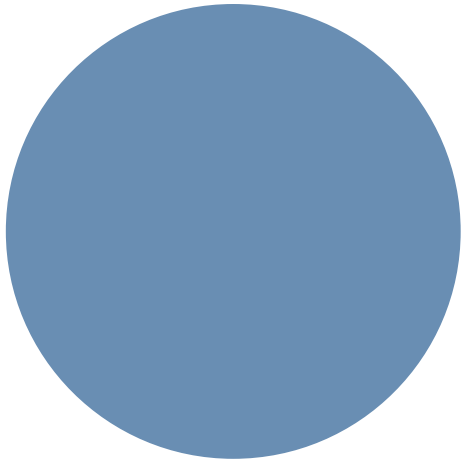
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-117	R51a Jarše - Sneberje, MRS Jarše	Non-FID

Pipeline including CS

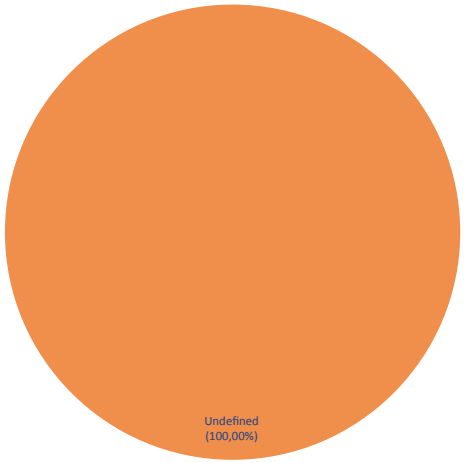
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+3,50
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Transmission system loop.

EXPECTED BENEFITS

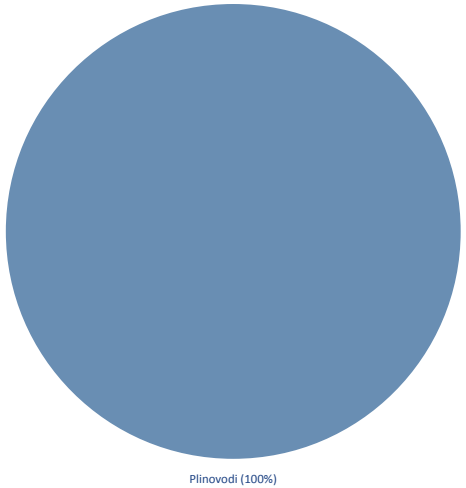
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-116	R51b TE-TOL - Fužine/Vevče	Non-FID

Pipeline including CS

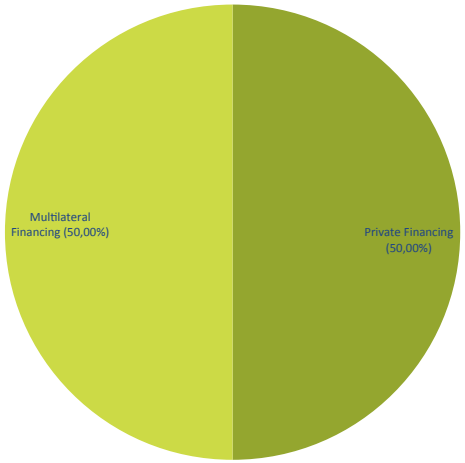
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+4,50
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+1,52
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

System loop and increasing the capacity of the transmission system.

EXPECTED BENEFITS

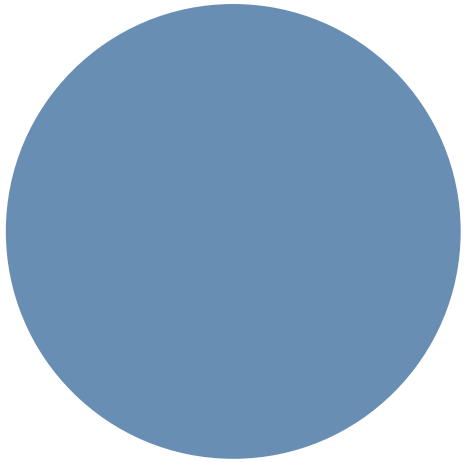
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-115	R51c Kozarje - Vevče, MRS Kozarje	Non-FID

Pipeline including CS

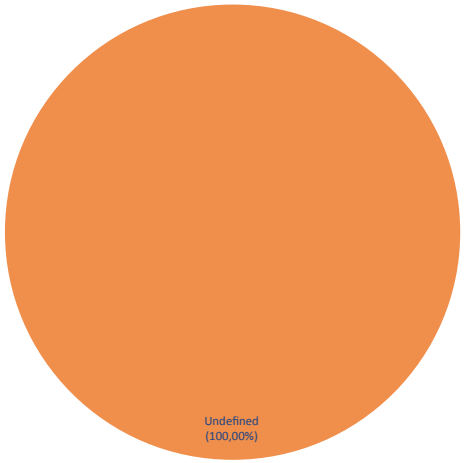
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+15,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Transmission system loop.

EXPECTED BENEFITS

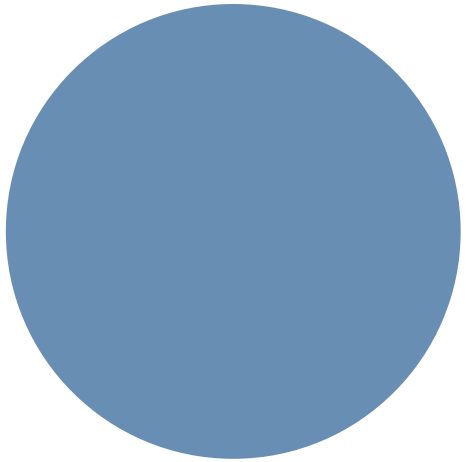
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-120	R52 Kleče - TOŠ	Non-FID

Pipeline including CS

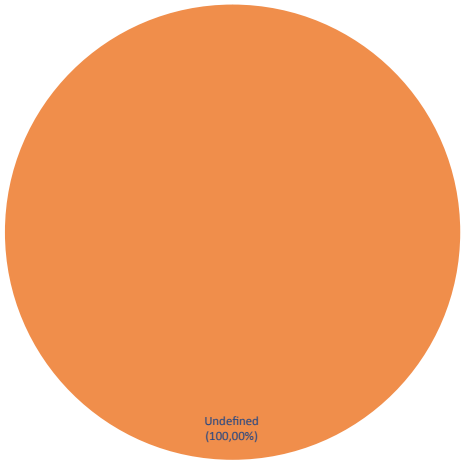
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+4,50
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+6,99
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

Connection to the CHP station TOŠ for the Municipality of Ljubljana.

EXPECTED BENEFITS

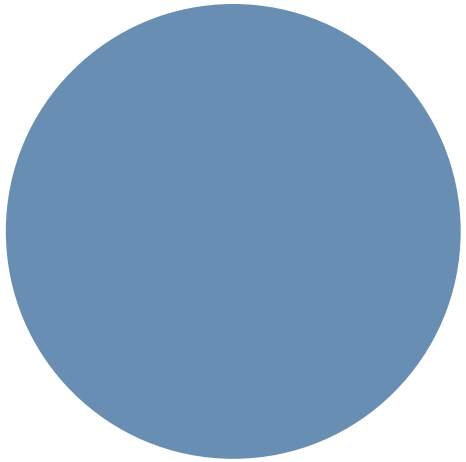
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-114	R61 Lucija - Sečovlje	Non-FID

Pipeline including CS

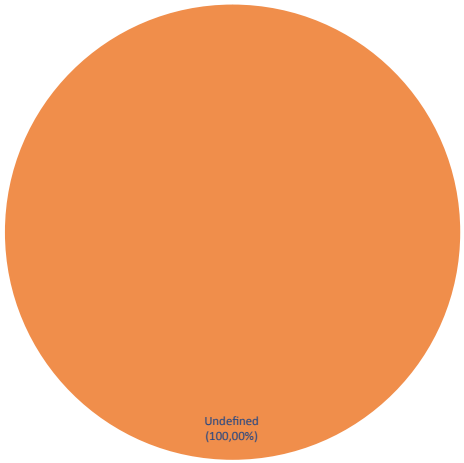
SPONSORS



GENERAL INFORMATION

Promoter	Plinovodi d.o.o.
Operator	Plinovodi d.o.o.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.plinovodi.si/wp-content/uploads/2011/09/RN-2013-2022-Posvetovalni-dokument.pdf

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2021
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+10,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	+2,31
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Sečovlje	Yes	entry	2,31	Hub Croatia	Hub Slovenia
	No	entry	5,08	Hub Croatia	Hub Slovenia

DESCRIPTION OF THE PROJECT

Possible interconnector with the transmission system of the Croatian TSO.

EXPECTED BENEFITS

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

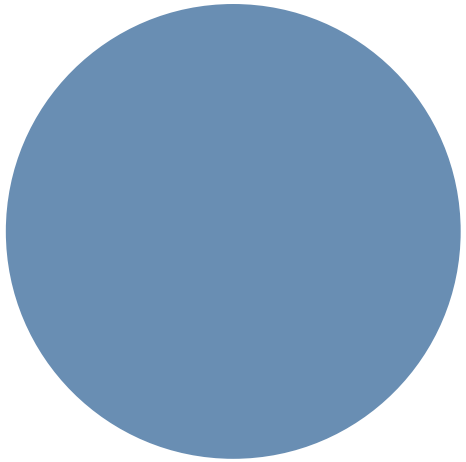
Spain

La Rochelle
Le Verdon-sur-Mer
PEG SUD
Bordeaux
Castillon (Dordogne)
PIR-MIDI
Ferrol
Mugardos
A Coruña
El Ferrol
Musel (Gijón)
Gijón / Musel
Lugo
Oviedo
Santander
Bilbao
GAVIOTA
Gaviota
Izaute
Lussagnet
Pontevedra
Tuy
Ourense
S.Sebastián
Biriatou
Irun
Lacq
PEG TIGF
Toulouse
Leon
Vitoria
Pamplona
Larrau
Cruzy (Hérault)
Bragança
Burgos
Logroño
Serrablo
Palencia
Zamora
Valladolid
Soria
AND
Le Perthus
Huesca
Figueras
Mangualde
Celorico
Cantalhede
Salamanca
Zaragoza
Barcelona
Guarda
Segovia
Lleida
Ávila
Yela
Guadalajara
MS-ATR
MADRID
Tarragona
Cáceres
Toledo
Cuenca
Teruel
Castor
SPAIN
Campo Maior
Badajoz
Castellon de la Plana
Balearic Sea
Sagunto
Ciudad Real
Valencia
Albacete
Palma de Mallorca
Las Barreras
Cordoba
Huelva
Sevilla
El Ruedo
Jaén
Alicante
POSEIDON
Marismas
Murcia
Cartagena
Granada
Cádiz
Málaga
Motril
Almería
Tarifa
Mediterranean
Ceuta
Tangier
ALGIERS
Arzew
Oran
RABAT
Melilla
Beni Saf
MEDGAZ
MEG
MAGHREB EUROPE GAS MA
GR1-GR2
GR3-GR4

LNG-F-152	Bilbao Send-Out increase 1000000	FID

LNG Terminal

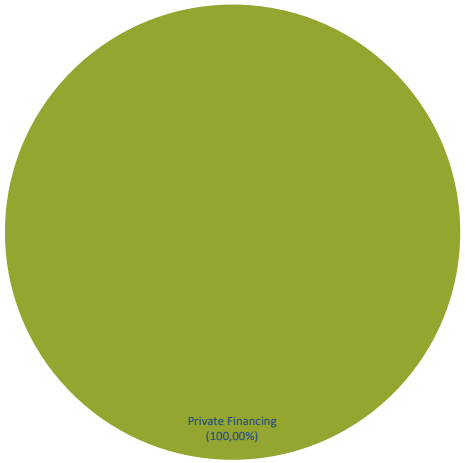
SPONSORS



GENERAL INFORMATION

Promoter	BBG
Operator	BBG
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2015 Q4
Last completed Phase :	FID

TECHNICAL INFORMATION

Regasification facility	Bilbao LNG Terminal
Expected volume (bcm/y)	
Storage capacity (m3)	
Send-out (mcm/d)	+4,80
Ship size (m3)	
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Bilbao	Yes	exit	55,80	LNG Terminals Spain	Hub Spain

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network;
Reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

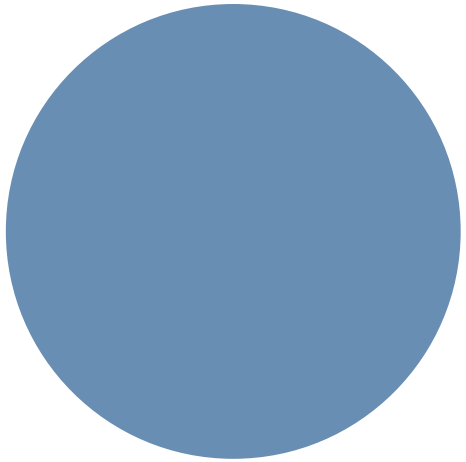
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-154	Bilbao Send-Out increase 1200000	Non-FID

LNG Terminal

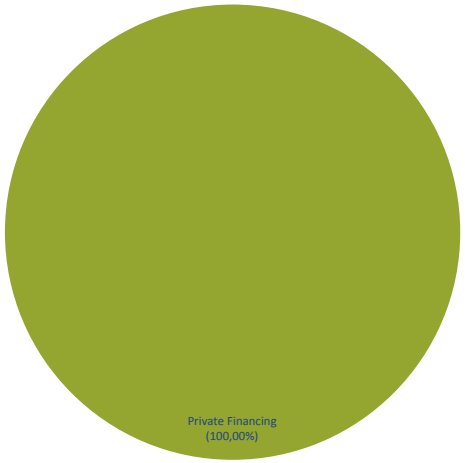
SPONSORS



GENERAL INFORMATION

Promoter	BBG
Operator	BBG
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2018 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Bilbao LNG Terminal
Expected volume (bcm/y)	
Storage capacity (m3)	
Send-out (mcm/d)	+4,80
Ship size (m3)	
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Bilbao	Yes	exit	55,80	LNG Terminals Spain	Hub Spain

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Iberian Peninsula with Europe), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Spain), N-1 Regional (North-south in Western Europe), Back-up for renewables, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants.
Bilbao send out increase to 1.200.000 Nm3/h is part of the of the paralell core network in the Spanish System to develop the 3rd Interconnection project between Spain and Portugal, which has been submitted as a PCI. From a European perspective, this project contributes to integrate the European systems and, therefore, an internal gas market development, fulfilling the objectives of the European Union policies and guidelines. This project linked and supplemented with the full development of the IBERIAN-FRENCH CORRIDOR, ensure that no Member State is isolated from the European network, as well as, reinforce the security of supply in any system, increasing the solidarity between countries in all of Europe.
The project has significant impact on cross-border because of the notable increase of the capacity at the Portugal-Spanish border and is part of the development of the Iberian Gas Market (MIBGAS) which mainly aims to achieve a single market in the Iberian Peninsula by developing cross border infrastructures to enhance transmission fluidity between Portugal and Spain.

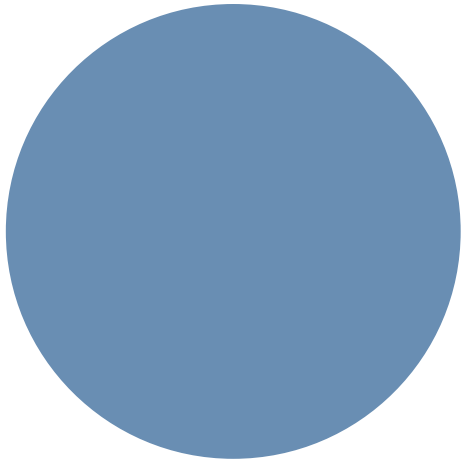
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-153	Bilbao Send-Out increase 1400000	Non-FID

LNG Terminal

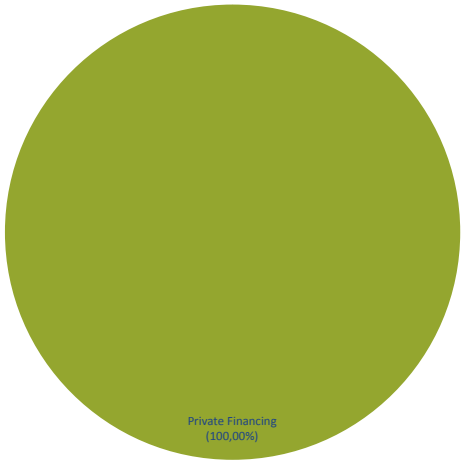
SPONSORS



GENERAL INFORMATION

Promoter	BBG
Operator	BBG
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2019 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Bilbao LNG Terminal
Expected volume (bcm/y)	
Storage capacity (m3)	
Send-out (mcm/d)	+4,80
Ship size (m3)	
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Bilbao	Yes	exit	55,80	LNG Terminals Spain	Hub Spain

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Iberian Peninsula with Europe), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Spain), N-1 Regional (North-south in Western Europe), Back-up for renewables, Enhancement of Internal Network, reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

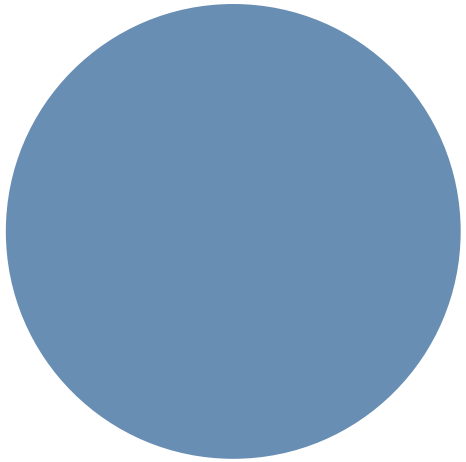
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-F-150	Bilbao's 3rd LNG Storage Tank	FID

LNG Terminal

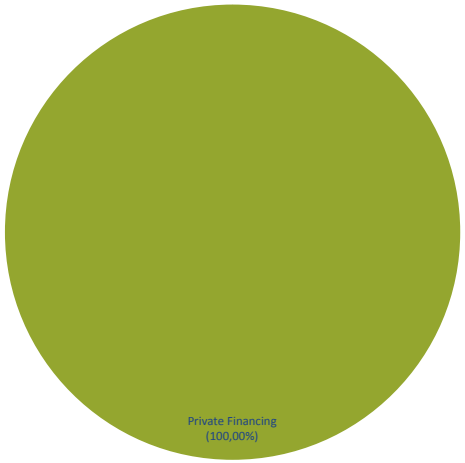
SPONSORS



GENERAL INFORMATION

Promoter	BBG
Operator	BBG
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2014 Q4
Last completed Phase :	Construction

TECHNICAL INFORMATION

Regasification facility	Bilbao LNG Terminal
Expected volume (bcm/y)	
Storage capacity (m3)	+150.000,00
Send-out (mcm/d)	
Ship size (m3)	
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network, reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

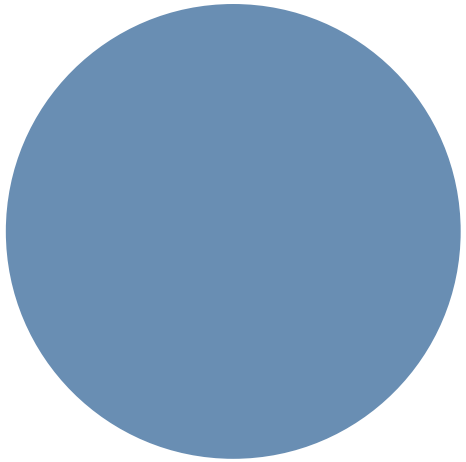
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-151	Bilbao's 4th LNG Storage Tank	Non-FID

LNG Terminal

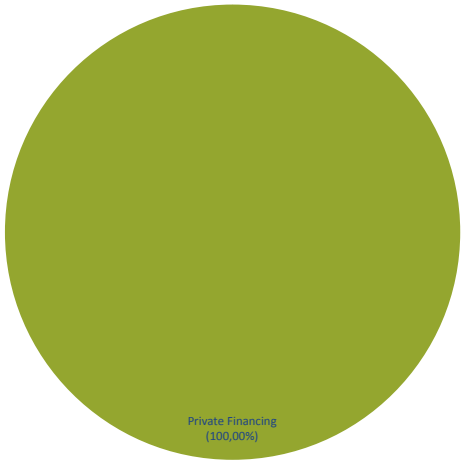
SPONSORS



GENERAL INFORMATION

Promoter	BBG
Operator	BBG
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2018 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Bilbao LNG Terminal
Expected volume (bcm/y)	
Storage capacity (m3)	+150.000,00
Send-out (mcm/d)	
Ship size (m3)	
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network, reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

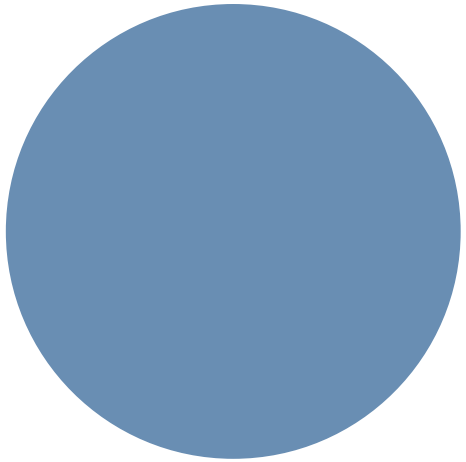
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-278	Castropodame-Zamora	Non-FID

Pipeline including CS

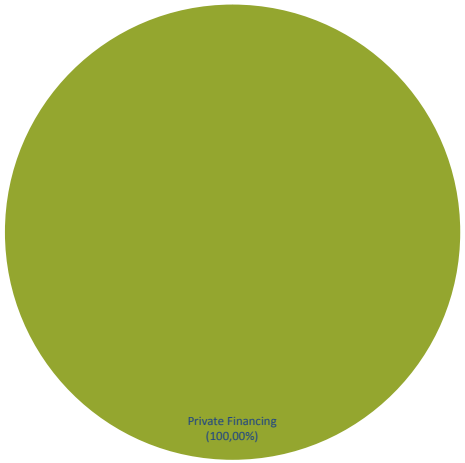
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2017 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+170,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Spain and Portugal), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Portugal), N-1 Regional (South gas region), Back-up for renewables, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants.
Castropodame-Zamora pipeline is part of the of the paralell core network in the Spanish System to develop 3rd Interconnection project between Spain and Portugal, which has been submitted as a PCI. From a European perspective, this project contributes to integrate the European systems and, therefore, an internal gas market development, fulfilling the objectives of the European Union policies and guidelines. This project linked and supplemented with the full development of the IBERIAN-FRENCH CORRIDOR, ensure that no Member State is isolated from the European network, as well as, reinforce the security of supply in any system, increasing the solidarity between countries in all of Europe.
The project has significant impact on cross-border because of the notable increase of the capacity at the Portugal-Spanish border and is part of the development of the Iberian Gas Market (MIBGAS) which mainly aims to achieve a single market in the Iberian Peninsula by developing cross border infrastructures to enhance transmission fluidity between Portugal and Spain.

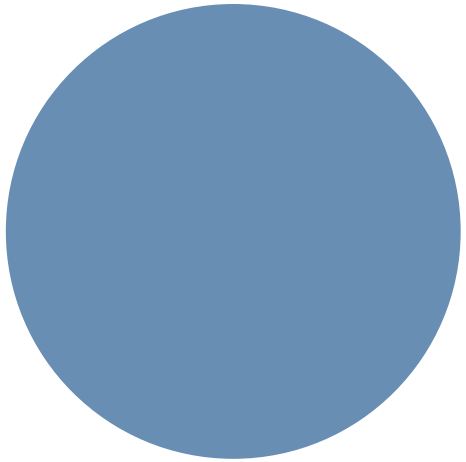
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-156	CS Border at Biriatou)	FID

Pipeline including CS

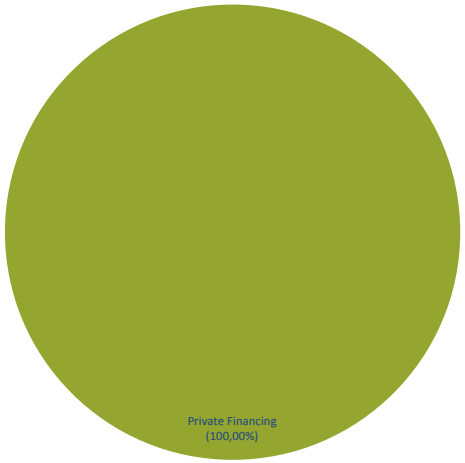
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2015 Q4
Last completed Phase :	FID

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+21,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

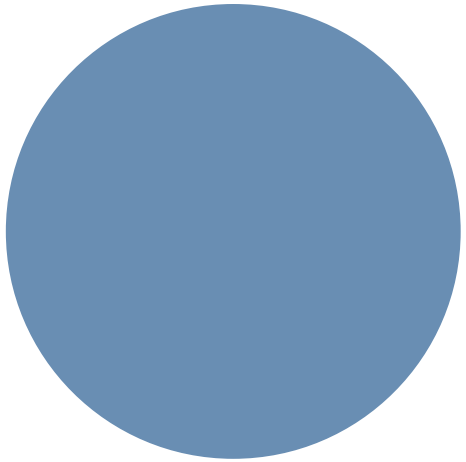
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-279	CS La Barbolla	Non-FID

Pipeline including CS

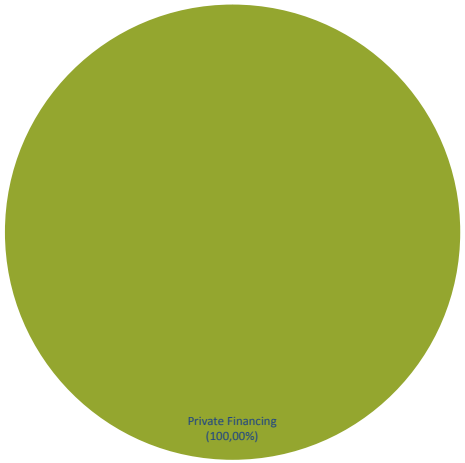
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2021 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+20,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Mangualde (PT) / Zamora (ES) (3rd Spain / Portugal IP)	Yes	entry	35,00	Hub Portugal	Hub Spain
	Yes	exit	35,00	Hub Spain	Hub Portugal

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Spain and Portugal), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Portugal), N-1 Regional (South gas region), Back-up for renewables, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants.
CS La Barbolla is part of the of the paralell core network in the Spanish System to develop the 3rd Interconnection project between Spain and Portugal, which has been submitted as a PCI. From a European perspective, this project contributes to integrate the European systems and, therefore, an internal gas market development, fulfilling the objectives of the European Union policies and guidelines. This project linked and supplemented with the full development of the IBERIAN-FRENCH CORRIDOR, ensure that no Member State is isolated from the European network, as well as, reinforce the security of supply in any system, increasing the solidarity between countries in all of Europe.
The project has significant impact on cross-border because of the notable increase of the capacity at the Portugal-Spanish border and is part of the development of the Iberian Gas Market (MIBGAS) which mainly aims to achieve a single market in the Iberian Peninsula by developing cross border infrastructures to enhance transmission fluidity between Portugal and Spain.

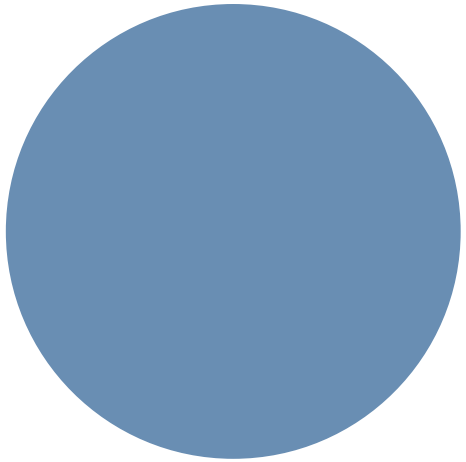
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-159	CS Zamora power increase	Non-FID

Pipeline including CS

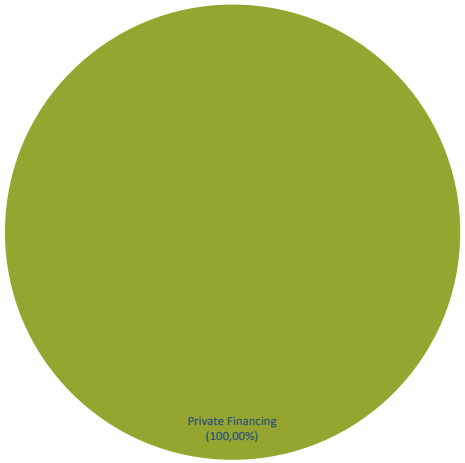
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2018 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+23,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Spain and Portugal), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Portugal), N-1 Regional (South gas region), Back-up for renewables, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants.
CS Zamora power increase is part of the 3rd Interconnection project between Spain and Portugal which has been submitted as a PCI. From a European perspective, this project contributes to integrate the European systems and, therefore, an internal gas market development, fulfilling the objectives of the European Union policies and guidelines. This project linked and supplemented with the full development of the IBERIAN-FRENCH CORRIDOR, ensure that no Member State is isolated from the European network, as well as, reinforce the security of supply in any system, increasing the solidarity between countries in all of Europe.
The project has significant impact on cross-border because of the notable increase of the capacity at the Portugal-Spanish border and is part of the development of the Iberian Gas Market (MIBGAS) which mainly aims to achieve a single market in the Iberian Peninsula by developing cross border infrastructures to enhance transmission fluidity between Portugal and Spain.

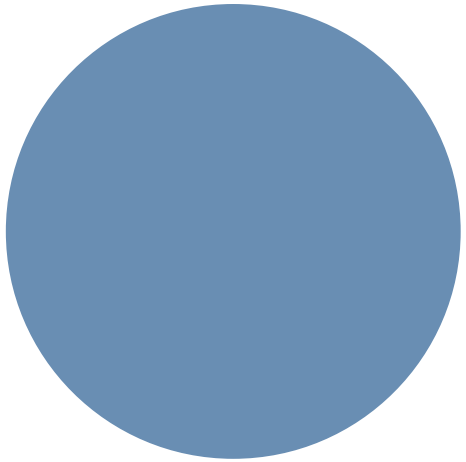
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-160	CS Zaragoza power increase	FID

Pipeline including CS

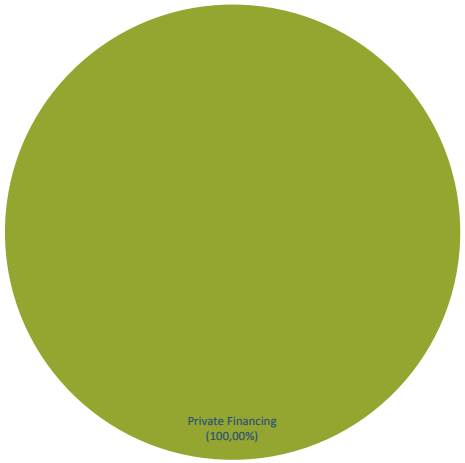
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2016 Q4
Last completed Phase :	FID

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+4,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Iberian Peninsula with Europe), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Spain), N-1 Regional (North-south in Western Europe), Back-up for renewables, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants.
CS Zaragoza power increase is necessary for the development of the "Cross-border optimization: Ebro Valley Project" in the North-South gas interconnections in Western Europe, which has been submitted as a PCI. The aim of Ebro Valley project is to allow to bring gas from any region in Europe to be transported to Spain (concretely, to Catalonia) through the interconnection points between France and Spain in the North-South Gas Interconnections in Western Europe, in case of the failure of Barcelona LNG plant, removing the internal bottlenecks of the Spanish system and covering the total system demand in this event. Thanks to the development of the internal Spanish System, the whole system will be integrated -Catalonia will never be isolated in case of N-1 of Barcelona- and will have physical access to the sources and routes from the European network. It increases the security of supply and involves a better integration of the countries, making possible the regional cooperation between member states in the North-South Gas Interconnections in Western Europe to face disruption and allowing to fulfil the N-1 rule.
CS Zaragoza power increase is also part of the core network developments (Spanish paralell Core Network) for the development of Le Perthus IP subproject, part of the Eastern axis-Midcat Project in the North-South gas interconnections in Western Europe, which has been submitted as a PCI. Therefore, although CS Zaragoza power increase is not exclusively linked to this interconnection project, is needed to the full development of the capacity and the achievements of the main objectives of the Eastern Axis.

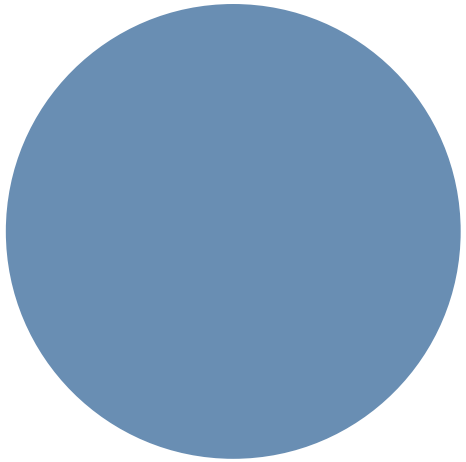
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-164	Guitiriz-Lugo	FID

Pipeline including CS

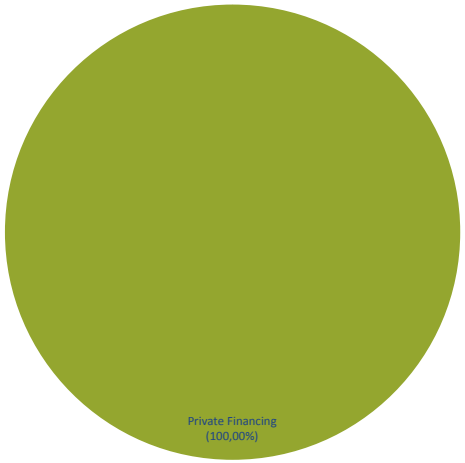
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2013 Q4
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+28,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

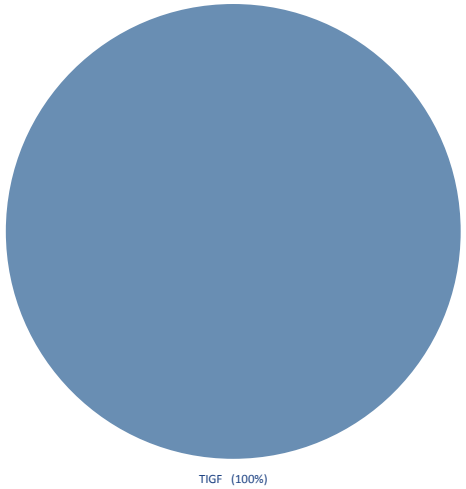
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-252	Iberian-French corridor: Eastern Axis-Midcat Project	Non-FID

Pipeline including CS

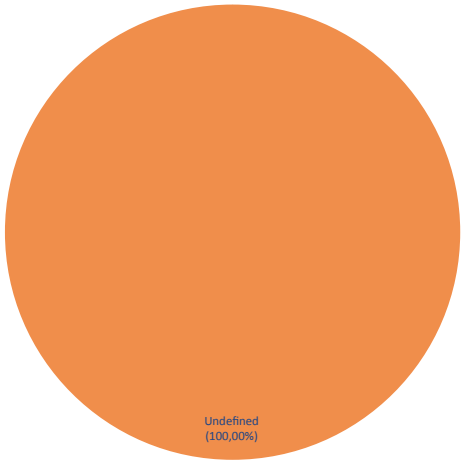
SPONSORS



GENERAL INFORMATION

Promoter	TIGF
Operator	TIGF
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.tigf.fr

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2020
Last completed Phase :	

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+148,00
Total Compressor Power (MW)	+10,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Le Perthus	Yes	entry	230,00	Hub Spain	Hub France(TIGF)
	Yes	exit	80,00	Hub France(TIGF)	Hub Spain

DESCRIPTION OF THE PROJECT

In the French side, it's composed by a 120 km long pipeline between the frontier (near Le Perthus) and the CS of Barbaira, the instalation of an aditional compression of 10 MW at Barbaira, and a 28 km long pipeline between Lupiac and Baran (Artère du Gascogne).

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional, Back-up for renewables

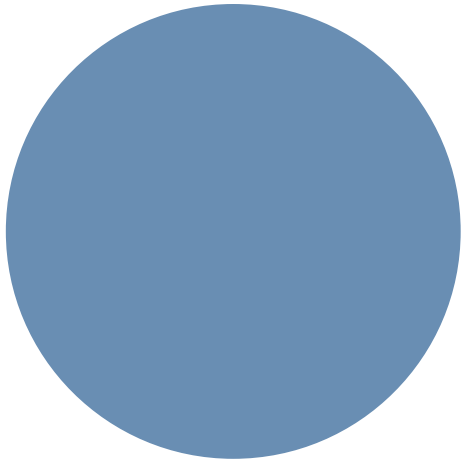
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-161	Iberian-French corridor: Eastern Axis-Midcat Project (Pipeline Figueras-French border)	Non-FID

Pipeline including CS

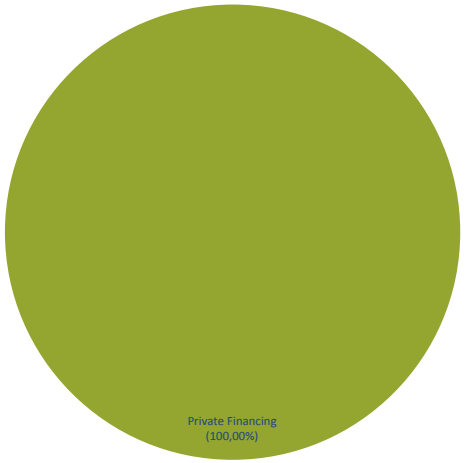
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2020 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+25,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Le Perthus	Yes	entry	80,00	Hub France(TIGF)	Hub Spain
	Yes	exit	230,00	Hub Spain	Hub France(TIGF)

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Iberian peninsula with Europe), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Spain, France), N-1 Regional (North-south in Western Europe), Back-up for renewables, Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants.
Figueras-French Border is necessary for the develpment of the Le Perthus IP subproject, part of the Eastern axis-Midcat Project in the North-South gas interconnections in western Europe, which has been submitted as a PCI. The Iberian-French Corridor is crucial to better interconnect the Mediterranean area and thus supplies from Africa and the Northern supply Corridor making a reality the strategy concept of the North-South Corridor in Western Europe.
From an European perspective, developing the full IBERIAN-FRENCH CORRIDOR contribute to spread the diversified portfolio of the South Region as well as opens a path to transport gas from Algeria to central Europe through France. The IBERIAN-FRENCH CORRIDOR will contribute to redistribute and balance the entry of supply sources to Europe, increasing the European diversification of supply by reducing the dependence on the incumbent gas source, jointly with the risks linked to security of supply.
From a regional perspective, highlighted is the better integration of these two countries into the South Region, developing the new cross border interconnection capacity. Developing cross-border capacity between France and Spain will bring the European gas market closer, making possible the development of large scale energy trade between countries.

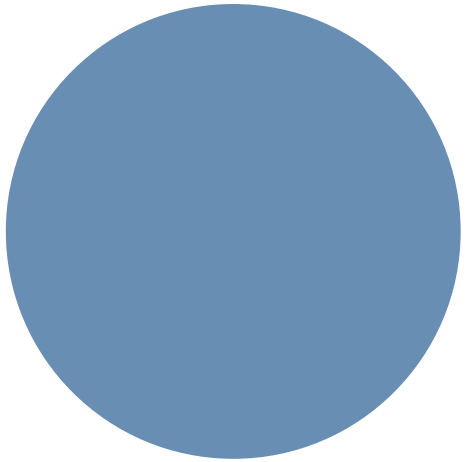
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-168	Interconnection ES-PT (3rd IP)	Non-FID

Pipeline including CS

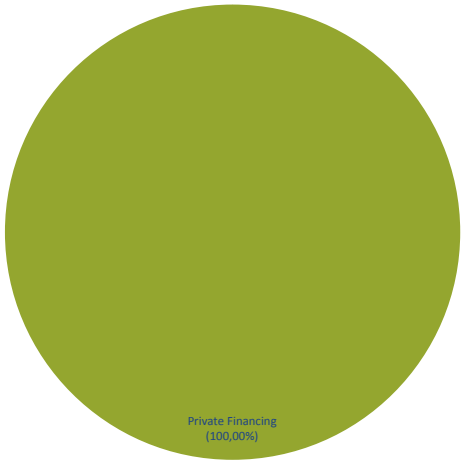
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2017 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+86,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Mangualde (PT) / Zamora (ES) (3rd Spain / Portugal IP)	Yes	exit	107,00	Hub Spain	Hub Portugal
	Yes	entry	107,00	Hub Portugal	Hub Spain

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Spain and Portugal), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Portugal), N-1 Regional (South gas region), Back-up for renewables, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants.
The 3rd Interconnection between Spain and Portugal has been submitted as a PCI. From a European perspective, this project contributes to integrate the European systems and, therefore, an internal gas market development, fulfilling the objectives of the European Union policies and guidelines. This project linked and supplemented with the full development of the IBERIAN-FRENCH CORRIDOR, ensure that no Member State is isolated from the European network, as well as, reinforce the security of supply in any system, increasing the solidarity between countries in all of Europe.
The project has significant impact on cross-border because of the notable increase of the capacity at the Portugal-Spanish border and is part of the development of the Iberian Gas Market (MIBGAS) which mainly aims to achieve a single market in the Iberian Peninsula by developing cross border infrastructures to enhance transmission fluidity between Portugal and Spain.

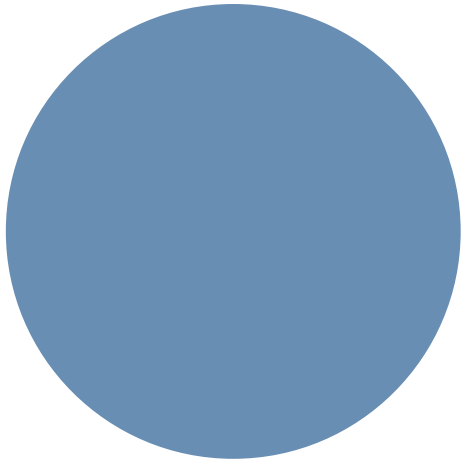
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-167	Loop Arrigorriaga-Lemona	Non-FID

Pipeline including CS

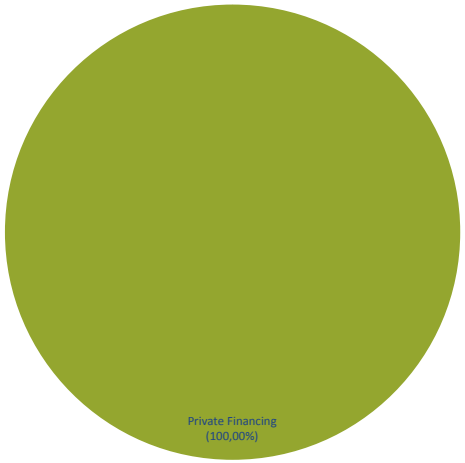
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2018 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+15,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

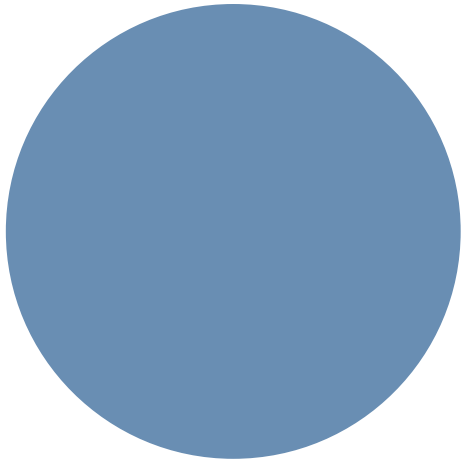
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-166	Loop Bermeo-Lemona	FID

Pipeline including CS

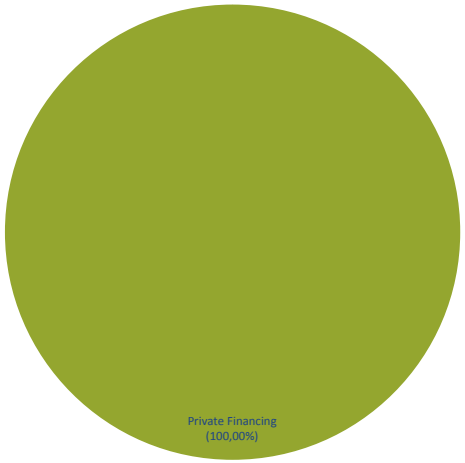
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2015 Q4
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+32,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

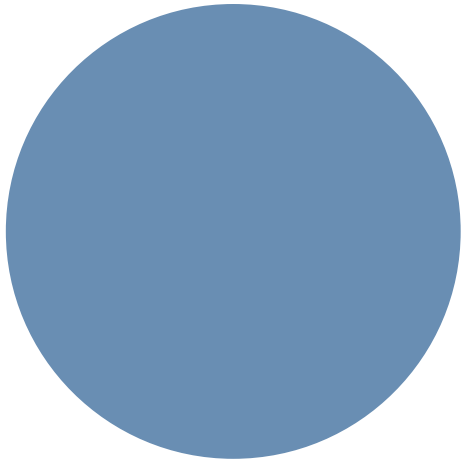
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-169	Loop Castelnou-Villar de Arnedo	FID

Pipeline including CS

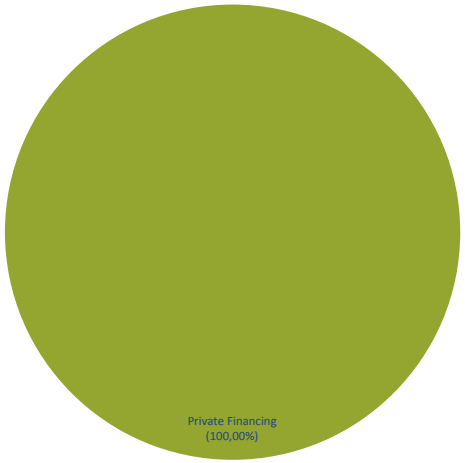
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2016 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+214,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Iberian Peninsula with Europe), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Spain), N-1 Regional (North-south in Western Europe), Back-up for renewables, Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants.
Loop Castelnou-Villar de Arnedo pipeline is necessary for the development of the "Cross-border optimization: Ebro Valley Project" in the North-South gas interconnections in Western Europe, which has been submitted as a PCI. The aim of Ebro Valley project is to allow to bring gas from any region in Europe to be transported to Spain (concretely, to Catalonia) through the interconnection points between France and Spain in the North-South Gas Interconnections in Western Europe, in case of the failure of Barcelona LNG plant, removing the internal bottlenecks of the Spanish system and covering the total system demand in this event. Thanks to the development of the internal Spanish System, the whole system will be integrated -Catalonia will never be isolated in case of N-1 of Barcelona- and will have physical access to the sources and routes from the European network. It increases the security of supply and involves a better integration of the countries, making possible the regional cooperation between member states in the North-South Gas Interconnections in Western Europe to face disruption and allowing to fulfil the N-1 rule
Loop Castelnou-Villar de Arnedo pipeline is also part of the core network developments (Spanish paralell Core Network) for the development of Le Perthus IP subproject, part of the Eastern axis-Midcat Project in the North-South gas interconnections in Western Europe, which has been submitted as a PCI. Therefore, although Loop Castelnou-Villar de Arnedo pipeline is not exclusively linked to this interconnection project, is needed to the full development of the capacity and the achievements of the main objectives of the Eastern Axis.

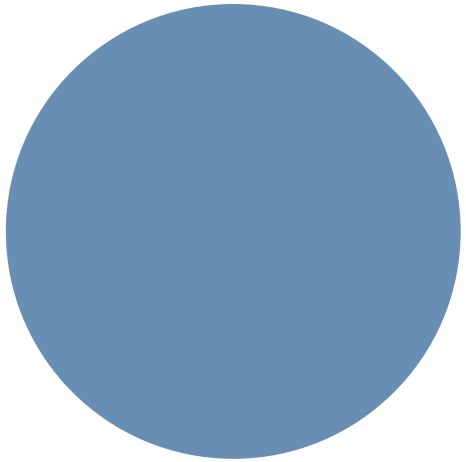
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-170	Loop Llanera-Otero	FID

Pipeline including CS

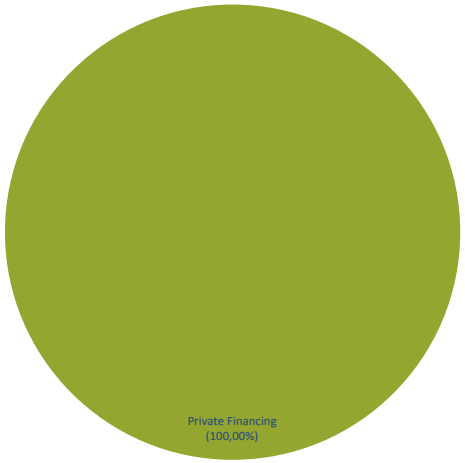
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2013 Q4
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+1,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

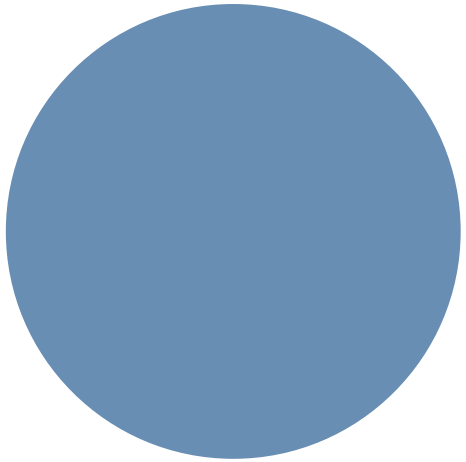
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-171	Loop Treto-Llanera	FID

Pipeline including CS

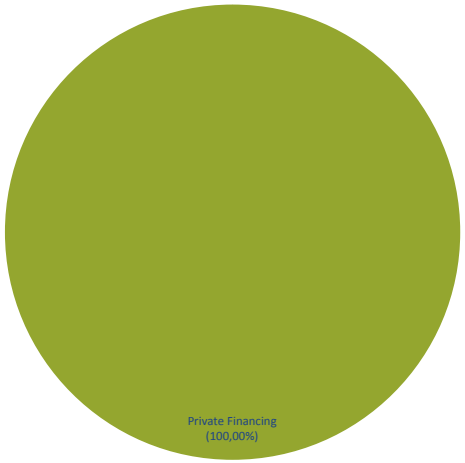
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2013 Q4
Last completed Phase :	FID

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+216,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

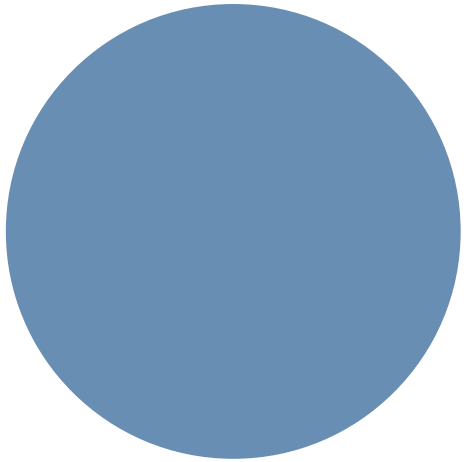
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-172	Loop Vergara-Lemona	Non-FID

Pipeline including CS

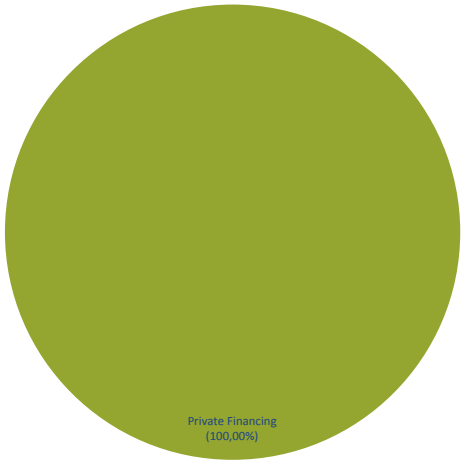
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2019 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+15,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

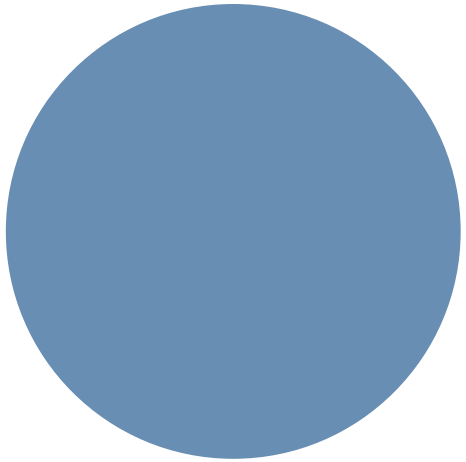
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-173	Loop Villapresente-Bugos	FID

Pipeline including CS

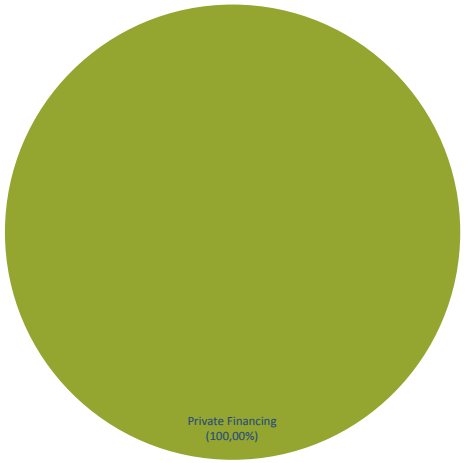
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2014 Q4
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+153,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

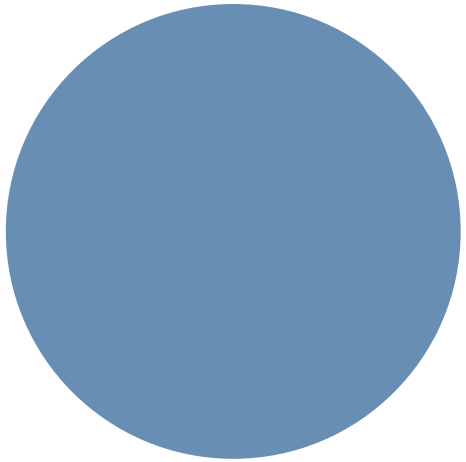
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-280	Lugo-Villafranca del Bierzo	Non-FID

Pipeline including CS

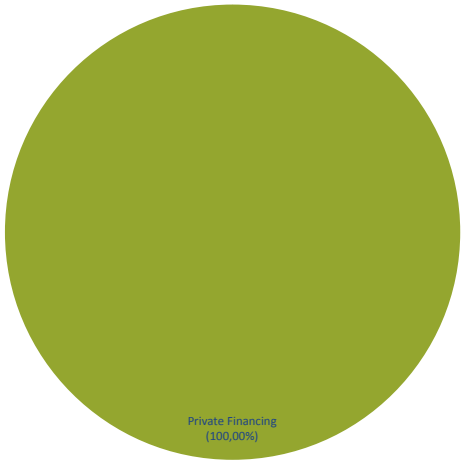
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2017 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+90,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Spain and Portugal), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Portugal), N-1 Regional (South gas region), Back-up for renewables, Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants.
Lugo-Villafranca del Bierzo pipeline is part of the of the paralell core network in the Spanish System to develop the 3rd Interconnection project between Spain and Portugal, which has been submitted as a PCI. From a European perspective, this project contributes to integrate the European systems and, therefore, an internal gas market development, fulfilling the objectives of the European Union policies and guidelines. This project linked and supplemented with the full development of the IBERIAN-FRENCH CORRIDOR, ensure that no Member State is isolated from the European network, as well as, reinforce the security of supply in any system, increasing the solidarity between countries in all of Europe.
The project has significant impact on cross-border because of the notable increase of the capacity at the Portugal-Spanish border and is part of the development of the Iberian Gas Market (MIBGAS) which mainly aims to achieve a single market in the Iberian Peninsula by developing cross border infrastructures to enhance transmission fluidity between Portugal and Spain.

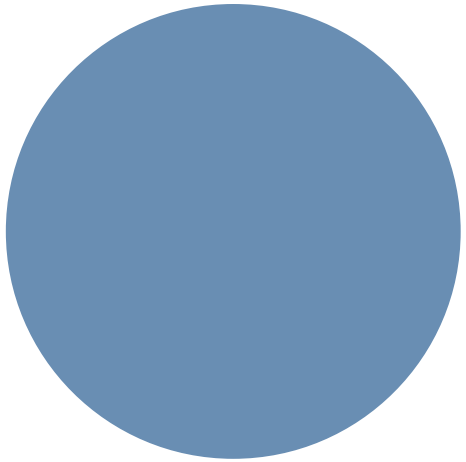
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-175	Martorell-Figueras	FID

Pipeline including CS

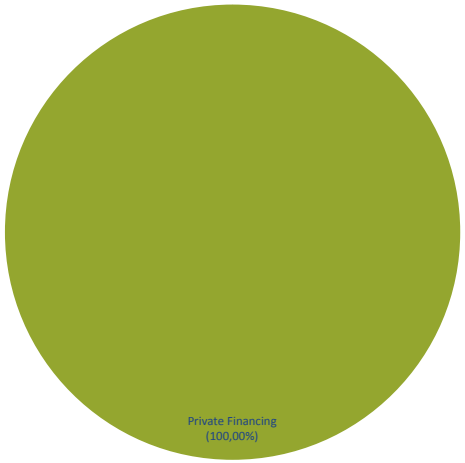
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2013 Q4
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+167,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Iberian peninsula with Europe), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Spain, France), N-1 Regional (North-south in Western Europe), Back-up for renewables, Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants
Although Martorell-Figueras pipeline has not been applied to be a Project of common interest, it is part of the core network developments
(Spanish paralell Core Network) for the development of Le Perthus IP subproject, part of the Eastern axis-Midcat Project in the North-South gas interconnections in Western Europe, which has been submitted as a PCI. Therefore, although Martorell-Figueras pipeline is not exclusively linked to the interconnection project, is needed to the full development of the capacity and the achievements of the main objectives of the Eastern Axis.

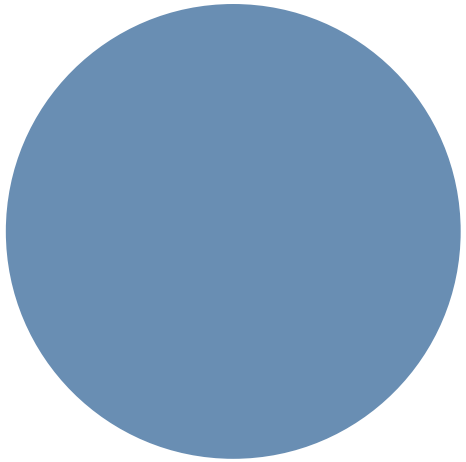
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-F-178	Musel LNG terminal	FID

LNG Terminal

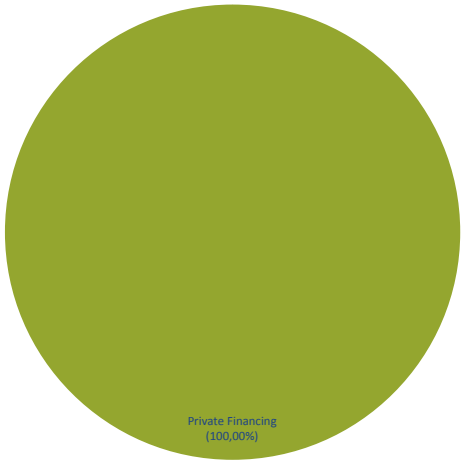
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2013 Q4
Last completed Phase :	Construction

TECHNICAL INFORMATION

Regasification facility	Musel
Expected volume (bcm/y)	
Storage capacity (m3)	+300.000,00
Send-out (mcm/d)	+19,20
Ship size (m3)	250.000,00
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Musel	Yes	entry	223,30	LNG Terminals Spain	Hub Spain

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

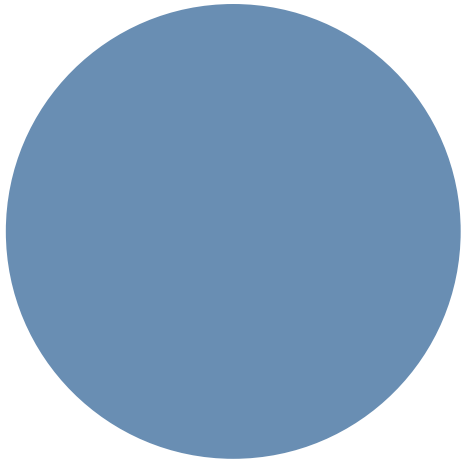
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-179	Musel Send-Out increase	Non-FID

LNG Terminal

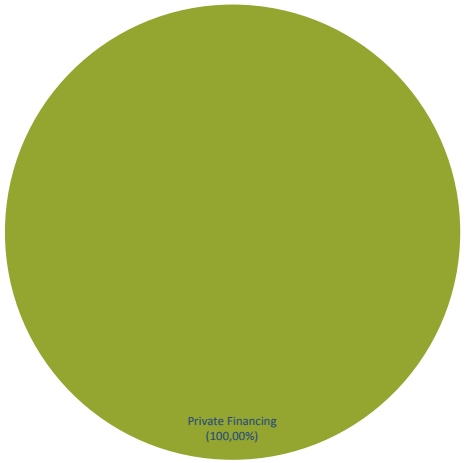
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2020 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Musel
Expected volume (bcm/y)	
Storage capacity (m3)	
Send-out (mcm/d)	+4,80
Ship size (m3)	
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Musel	Yes	entry	55,80	LNG Terminals Spain	Hub Spain

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

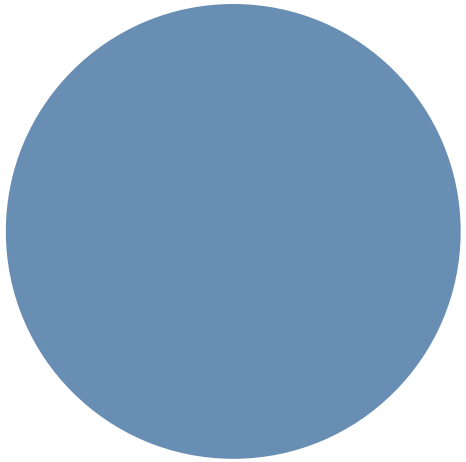
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-181	Musel Terminal-Llanera	FID

Pipeline including CS

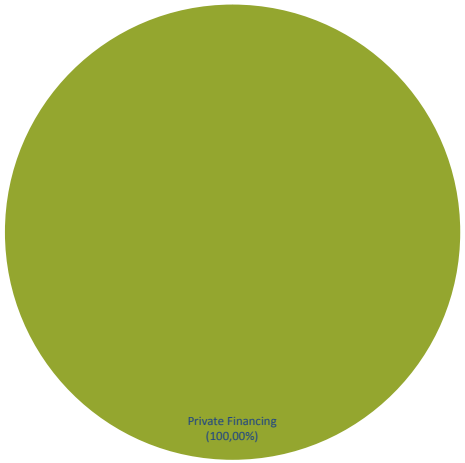
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2013 Q4
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+16,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

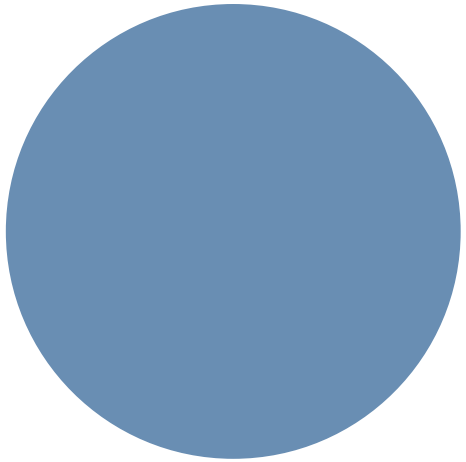
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-174	Musel's 3th LNG Storage Tank	Non-FID

LNG Terminal

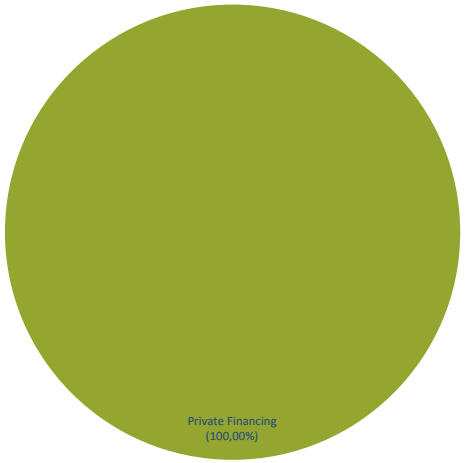
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2016 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Musel
Expected volume (bcm/y)	
Storage capacity (m3)	+150.000,00
Send-out (mcm/d)	
Ship size (m3)	
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

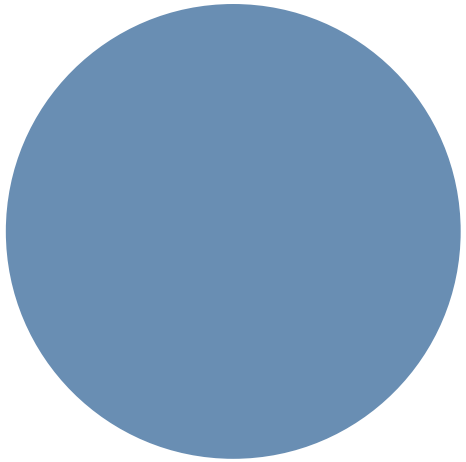
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-177	Musel's 4th LNG Storage Tank	Non-FID

LNG Terminal

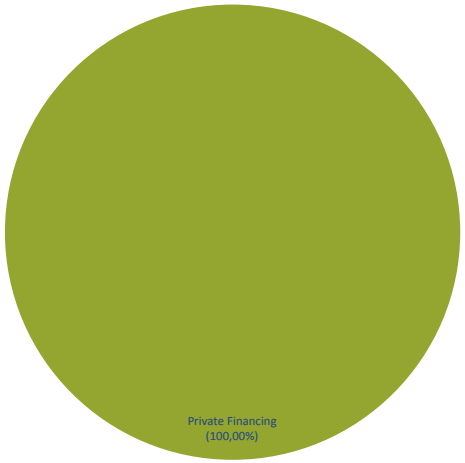
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2019 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Musel
Expected volume (bcm/y)	
Storage capacity (m3)	+150.000,00
Send-out (mcm/d)	
Ship size (m3)	
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

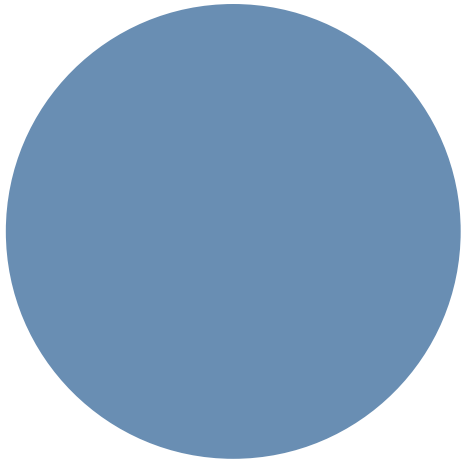
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-158	New Utilities CS Tivissa	FID

Pipeline including CS

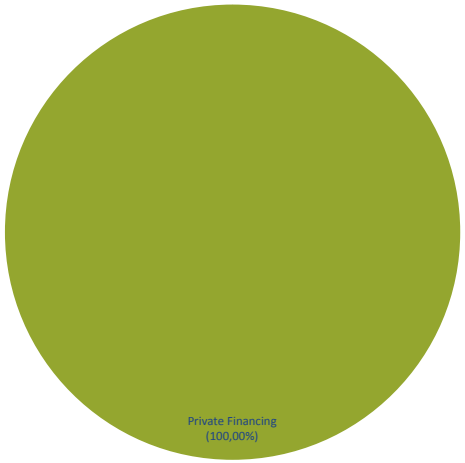
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2016 Q4
Last completed Phase :	FID

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Iberian Peninsula with Europe), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Spain), N-1 Regional (North-south in Western Europe), Back-up for renewables, Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants.
CS TIvissa new utilities are necessary for the development of the "Cross-border optimization: Ebro Valley Project" in the North-South gas interconnections in Western Europe, which has been submitted as a PCI. The aim of Ebro Valley project is to allow to bring gas from any region in Europe to be transported to Spain (concretely, to Catalonia) through the interconnection points between France and Spain in the North-South Gas Interconnections in Western Europe, in case of the failure of Barcelona LNG plant, removing the internal bottlenecks of the Spanish system and covering the total system demand in this event. Thanks to the development of the internal Spanish System, the whole system will be integrated -Catalonia will never be isolated in case of N-1 of Barcelona- and will have physical access to the sources and routes from the European network. It increases the security of supply and involves a better integration of the countries, making possible the regional cooperation between member states in the North-South Gas Interconnections in Western Europe to face disruption and allowing to fulfil the N-1 rule

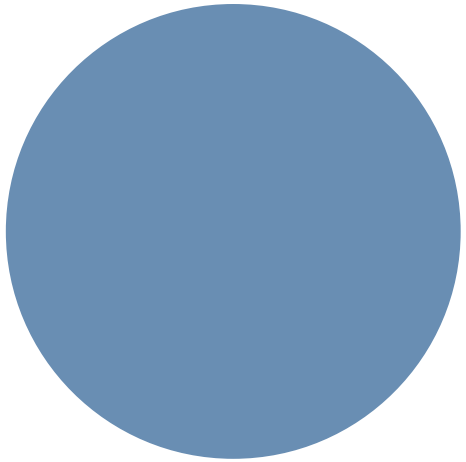
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-180	Nuevo Tivissa-Arbós	FID

Pipeline including CS

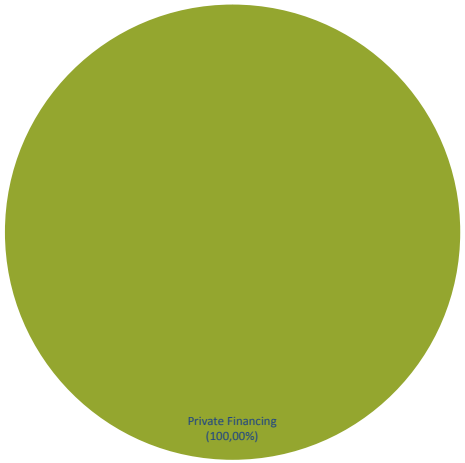
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2016 Q4
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+114,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Iberian Peninsula with Europe), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Spain), N-1 Regional (North-south in Western Europe), Back-up for renewables, Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants.
Nuevo Tivissa-Arbós pipeline is necessary for the development of the "Cross-border optimization: Ebro Valley Project" in the North-South gas interconnections in Western Europe, which has been submitted as a PCI. The aim of Ebro Valley project is to allow to bring gas from any region in Europe to be transported to Spain (concretely, to Catalonia) through the interconnection points between France and Spain in the North-South Gas Interconnections in Western Europe, in case of the failure of Barcelona LNG plant, removing the internal bottlenecks of the Spanish system and covering the total system demand in this event. Thanks to the development of the internal Spanish System, the whole system will be integrated -Catalonia will never be isolated in case of N-1 of Barcelona- and will have physical access to the sources and routes from the European network. It increases the security of supply and involves a better integration of the countries, making possible the regional cooperation between member states in the North-South Gas Interconnections in Western Europe to face disruption and allowing to fulfil the N-1 rule.
Nuevo Tivissa-Arbós pipeline is also part of the core network developments (Spanish paralell Core Network) for the development of Le Perthus IP subproject, part of the Eastern axis-Midcat Project in the North-South gas interconnections in Western Europe, which has been submitted as a PCI. Therefore, although Nuevo Tivissa-Arbós pipeline is not exclusively linked to this interconnection project, is needed to the full development of the capacity and the achievements of the main objectives of the Eastern Axis.

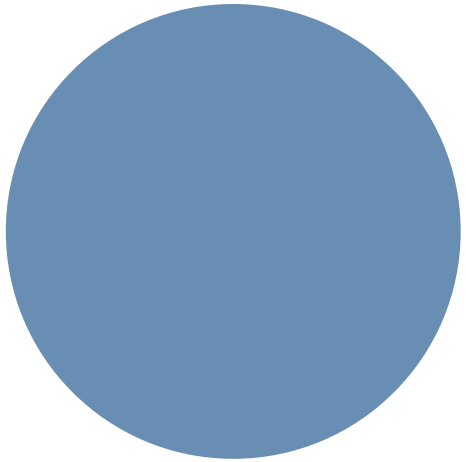
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-157	Power increase CS Haro	FID

Pipeline including CS

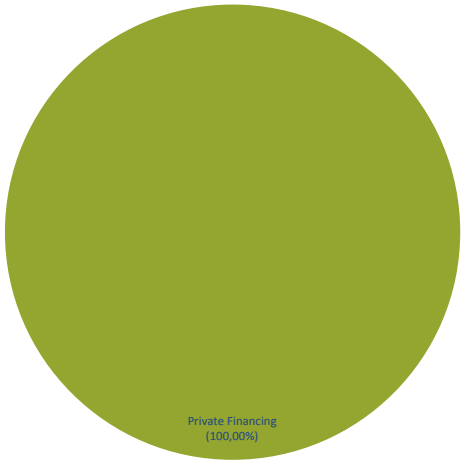
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2016 Q4
Last completed Phase :	FID

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+12,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Iberian Peninsula with Europe), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Spain), N-1 Regional (North-south in Western Europe), Back-up for renewables, Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants.
CS Haro power increase is necessary for the development of the "Cross-border optimization: Ebro Valley Project" in the North-South gas interconnections in Western Europe, which has been submitted as a PCI. The aim of Ebro Valley project is to allow to bring gas from any region in Europe to be transported to Spain (concretely, to Catalonia) through the interconnection points between France and Spain in the North-South Gas Interconnections in Western Europe, in case of the failure of Barcelona LNG plant, removing the internal bottlenecks of the Spanish system and covering the total system demand in this event. Thanks to the development of the internal Spanish System, the whole system will be integrated -Catalonia will never be isolated in case of N-1 of Barcelona- and will have physical access to the sources and routes from the European network. It increases the security of supply and involves a better integration of the countries, making possible the regional cooperation between member states in the North-South Gas Interconnections in Western Europe to face disruption and allowing to fulfil the N-1 rule

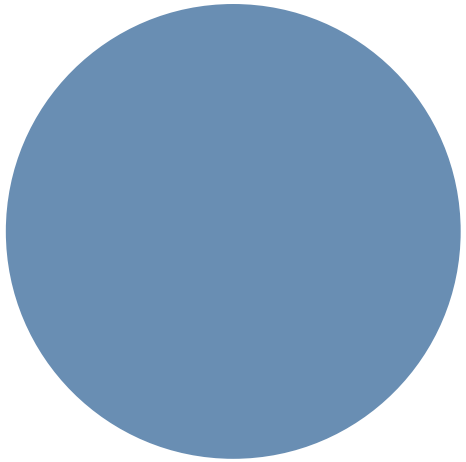
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-281	Villafranca del Bierzo-Castropodame	Non-FID

Pipeline including CS

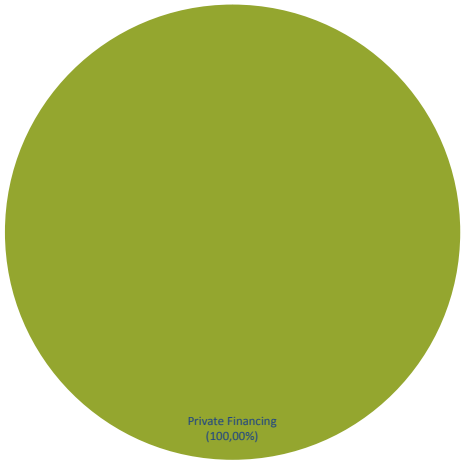
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2017 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+30,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Spain and Portugal), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Portugal), N-1 Regional (South gas region), Back-up for renewables, Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants.

Villafranca del Bierzo-Castropodame pipeline is part of the of the paralell core network in the Spanish System to develop the 3rd Interconnection project between Spain and Portugal, which has been submitted as a PCI. From a European perspective, this project contributes to integrate the European systems and, therefore, an internal gas market development, fulfilling the objectives of the European Union policies and guidelines. This project linked and supplemented with the full development of the IBERIAN-FRENCH CORRIDOR, ensure that no Member State is isolated from the European network, as well as, reinforce the security of supply in any system, increasing the solidarity between countries in all of Europe.
The project has significant impact on cross-border because of the notable increase of the capacity at the Portugal-Spanish border and is part of the development of the Iberian Gas Market (MIBGAS) which mainly aims to achieve a single market in the Iberian Peninsula by developing cross border infrastructures to enhance transmission fluidity between Portugal and Spain.

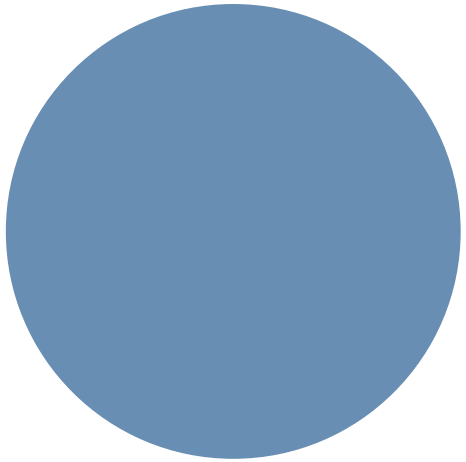
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-282	Zamora-Barbolla-Adradas	Non-FID

Pipeline including CS

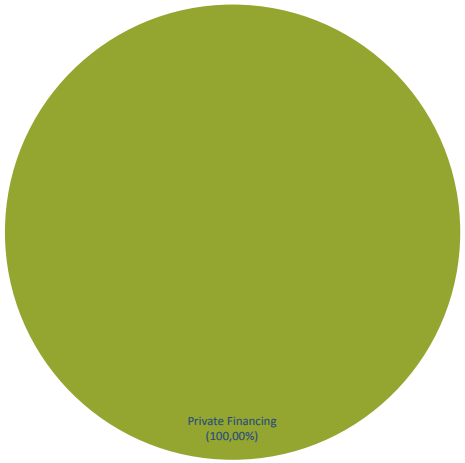
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2021 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+307,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Spain and Portugal), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Portugal), N-1 Regional (South gas region), Back-up for renewables, Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants.
Zamora-Barbolla-Adradas pipeline is part of the of the paralell core network in the Spanish System to develop the 3rd Interconnection project between Spain and Portugal, which has been submitted as a PCI. From a European perspective, this project contributes to integrate the European systems and, therefore, an internal gas market development, fulfilling the objectives of the European Union policies and guidelines. This project linked and supplemented with the full development of the IBERIAN-FRENCH CORRIDOR, ensure that no Member State is isolated from the European network, as well as, reinforce the security of supply in any system, increasing the solidarity between countries in all of Europe.
The project has significant impact on cross-border because of the notable increase of the capacity at the Portugal-Spanish border and is part of the development of the Iberian Gas Market (MIBGAS) which mainly aims to achieve a single market in the Iberian Peninsula by developing cross border infrastructures to enhance transmission fluidity between Portugal and Spain.

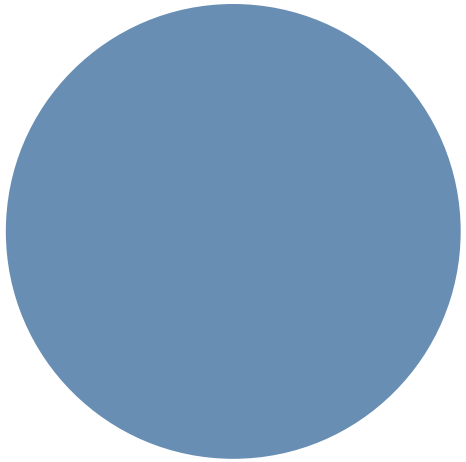
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-186	Zarza de Tajo-Yela	FID

Pipeline including CS

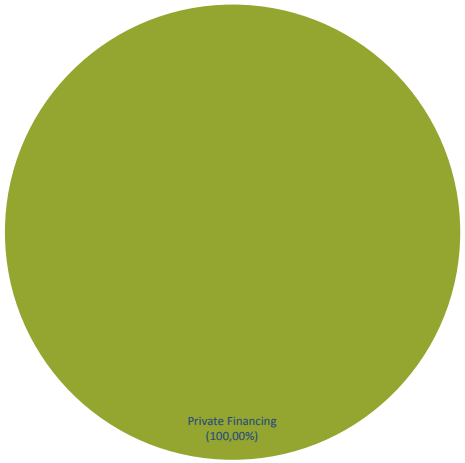
SPONSORS



GENERAL INFORMATION

Promoter	Enagás S.A.
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2013 Q4
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+106,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

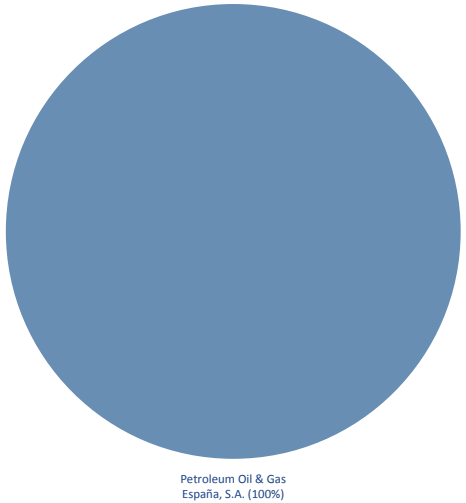
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-127	Underground Gas Storage in salt leached caverns in the Bages area, North-Eastern Spain	Non-FID

Storage Facility

SPONSORS

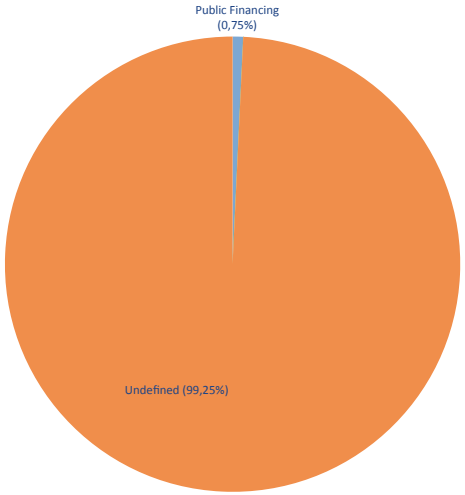


GENERAL INFORMATION

Promoter	Gas Natural
Operator	Gas Natural Aprovisionamientos SDG
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	None
Web Link	

TEN-E Requests	Date of Request	Year Funding Granted
	28/02/11	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014 Q3
FID	2014 Q3
Construction	2023 Q3
Commissioning	2023 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Storage facility	Pinasses
Working volume (mcm)	+240,00
Injectability (mcm/d)	+3,00
Deliverability (mcm/d)	+14,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Pinasses	No	entry	33,00	Hub Spain	Storage Spain
	No	exit	154,00	Storage Spain	Hub France(PEG South)
Pinasses	No	exit	154,00	Storage Spain	Hub Spain
	No	entry	33,00	Hub France(PEG South)	Storage Spain

DESCRIPTION OF THE PROJECT

Underground storage in underground caverns to be constructed by salt leaching to be carried out on the base salt of the potassium formation from Ecocene in the catalan sector of the Ebro river

EXPECTED BENEFITS

Security of Supply, Market integration (Spain and France), Reverse Flows, N-1 National, N-1 Regional, Back-up for renewables

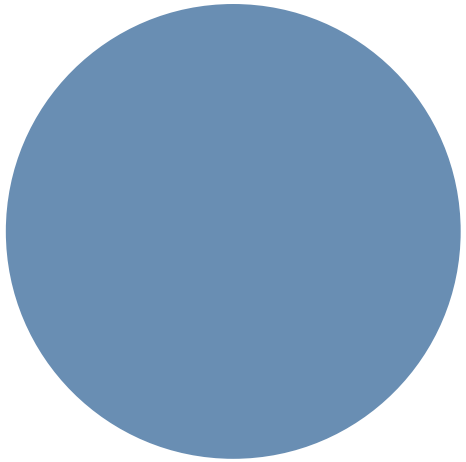
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
Expected to be received from TEN-E 2011		

LNG-N-162	Gran Canaria 2º LNG Tank	Non-FID

LNG Terminal

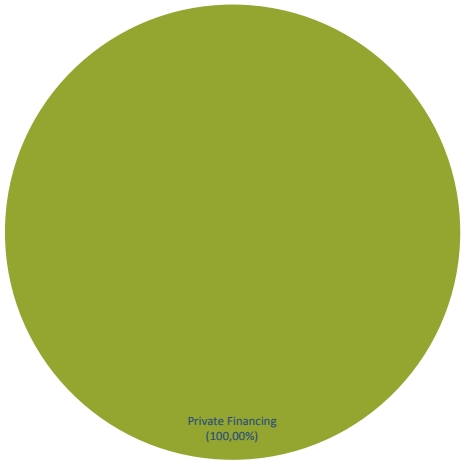
SPONSORS



GENERAL INFORMATION

Promoter	Gascan
Operator	Gascan
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2018 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Tenerife LNG Terminal
Expected volume (bcm/y)	
Storage capacity (m3)	+150.000,00
Send-out (mcm/d)	
Ship size (m3)	
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

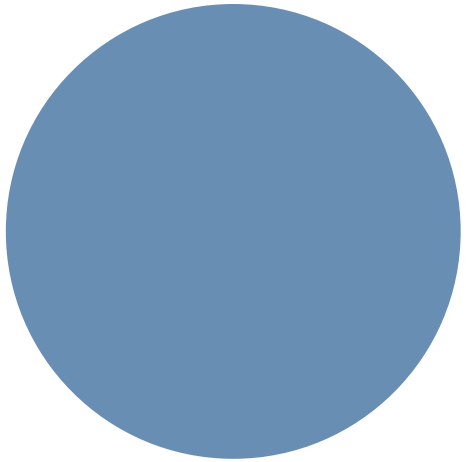
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-F-163	Gran Canaria LNG Terminal	FID

LNG Terminal

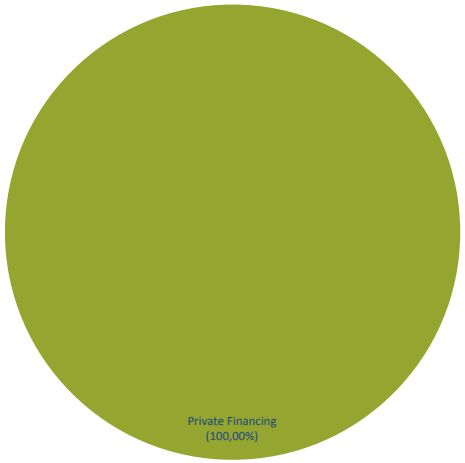
SPONSORS



GENERAL INFORMATION

Promoter	Gascan
Operator	Gascan
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2015 Q4
Last completed Phase :	FID

TECHNICAL INFORMATION

Regasification facility	Gran Canaria
Expected volume (bcm/y)	
Storage capacity (m3)	+150.000,00
Send-out (mcm/d)	+3,60
Ship size (m3)	140.000,00
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Gran Canaria LNG	Yes	exit	41,80	LNG Terminals Spain(Canaria)	Hub Spain(Canaria)

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

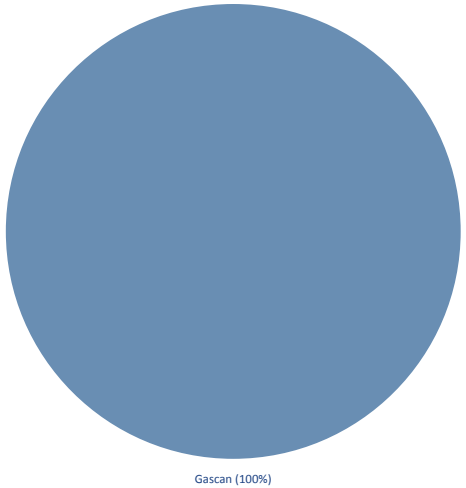
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-165	Gran Canaria send out increase	Non-FID

LNG Terminal

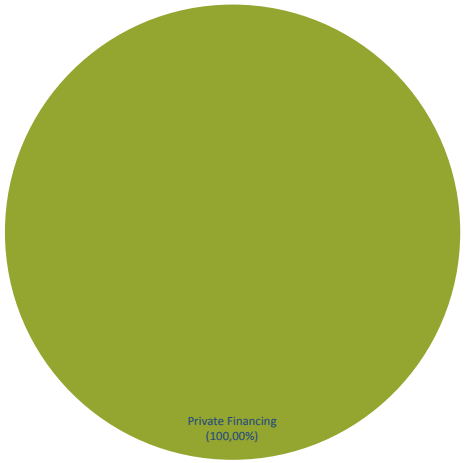
SPONSORS



GENERAL INFORMATION

Promoter	Gascan
Operator	Gascan
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2018 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Tenerife LNG Terminal
Expected volume (bcm/y)	
Storage capacity (m3)	
Send-out (mcm/d)	+1,80
Ship size (m3)	
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Gran Canaria LNG	Yes	exit	20,90	LNG Terminals Spain(Canaria)	Hub Spain(Canaria)

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

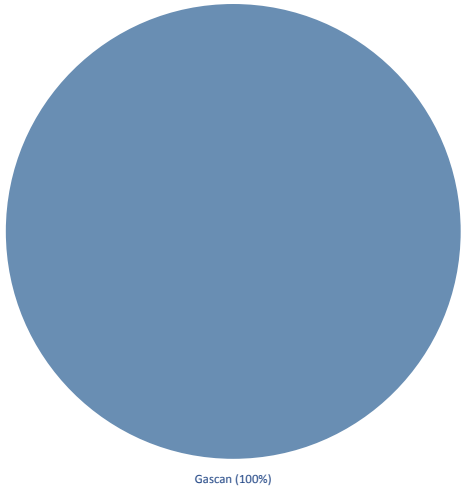
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-185	Tenerife Send-Out increase	Non-FID

LNG Terminal

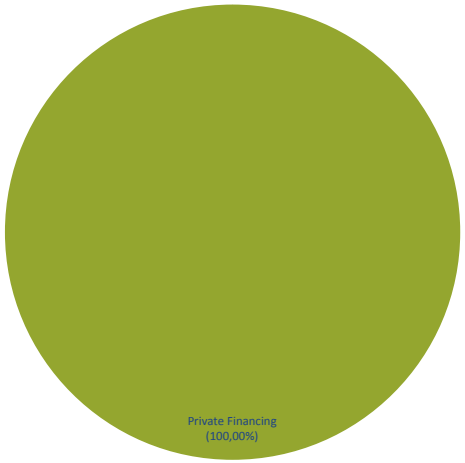
SPONSORS



GENERAL INFORMATION

Promoter	Gascan
Operator	Gascan
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2017 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Tenerife LNG Terminal
Expected volume (bcm/y)	
Storage capacity (m3)	
Send-out (mcm/d)	+1,80
Ship size (m3)	
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Tenerife LNG	Yes	exit	20,90	LNG Terminals Spain(Canaria)	Hub Spain(Canaria)

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

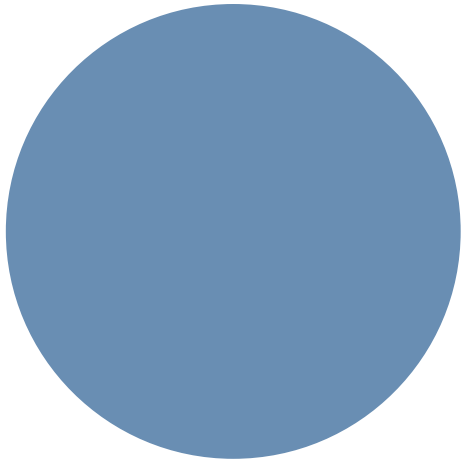
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-184	Tenerife 2º LNG Storage Tank	Non-FID

LNG Terminal

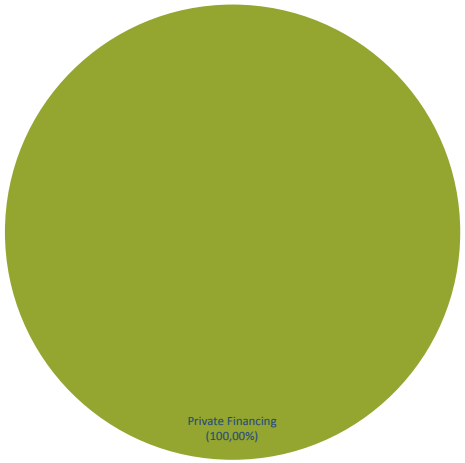
SPONSORS



GENERAL INFORMATION

Promoter	Gascan
Operator	Gascan
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2017 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Tenerife LNG Terminal
Expected volume (bcm/y)	
Storage capacity (m3)	+150.000,00
Send-out (mcm/d)	
Ship size (m3)	
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

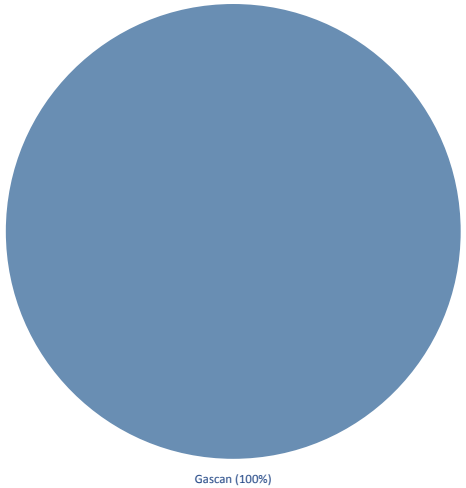
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-F-183	Tenerife LNG Terminal	FID

LNG Terminal

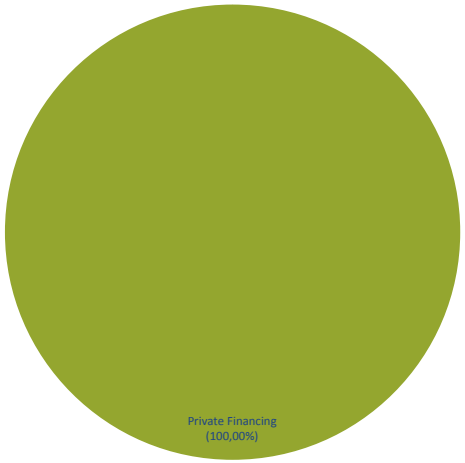
SPONSORS



GENERAL INFORMATION

Promoter	Gascan
Operator	Gascan
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2014 Q4
Last completed Phase :	Permitting

TECHNICAL INFORMATION

Regasification facility	Tenerife LNG Terminal
Expected volume (bcm/y)	
Storage capacity (m3)	+150.000,00
Send-out (mcm/d)	+3,60
Ship size (m3)	140.000,00
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Tenerife LNG	Yes	exit	41,80	LNG Terminals Spain(Canaria)	Hub Spain(Canaria)

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

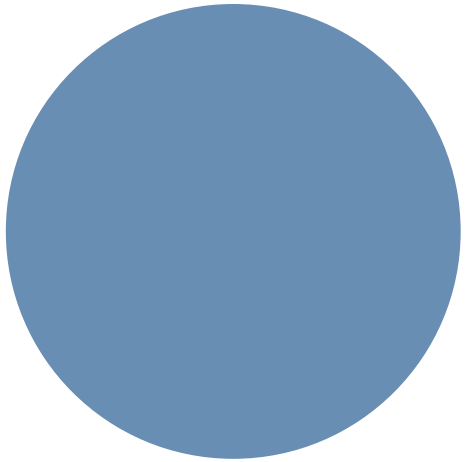
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-155	Bilbao Terminal-Treto	FID

Pipeline including CS

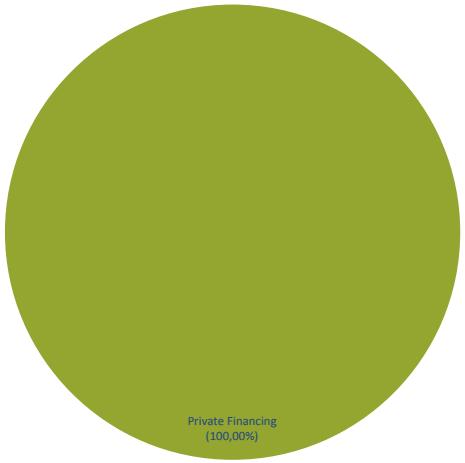
SPONSORS



GENERAL INFORMATION

Promoter	Naturgas
Operator	Enagás S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2013 Q4
Last completed Phase :	Construction

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+53,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network, reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

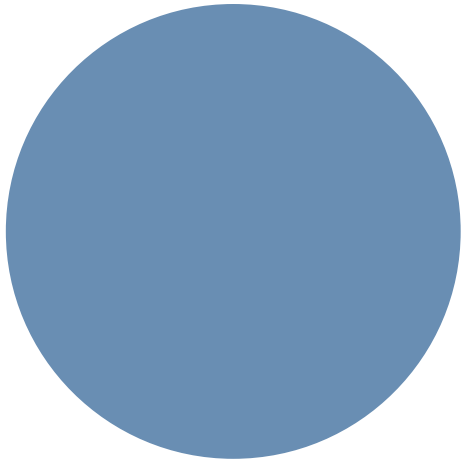
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

LNG-N-182	Sagunto Send-Out increase 1.200.000 Nm3/h	Non-FID

LNG Terminal

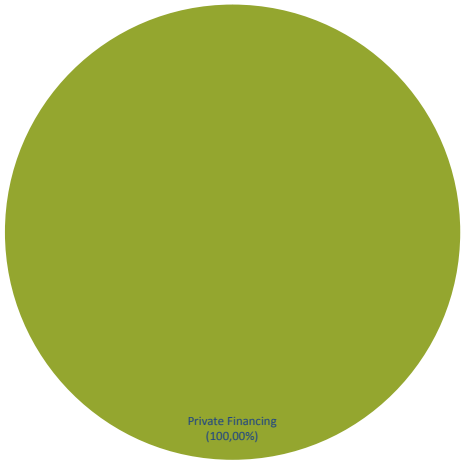
SPONSORS



GENERAL INFORMATION

Promoter	Saggas
Operator	Saggas
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2014 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

Regasification facility	Sagunto
Expected volume (bcm/y)	
Storage capacity (m3)	
Send-out (mcm/d)	+4,80
Ship size (m3)	
Reloading ability ?	No

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Sagunto	Yes	exit	55,80	LNG Terminals Spain	Hub Spain

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration, Enhancement of Internal Network; reduction of internal congestion, N-1 compliance, Integration of LNG plants, Integration of UGS, Integration of new Gas fired power plants

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

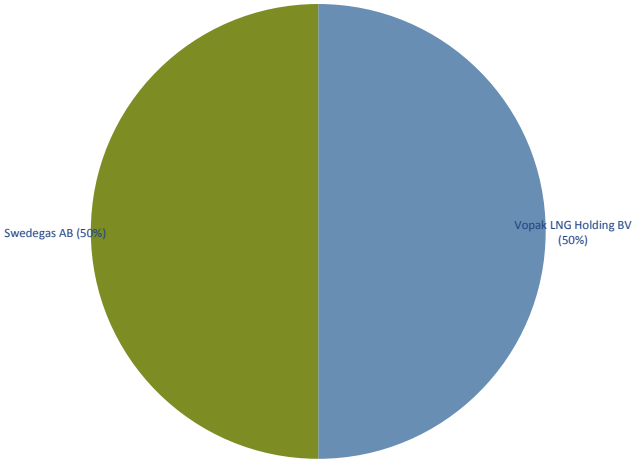
Sweden

Trondheim
SWEDEN
OSLO
Rafnes
Øra LNG
(Fredrikstad)
STOCKHOLM
Brunnsviksholmen
(Nynäshamn)
Lysekil
Stenungsund
Valby Kile
Göteborg LNG
Göteborg
Jönköping
Gislaved
Gnosjö
Aalborg
Varberg
Lille Torup
Halmstad
Skallen
DENMARK
Egtved
COPENHAGEN
Malmö
Stenlille
Dragør
Avedøre
Trelleborg
NORD STREAM
BALTIC PIPE

LNG-N-032	Gothenburg LNG (preliminary)	Non-FID

LNG Terminal

SPONSORS

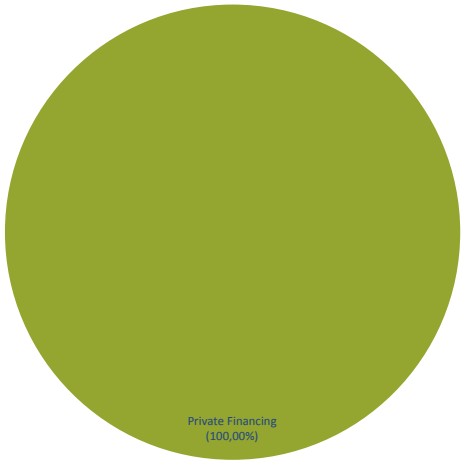


GENERAL INFORMATION

Promoter	Swedegas AB
Operator	Swedegas AB
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	

TEN-E Requests	Date of Request	Year Funding Granted
	1/06/12	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2015
Last completed Phase :	

TECHNICAL INFORMATION

Regasification facility	Gothenburg LNG (preliminary)
Expected volume (bcm/y)	+0,50
Storage capacity (m3)	+20.000,00
Send-out (mcm/d)	+2,00
Ship size (m3)	30.000,00
Reloading ability ?	Yes

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Gothenburg LNG	Yes	entry	24,00	LNG Terminals Sweden	Hub Sweden

DESCRIPTION OF THE PROJECT

A LNG terminal, including connection to the transmission grid, placed in the Gothenburg harbor.

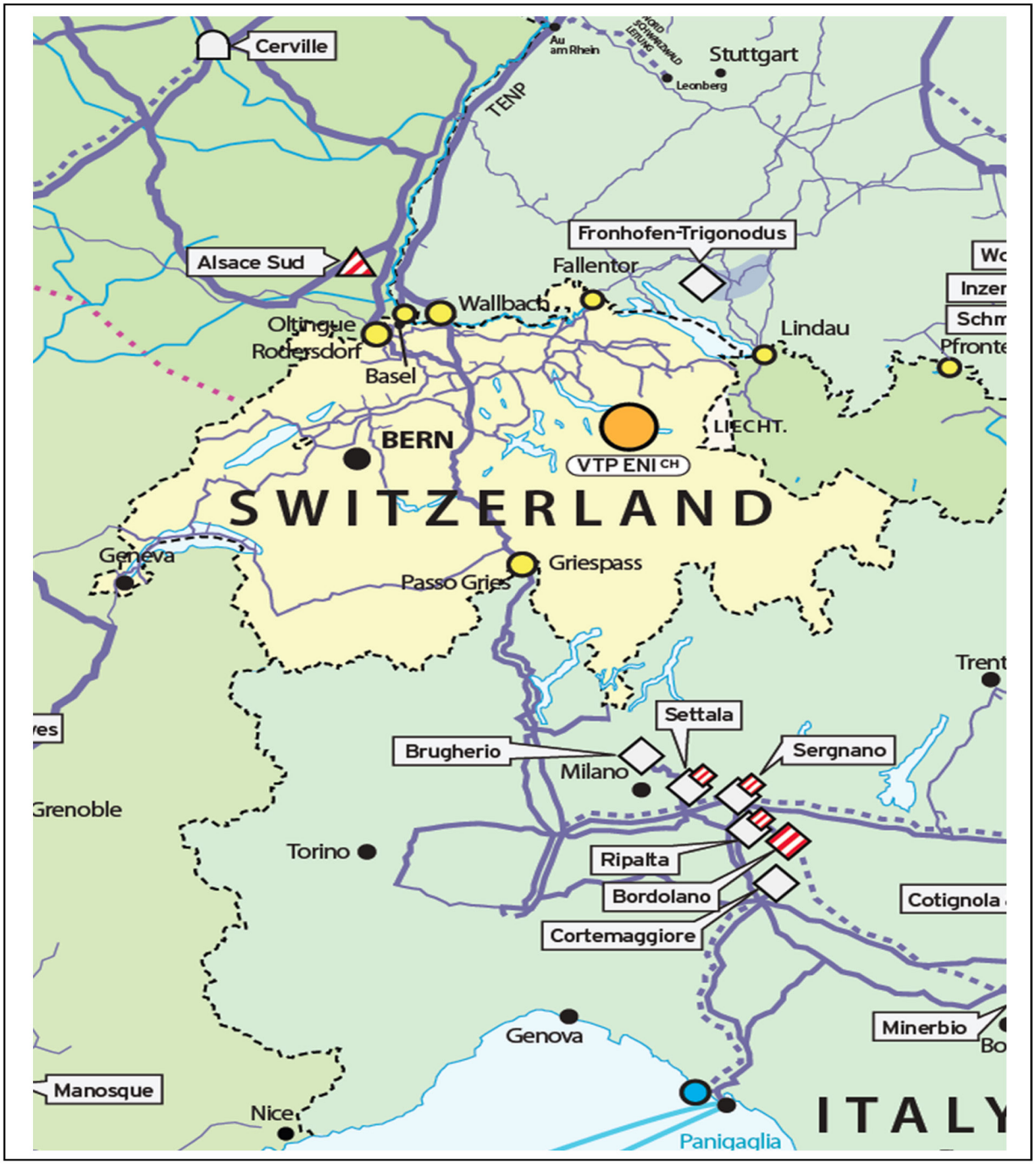
EXPECTED BENEFITS

Security of Supply, Reverse Flows, Diversification of sources, Diversification of routes, Facilitates supply to non grid customers, such as industry replacing oil and future bunkering of ships to comply with the coming SECA regulation.

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

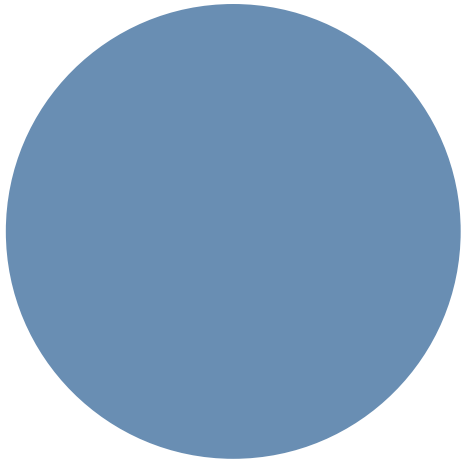
Switzerland



TRA-N-230	Reverse Flow Transitgas Switzerland	Non-FID

Pipeline including CS

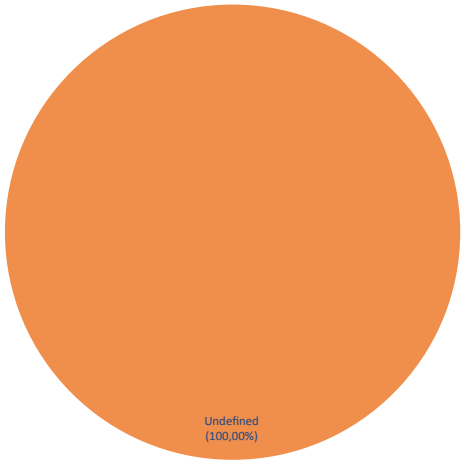
SPONSORS



GENERAL INFORMATION

Promoter	Fluxys
Operator	FluxSwiss
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	100%
% Exemption in exit direction	100%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2016 Q4
Last completed Phase :	Market test

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	
Total Pipeline Length (km)	
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Wallbach (Fluxys TENP/FluxSwiss)	Yes	exit	330,00	Hub Switzerland	Hub Germany(NCG)
Oltingue (FR) / Rodersdorf (CH)	Yes	exit	100,00	Hub Switzerland	Hub France(PEG North)
Griespass (CH) / Passo Gries (IT) (FluxSwiss)	Yes	entry	430,00	Hub Italia	Hub Switzerland

DESCRIPTION OF THE PROJECT

Modification of a compressor station to allow the reversal of the border interconnection points at Gries Pass, Wallbach and Oltingue and a south-north use of the Transitgas pipeline.

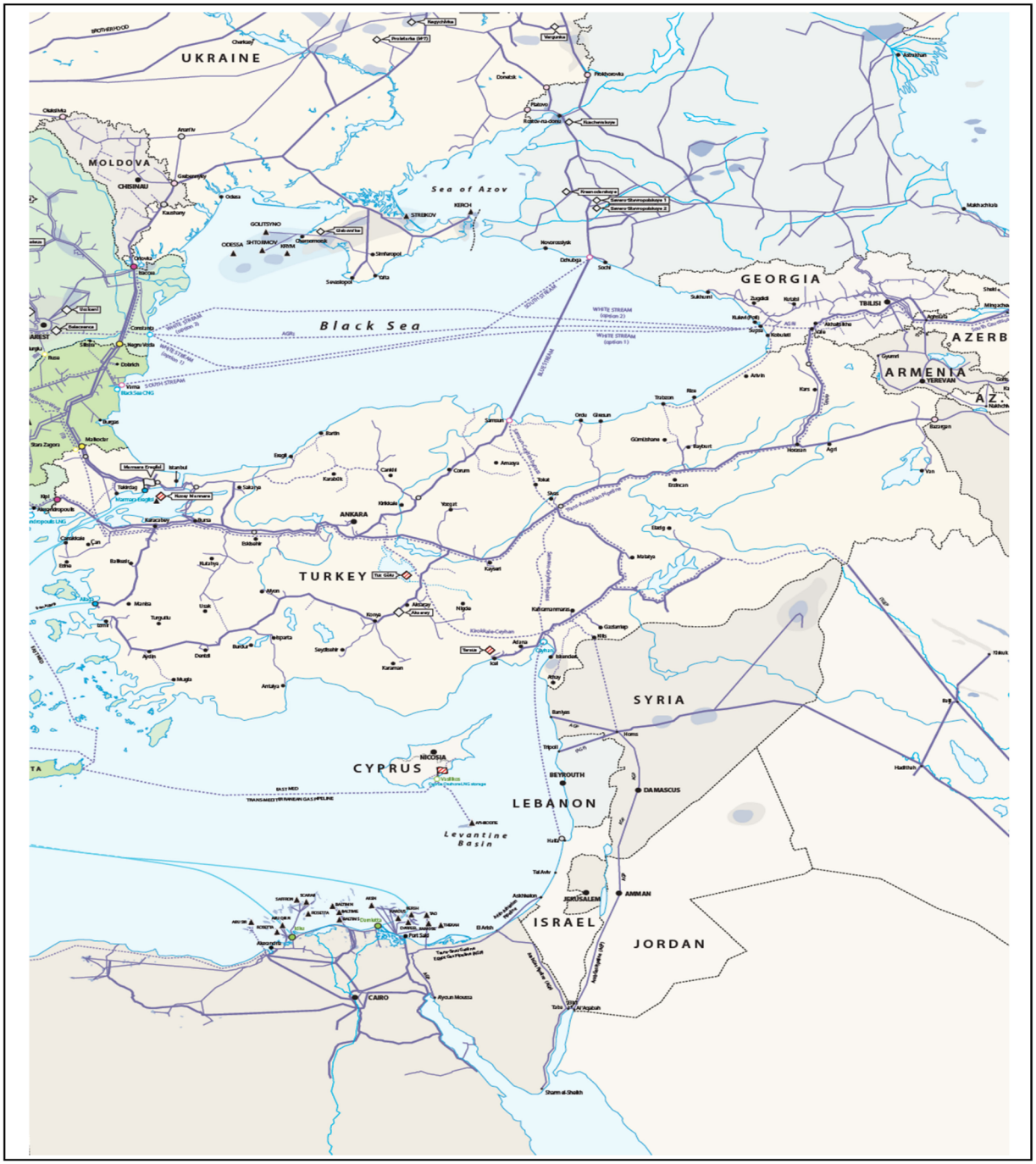
EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

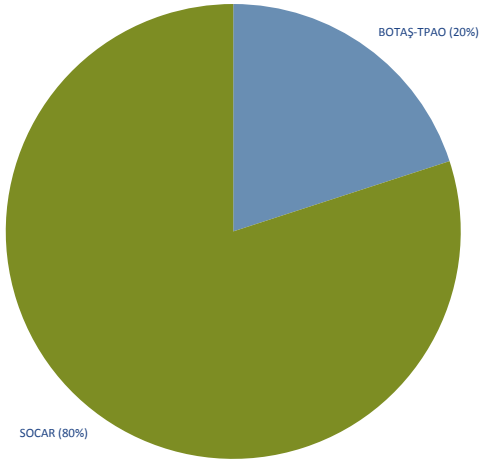
Turkey


UKRAINE
MOLDOVA
CHISINAU
Sea of Azov
KERCH
STRIMOV
GOLITSYNO
ODESSA
SHTORMOVO
Simferopol
Sevastopol
Yalta
Sochi
GEORGIA
TBILISI
Black Sea
AZERB
ARMENIA
YEREVAN
Constanta
Dobrich
Varna
Burgas
Samsun
Trabzon
Ordu
Giresun
Rize
Kars
Artvin
Erzurum
Bayburt
Gumushane
Hopa
Agri
Van
Bitlis
Mus
Mardin
Batman
Siirt
Istanbul
Edirne
Tekirdag
Kirklareli
Sakarya
Bursa
Canakkale
Eskisehir
Bilecik
Kutahya
Balikesir
Izmir
Aydin
Denizli
Mugla
Antalya
Isparta
Afyon
Usak
Manisa
Izmir
Aliaga
Aksaray
Konya
Nigde
Kayseri
Sivas
Yozgat
Corum
Amasya
Tokat
Karabuk
Cankiri
Kirikkale
Ankara
Eskisehir
Kutahya
Balikesir
Bursa
Tekirdag
Kilyos
Silivri
Istanbul
Izmit
Adapazari
Duzce
Bolu
Kastamonu
Cankiri
Karabuk
Zonguldak
Bartin
Eregli
Amasya
Tokat
Sivas
Erzincan
Tercan
Elazig
Malatya
Kayseri
Nigde
Aksaray
Konya
Karaman
Mersin
Adana
Kahramanmaras
Gaziantep
Kilis
Osmaniye
Iskenderun
Afrin
Aleppo
Idlib
Hama
Homs
Tripoli
Beirut
Damascus
Sidon
Tyre
Haifa
Acre
Nahariya
Tel Aviv
Ashkelon
Jerusalem
Amman
Irbid
Zarqa
Port Said
Ismailia
Suez
Cairo
Ayoun Mousa
Sharm el-Sheikh
Taba
Aqaba
Hadithah
Rutbah
Turkey
Syria
Cyprus
Nicosia
Lebanon
Israel
Jordan
Levantine Basin
Black Sea
Sea of Azov
Ankara
Nicosia
Beirut
Damascus
Jerusalem
Amman
Cairo
BLACK SEA STREAM
SOUTH STREAM
WHITE STREAM
TRANS-ANATOLIAN GAS PIPELINE
EAST MED
Kiyikoy-Malkoclar-Ceyhan
Turkey-Greece-Italy (TGI)
Arab Gas Pipeline
Trans-Israel Pipeline
Ashkelon-Eilat (Trans-Israeli Pipeline)
Dolphinus
Sochi
Novorossiysk
Kavkaz
Anapa
Blue Stream
Dzhubga
Tuapse
Gelendzhik
Krasnodar 1
Krasnodar 2
Slavyanskaya 1
Slavyanskaya 2
Kropotkin
Volgodonsk
Izobilnoye
Mozdok
Russia
Ukraine
Moldova
Romania
Bulgaria
Greece
Turkey
Georgia
Armenia
Azerbaijan
Syria
Lebanon
Israel
Jordan
Egypt
Cyprus

TRA-N-221	TANAP - Trans Anatolian Natural Gas Pipeline Project	Non-FID

Pipeline including CS

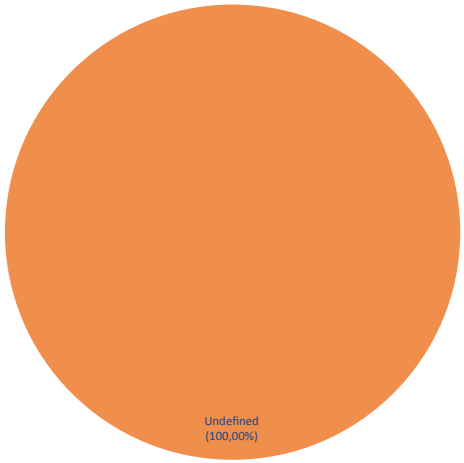
SPONSORS



GENERAL INFORMATION

Promoter	Socar
Operator	Unknown
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	1
Web Link	www.tanap.com

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2013 Q2
Construction	2017 Q3
Commissioning	2018 Q1
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+1.900,00
Total Compressor Power (MW)	+650,00
Maximum Capacity (GWh/d)	+16,00
Expected Load Factor	95,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Türkgözü	Yes	entry	536,00	Supplier Caspia	Interconnector Trans-Anatolian Pipeline
Esksisehir and Thracian region	No	exit	201,00	Interconnector Trans-Anatolian Pipeline	Hub Turkey
Kipi	Yes	exit	335,00	Interconnector Trans-Anatolian Pipeline	Hub Greece
Nabucco from Caspia (CA)	Yes	exit	335,00	Interconnector Trans-Anatolian Pipeline	Interconnector Nabucco

DESCRIPTION OF THE PROJECT

TANAP intends for the transportation of the natural gas to be produced in Shah Deniz-2 field and other fields of Azerbaijan (and other possible countries) through Turkey to Europe.

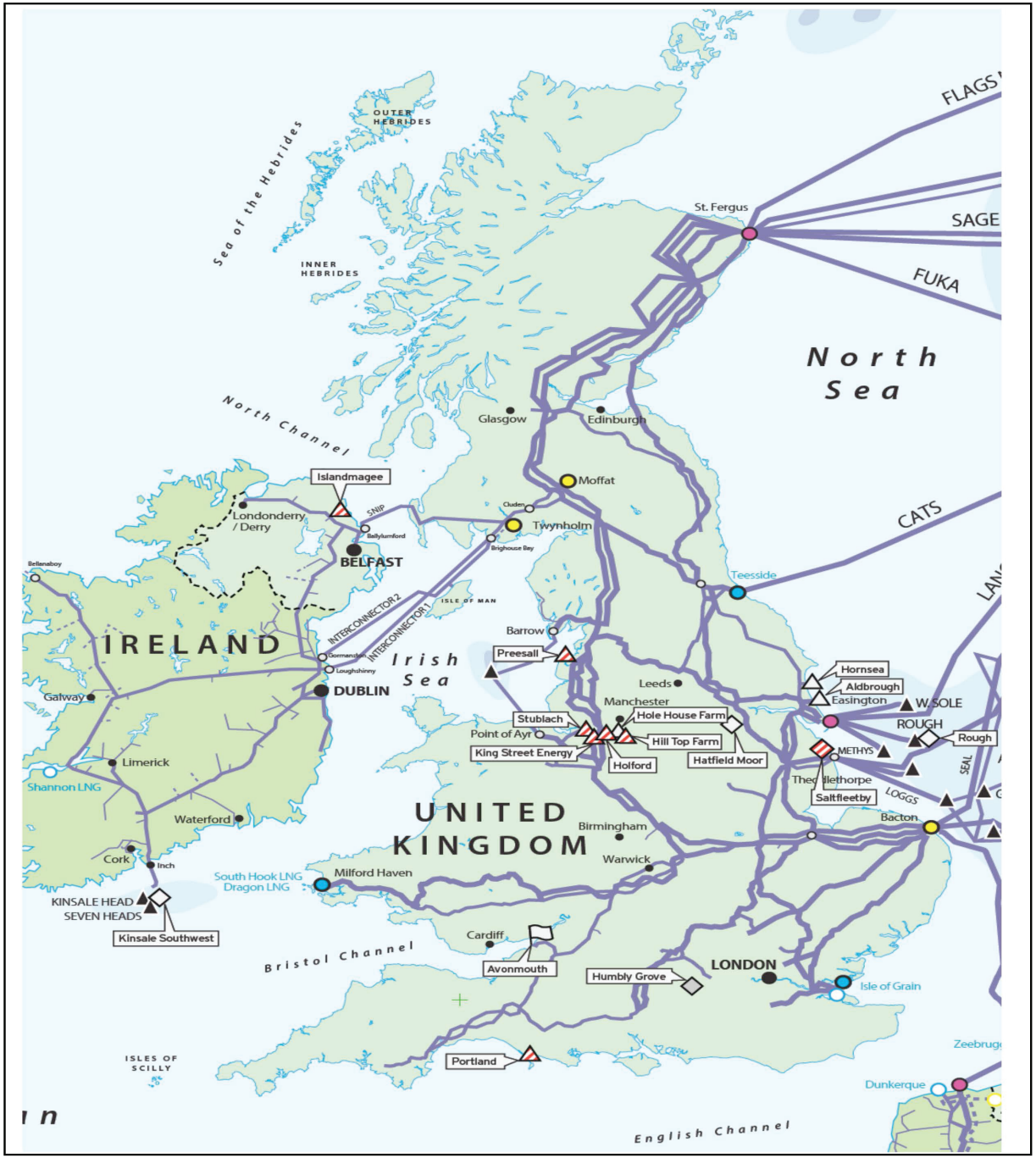
EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of sources, Diversification of routes

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

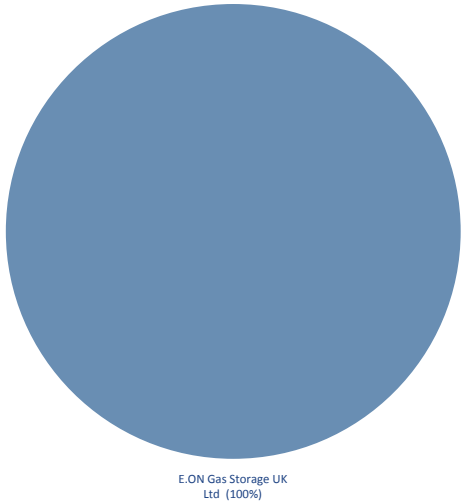
United Kingdom



UGS-F-091	Holford	FID

Storage Facility

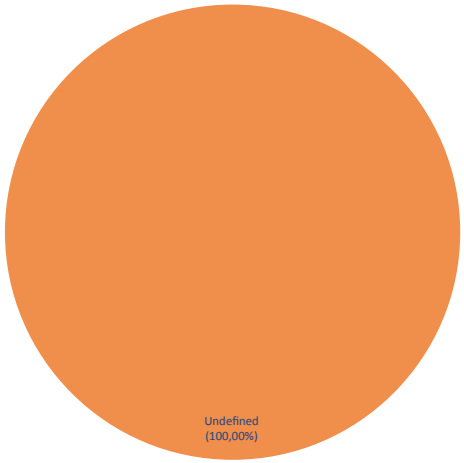
SPONSORS



GENERAL INFORMATION

Promoter	E.ON UK
Operator	E.ON Gas Storage UK Ltd
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.eon-uk.com/generation/holford.aspx

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Yes
Exemption granted ?	Yes
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2005
Construction	
Commissioning	2013 Q1
Last completed Phase :	Construction

TECHNICAL INFORMATION

Storage facility	
Working volume (mcm)	+196,00
Injectability (mcm/d)	+22,00
Deliverability (mcm/d)	+22,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Holford (frmr Byley)	Yes	entry	242,00	Hub United Kingdom	Storage United Kingdom
	Yes	exit	242,00	Storage United Kingdom	Hub United Kingdom

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market Integration (Increase of competition) through marketing of capacity.
SoS - Provision of constant and secure gas supply into the UK gas market, which can be withdrawn to meet daily demand peaks

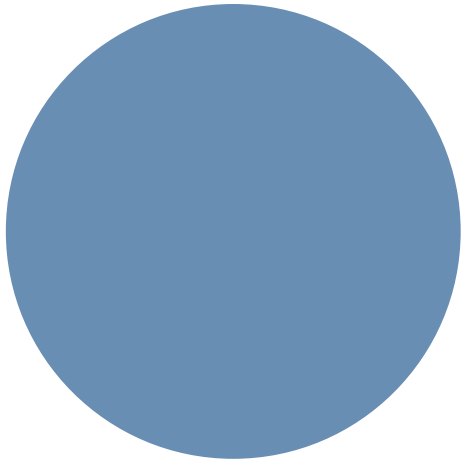
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-203	Preesall Gas Storage	Non-FID

Storage Facility

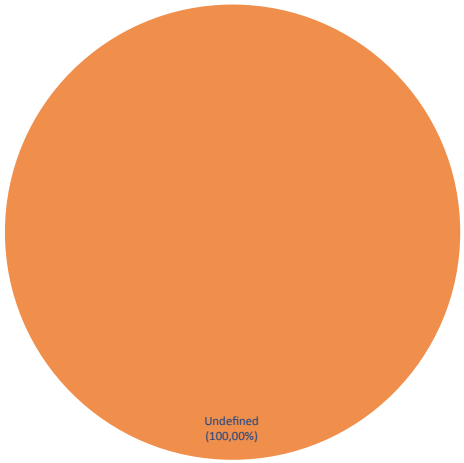
SPONSORS



GENERAL INFORMATION

Promoter	Halite Energy Group Ltd
Operator	Halite Energy Group Ltd
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.halite-energy.co.uk/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2013
FID	2013
Construction	2018
Commissioning	2016
Last completed Phase :	Planned

TECHNICAL INFORMATION

Storage facility	Preesall
Working volume (mcm)	+600,00
Injectability (mcm/d)	+30,00
Deliverability (mcm/d)	+30,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Preesall	Yes	exit	330,00	Storage United Kingdom	Hub United Kingdom
	Yes	entry	330,00	Hub United Kingdom	Storage United Kingdom

DESCRIPTION OF THE PROJECT

A fast cycle salt cavern project with shallow depths allowing for rapid turnaround at low operating costs

EXPECTED BENEFITS

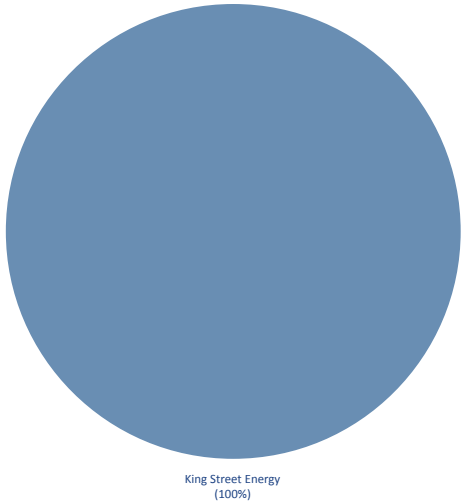
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-087	King Street Energy Storage Project	Non-FID

Storage Facility

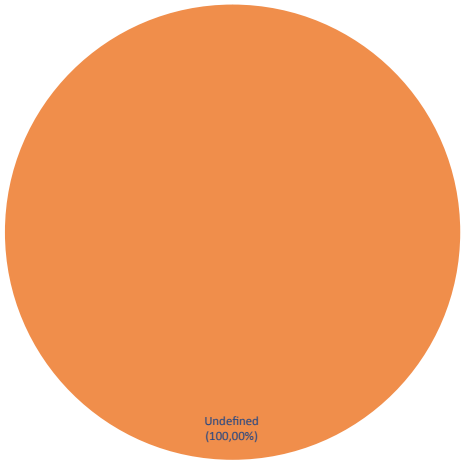
SPONSORS



GENERAL INFORMATION

Promoter	King Street Enegy Ltd
Operator	King Street Enegy Ltd
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	1
Web Link	www.kingstreetenergy.com

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2015 Q2
FID	2013 Q3
Construction	2014 Q1
Commissioning	2017 Q4
Last completed Phase :	Construction

TECHNICAL INFORMATION

Storage facility	
Working volume (mcm)	+348,00
Injectability (mcm/d)	+32,00
Deliverability (mcm/d)	+32,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
King Street	Yes	entry	352,00	Hub United Kingdom	Storage United Kingdom
	Yes	exit	352,00	Storage United Kingdom	Hub United Kingdom

DESCRIPTION OF THE PROJECT

Storage facility; Salt Cavern Storage Facility

EXPECTED BENEFITS

Market Integration (Increase of competition)
Project increases available gas storage in the UK

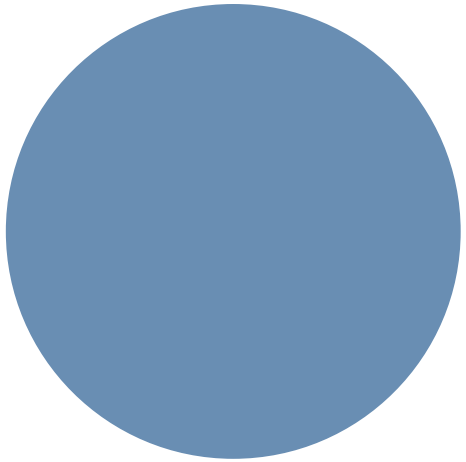
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-F-025	System Capacity Enhancements FID	FID

Pipeline including CS

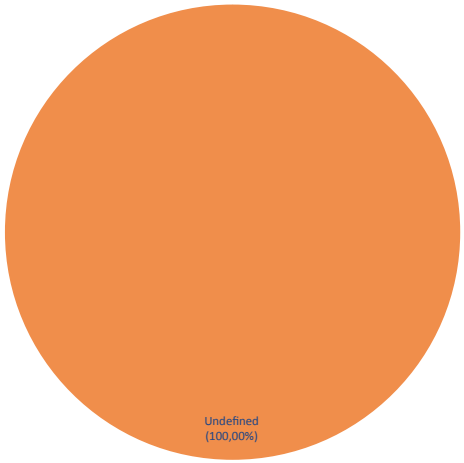
SPONSORS



GENERAL INFORMATION

Promoter	National Grid Gas plc
Operator	National Grid Gas plc
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	No
IGAs	None
Web Link	www.nationalgrid.com/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	No
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2013
Last completed Phase :	FID

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	3
Total Pipeline Length (km)	
Total Compressor Power (MW)	+118,00
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

New electric drive unit to be installed as part of the Emissions Reduction Programme.

EXPECTED BENEFITS

The compression fleet enhancements currently being completed by National Grid are installing alternative compression fuel capability at selected sites; this will enable the bulk of compression at these sites to be electrically driven thereby reducing station emission levels.

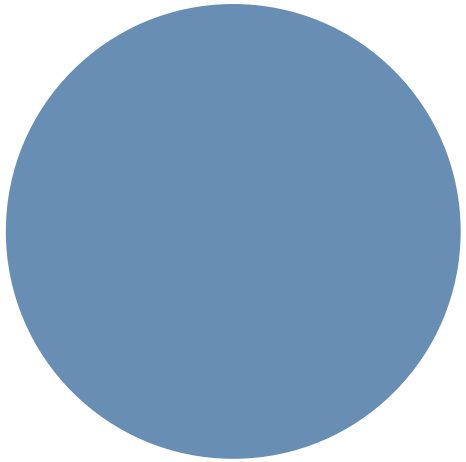
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-026	System Capacity Enhancements non-FID - National Grid	Non-FID

Pipeline including CS

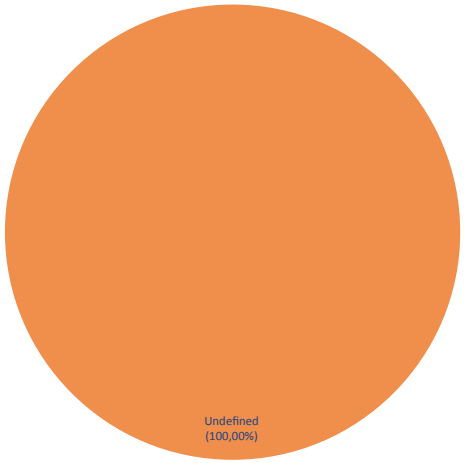
SPONSORS



GENERAL INFORMATION

Promoter	National Grid Gas plc
Operator	National Grid Gas plc
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.nationalgrid.com/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	2018
Commissioning	2022*
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+93,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone

DESCRIPTION OF THE PROJECT

New pipelines to be constructed as part of the pre-FID System Capacity Enhancements

EXPECTED BENEFITS

The system capacity enhancements proposed by National Grid will ensure that despite the uncertainty regarding the pattern of supplies – in terms of both volume and location – sufficient gas can be transmitted under a variety of supply scenarios in order to meet both the predicted peak demand and lower levels of demand.

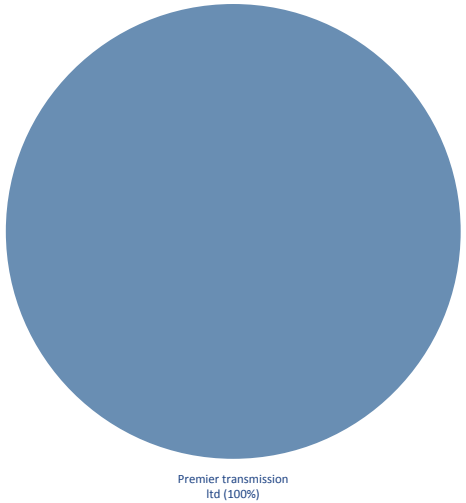
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-027	Physical reverse flow from Northern Ireland to Great Britain and Republic of Ireland via Scotland to Northern Ireland pipeline	Non-FID

Pipeline including CS

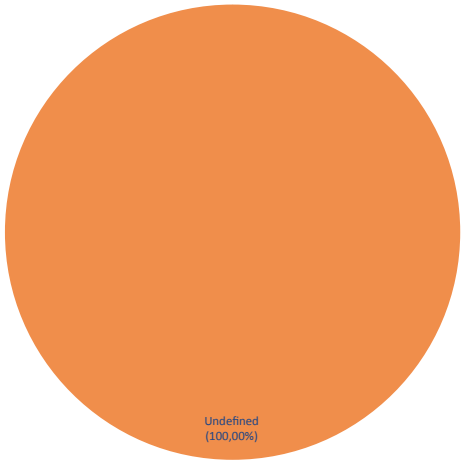
SPONSORS



GENERAL INFORMATION

Promoter	Premier Transmission Ltd
Operator	Premier Transmission Ltd
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2014
FID	2013
Construction	2014
Commissioning	2016
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	
Total Compressor Power (MW)	+9,50
Maximum Capacity (GWh/d)	+132,00
Expected Load Factor	20,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Scotland - Northern Ireland (SNIP)	No	exit	132,00		Hub United Kingdom
	No	exit	132,00		Hub Ireland

DESCRIPTION OF THE PROJECT

Installation of bi-drectional compression on Scotland to Northern Ireland pipeline (SNIP); pipework modifications at 2 AGI's to allow bidirectional metering and flow control and moving gas odourisation point to a new point(s) downstream of the bidirectional transmission system.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Ireland), Back-up for renewables, Extension of transport capacity of Russian gas to the West, Integration of Nord Stream off- and on-Shore in the European gas infrastructure

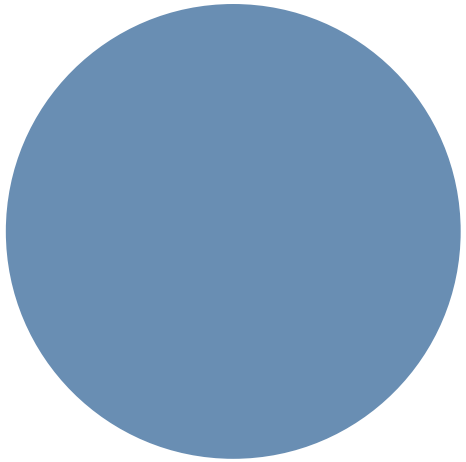
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-F-006	Stublach - Stage 1	FID

Storage Facility

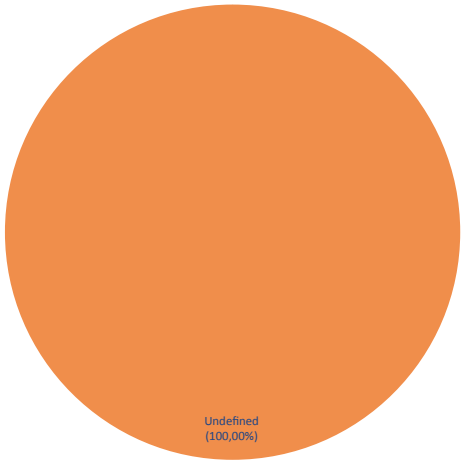
SPONSORS



GENERAL INFORMATION

Promoter	Storengy
Operator	Storengy UK
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.storengy.co.uk/About-Storengy/Projects.php

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Yes
Exemption granted ?	Yes
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2014 Q4
Last completed Phase :	Construction

TECHNICAL INFORMATION

Storage facility	Stublach Gas Storage
Working volume (mcm)	+100,00
Injectability (mcm/d)	+16,00
Deliverability (mcm/d)	+16,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Stublach	Yes	entry	176,00	Hub United Kingdom	Storage United Kingdom
	Yes	exit	176,00	Storage United Kingdom	Hub United Kingdom

DESCRIPTION OF THE PROJECT

Development of a new salt cavern storage facility in the UK.

EXPECTED BENEFITS

Security of Supply, Market integration, N-1 National (UK), N-1 Regional (UK, Ireland), Back-up for renewables,
o Market Integration (Increase of competition)
The project will contribute to the increase of security of supply in the region and will provide more flexibility to the market thus facilitating competition.

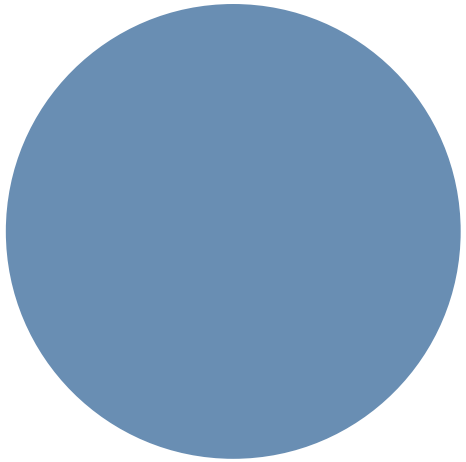
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-266	Stublach - Stage 2	Non-FID

Storage Facility

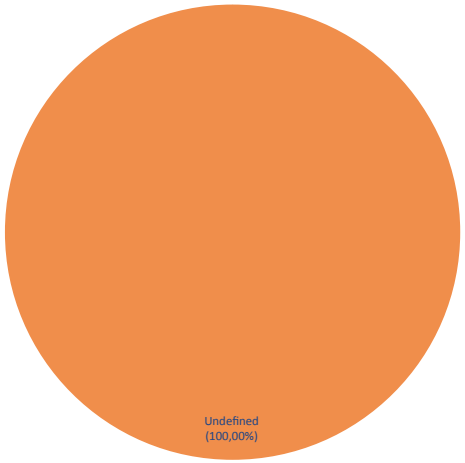
SPONSORS



GENERAL INFORMATION

Promoter	Storengy
Operator	Storengy UK
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	www.storengy.co.uk/About-Storengy/Projects.php

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Yes
Exemption granted ?	Yes
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	
Construction	
Commissioning	2020
Last completed Phase :	Construction

TECHNICAL INFORMATION

Storage facility	Stublach Gas Storage
Working volume (mcm)	+460,00
Injectability (mcm/d)	+16,00
Deliverability (mcm/d)	+16,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Stublach	Yes	entry	176,00	Hub United Kingdom	Storage United Kingdom
	Yes	exit	176,00	Storage United Kingdom	Hub United Kingdom

DESCRIPTION OF THE PROJECT

Development of a new salt cavern storage facility in the UK.

EXPECTED BENEFITS

Security of Supply, Market integration, N-1 National (UK), N-1 Regional (UK, Ireland), Back-up for renewables,
o Market Integration (Increase of competition)
The project will contribute to the increase of security of supply in the region and will provide more flexibility to the market thus facilitating competition.

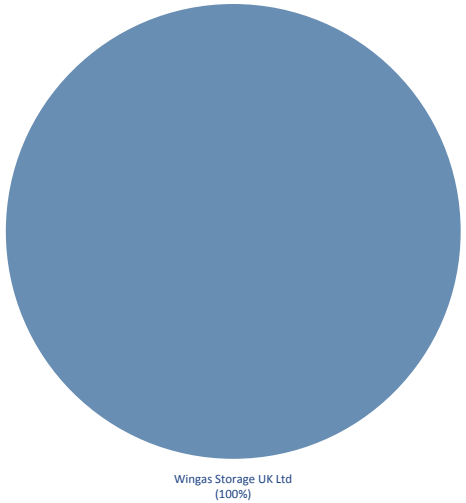
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

UGS-N-033	Saltfleetby	Non-FID

Storage Facility

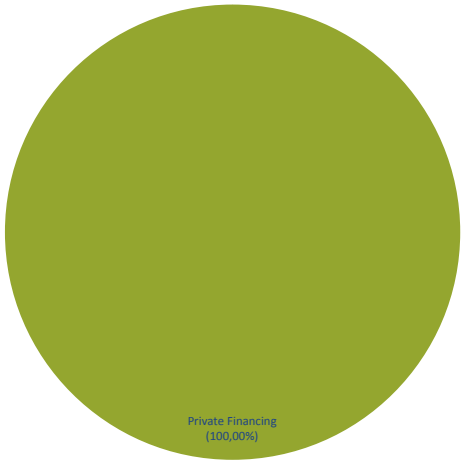
SPONSORS



GENERAL INFORMATION

Promoter	Wingas Storage UK Ltd
Operator	Wingas Storage UK Ltd
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.wingas-storage.com/

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Regulated
Applied for Exemption ?	Yes
Exemption granted ?	Yes
% Exemption in entry direction	100%
% Exemption in exit direction	100%

SCHEDULE

End of permitting phase	
FID	2014 Q1
Construction	
Commissioning	2017 Q2
Last completed Phase :	Permitting

TECHNICAL INFORMATION

Storage facility	Saltfleetby UGS
Working volume (mcm)	+775,00
Injectability (mcm/d)	+5,20
Deliverability (mcm/d)	+8,50

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Saltfleetby	Yes	exit	93,50	Storage United Kingdom	Hub United Kingdom
	Yes	entry	57,20	Hub United Kingdom	Storage United Kingdom

DESCRIPTION OF THE PROJECT

Conversion of the Saltfleetby, Lincolnshire, gas field to a seasonal gas storage facility

EXPECTED BENEFITS

Security of Supply, The project will provide two clear benefits. First, it will increase the level of gas storage in the UK in a time of increasing concern about security of supply on a national level. Secondly it will provide storage capacity for the shareholders and third parties to enable them better to meet their commercial objectives

COMMENTS ABOUT THE PROJECT FINANCING

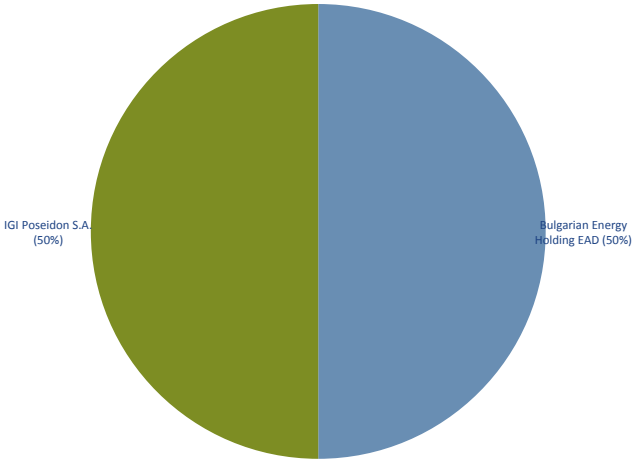
Public financing	Private financing	Multilateral financing

Multi-Country Projects

TRA-N-149	Interconnector Greece Bulgaria - IGB	Non-FID

Pipeline including CS

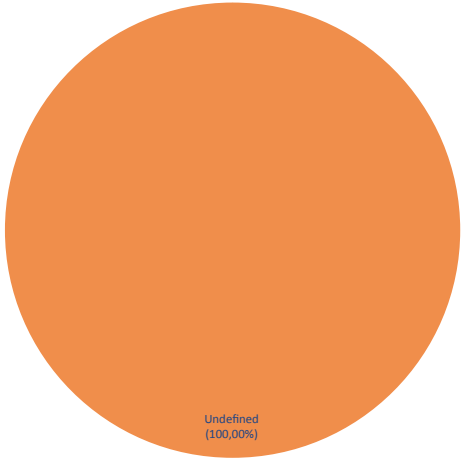
SPONSORS



GENERAL INFORMATION

Promoter	DEPA S.A.
Operator	DEPA S.A.
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	None
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Not yet
Exemption granted ?	Not yet
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2013 Q2
FID	2013 Q1
Construction	2014 Q4
Commissioning	2015 Q1
Last completed Phase :	Permitting

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+182,00
Total Compressor Power (MW)	+20,00
Maximum Capacity (GWh/d)	+147,00
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Interconnector IGB (Greece - Bulgaria)	Yes	exit	110,00	Hub Greece	Hub Bulgaria
	Yes	entry	50,00	Hub Bulgaria	Hub Greece

DESCRIPTION OF THE PROJECT

An onshore natural gas pipeline that will connect Komotini in Greece to Stara Zagora in Bulgaria

EXPECTED BENEFITS

Security of Supply, Market integration (Greece, Bulgaria, Romania, Hungary, FYROM, Serbia), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Greece, Bulgaria), N-1 Regional (North South Interconnection in the South Eastern Europe), Back-up for renewables, Power-to-gas, The project will contribute significantly in the itegration of the market area, specifically the South Eastern Europe, and will allow to alleviate to a great extend the dependency of countries in the area to a single source/counterpart.Taking into account that the objective of the project is to bring additional import quantities of natural gas in Bulgaria and South Eastern Europe it significantly improves the resilience of the system in both short (the additional quantities will be able to cover daily peak demands) and long term.
Specifically for the long term, the diversification in route, supply source as well as counterparts will have a great positive impact on the resilience of the system and will be able to cater to any forecasted increase in demand over the coming years.
The impact of the project in the systems flexibility under disruption (n-1 rule) will be significant taking into account that it will create a new interconnections carrying gas from a new source allowing new counterparts to enter the market.
A possible disruption in any of the other import sources (including the regional disruption of Russian gas) will NOT AFFECT this one having a great positive impact on the remaining flexibility of the system.

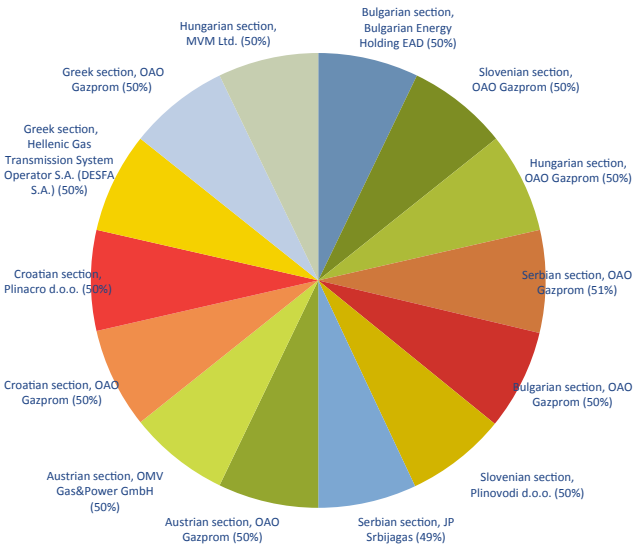
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-187	South Stream Project (Onshore Section)	Non-FID

Pipeline including CS

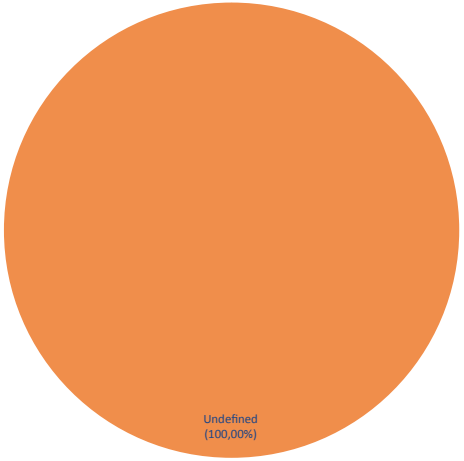
SPONSORS



GENERAL INFORMATION

Promoter	Gazprom
Operator	South Stream AG
TEN-E Project ?	Not part of TEN-E
Interested by PCI ?	Yes
IGAs	7
Web Link	

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	No
Exemption granted ?	No
% Exemption in entry direction	100%
% Exemption in exit direction	100%

SCHEDULE

End of permitting phase	2013 Q4
FID	2012 Q4
Construction	2015 Q4
Commissioning	2015 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	8
Total Pipeline Length (km)	+1.864,70
Total Compressor Power (MW)	+712,00
Maximum Capacity (GWh/d)	
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
South Stream (Bata, Nagykanizsa) (HU)	Yes	exit	224,00	Interconnector South Stream	Hub Hungary
South Stream into Slovenia (SI)	Yes	exit	104,00	Interconnector South Stream	Hub Slovenia
South Stream from Russia (RU)	Yes	entry	2.109,00	Supplier Russia(Mainland)	Interconnector South Stream
South Stream into Bulgaria (BG)	Yes	exit	563,00	Interconnector South Stream	Hub Bulgaria
South Stream into Serbia RS)	Yes	exit	251,00	Interconnector South Stream	Hub Serbia
South Stream into Bosnia (BH)	Yes	exit	18,00	Interconnector South Stream	Hub Bosnia Herzegovina
South Stream into Croatia (HR)	Yes	exit	90,00	Interconnector South Stream	Hub Croatia
South Stream into Austria (AT)	Yes	exit	670,00	Interconnector South Stream	Hub Austria

DESCRIPTION OF THE PROJECT

Major infrastructure project (pipeline incl. compressor stations). Project operators are :
• South Stream Bulgaria AD
• South Stream d.o.o.
• South Stream Hungary Zrt.
• South Stream Slovenia LLC
• South Stream Austria GmbH
• South Stream Greece S.A.
• South Stream Croatia LLC - to be incorporated

EXPECTED BENEFITS

Security of Supply, Market integration, Diversification of routes, Power-to-gas, o Interruptible supplies during peak demands, Contribution to satisfaction of natural gas demand in Europe, Considerable number of EU Member States involved, Significant cross-border importance, Contribution to the economies of the countries involved

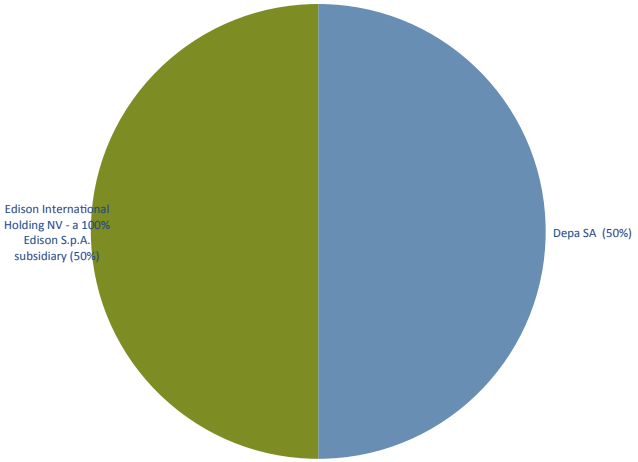
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-010	Poseidon Pipeline	Non-FID

Pipeline including CS

SPONSORS

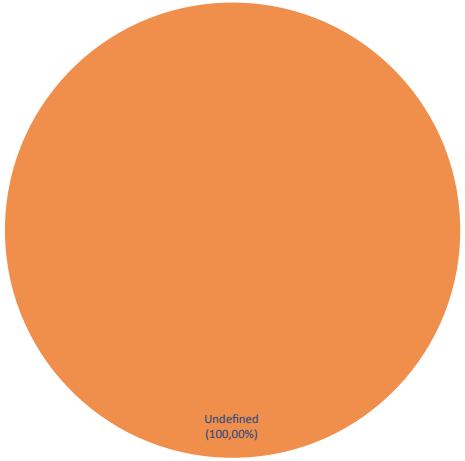


GENERAL INFORMATION

Promoter	IGI Poseidon S.A.
Operator	IGI Poseidon S.A.
TEN-E Project ?	Project of European Interest
Interested by PCI ?	Yes
IGAs	6
Web Link	www.igi-poseidon.com

TEN-E Requests	Date of Request	Year Funding Granted
	6/07/09	2010
	15/06/05	2006
	23/04/03	2003

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Yes
Exemption granted ?	Yes
% Exemption in entry direction	0%
% Exemption in exit direction	89%

SCHEDULE

End of permitting phase	2013 Q1
FID	2013 Q3
Construction	2017 Q3
Commissioning	2017 Q4
Last completed Phase :	FEED

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+210,00
Total Compressor Power (MW)	+100,00
Maximum Capacity (GWh/d)	+329,40
Expected Load Factor	1,00

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Komotini - GR / IGI Poseidon	Yes	entry	329,40	Hub Greece	Interconnector ITGI Poseidon
	Yes	exit	252,50	Interconnector ITGI Poseidon	Hub Greece
Otranto - IT / IGI Poseidon	Yes	exit	329,40	Interconnector ITGI Poseidon	Hub Italia
	Yes	entry	252,50	Hub Italia	Interconnector ITGI Poseidon

DESCRIPTION OF THE PROJECT

EXPECTED BENEFITS

Security of Supply, Market integration (Greece (SEE) and Italy), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Italy, Greece), N-1 Regional (NSI East Gas), Back-up for renewables, Power-to-gas, Biogas, Connecting diversified natural gas reserves not yet linked to Europe, providing diversification of gas supply sources, routes and supplier counterparts. The project promoters, being not gas producer, have strong interest in minimising the gas supply cost. In addition, being the project multi source, the promoters aim to foster competition among producers to supply competitive gas.
Moreover, the project, providing new diversified gas supplies from new counterparts, route and sources, will boost the liquidity of the Italian market contributing to the development of a hub with transparent price signals. This will also benefit Greece, that will be linked for the first time with an accessible gas trading hub.
The Project will support the creation of a more liquid market in Italy and create an excess of gas availability, also contributing to the security of supply of other regions such as the North South Interconnection in WE through the reverse flow of the Transit gas pipeline.
The possible use in Reverse Flow of Poseidon pipeline, not involving transit in non-eu countries, significantly contributes to security of supply of SEE. The project promoters, being not gas producer, have strong interest in minimising the gas supply cost. In addition, being the project multi source, the promoters aim to foster competition among gas producers to supply competitive gas. ,

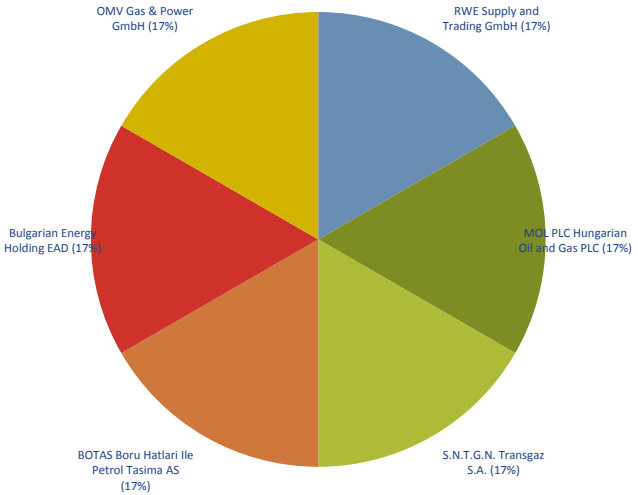
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-077	Nabucco Gas Pipeline Project ("Nabucco Classic")	Non-FID

Pipeline including CS

SPONSORS

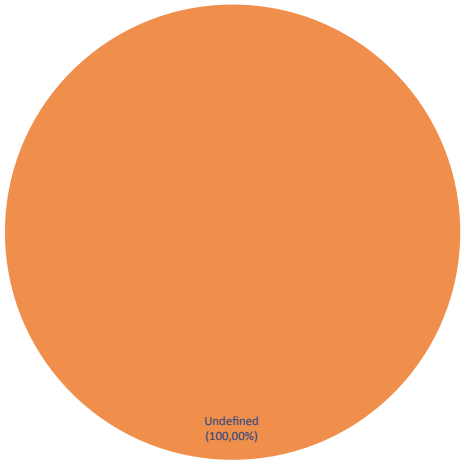


GENERAL INFORMATION

Promoter	NABUCCO Gas Pipeline International
Operator	NABUCCO Gas Pipeline International
TEN-E Project ?	Priority Project
Interested by PCI ?	Yes
IGAs	1
Web Link	www.nabucco-pipeline.com

TEN-E Requests	Date of Request	Year Funding Granted
	28/04/03	2004
	20/06/05	2007
	24/04/09	Not yet

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Yes
Exemption granted ?	Yes
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2013 Q4
FID	2013 Q2
Construction	2013 Q4
Commissioning	2018 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+3.184,00
Total Compressor Power (MW)	+1.560,00
Maximum Capacity (GWh/d)	+976,71
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Nabucco into Romania (RO)	No	exit	87,90	Interconnector Nabucco	Hub Romania
Nabucco into Austria (AT)	No	exit	654,40	Interconnector Nabucco	Hub Austria
Nabucco into Hungary (HU)	No	exit	107,44	Interconnector Nabucco	Hub Hungary
Nabucco from Caspia (CA)	No	entry	976,71	Supplier Caspia	Interconnector Nabucco
Nabucco into Turkey (TR)	No	exit	78,14	Interconnector Nabucco	Hub Turkey
Nabucco into Bulgaria (BG)	No	exit	48,84	Interconnector Nabucco	Hub Bulgaria

DESCRIPTION OF THE PROJECT

The Nabucco Gas Pipeline is a new gas pipeline that will connect the Caspian region and the Middle East to the European gas demand markets. The pipeline will cross Turkey, Bulgaria, Romania and Hungary and run to Austria.

EXPECTED BENEFITS

Security of Supply, Market integration (The Project will significantly increase the cross-border transmission capacity between Member States thereby contribute to integrating the European gas markets (see gas flow scenarios reflected in above table).) Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Nabucco countries), N-1 Regional (Nabucco countries), Back-up for renewables, Power-to-gas, Biogas, Interconnectivity: No other project will connect European and Turkish Markets and the South East European national grids. Turkey, Bulgaria, Romania, Hungary, Austria and via the Central European Gas hub all other countries of Europe will receive Nabucco gas.
Third Party Access: No other project in the region offers 16 bcm/y transport capacity to third parties.
Stability by Treaty: No other project provides a predictable, long term concept over 50 years backed by an Intergovernmental Agreement (IGA) for gas transit via Turkey which is compatible with European Energy Law
Supply Security: No other project will provide a gas transport volume of 31 bcm/y to gas producers from Central Asian and Middle East from alternative sources directly into the centre of the European markets.
Market Liquidity/Competition: No other project will reach such a high number of shippers, industrial users, wholesalers at competitive conditions in the European market
Market recovery: No other project promoter will spend [such an amount] to construct an infrastructure project with a transparent procurement regime.

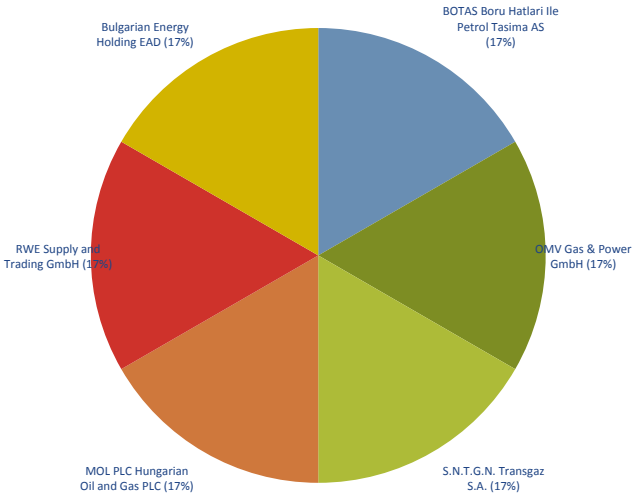
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
The Nabucco project is eligible for 200 million Euro grant funds under the European Economic Programme for Recovery (EEPR). Sovereign guarantees shall be provided through export credit agencies (ECA) based on the procurement of material supplies from specific countries.	Private financing shall be provided by commercial banks.	Mulilateral funds shall be provided by EBRD, EIB and IFC.

TRA-N-078	Nabucco Gas Pipeline Project ("Nabucco West")	Non-FID

Pipeline including CS

SPONSORS

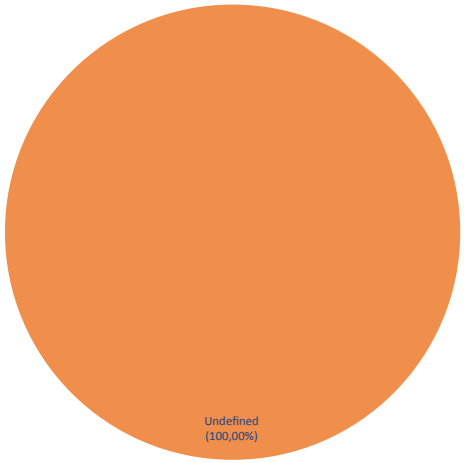


GENERAL INFORMATION

Promoter	NABUCCO Gas Pipeline International
Operator	NABUCCO Gas Pipeline International
TEN-E Project ?	Priority Project
Interested by PCI ?	Yes
IGAs	1
Web Link	www.nabucco-pipeline.com

TEN-E Requests	Date of Request	Year Funding Granted
	24/04/09	Not yet
	28/04/03	2004
	20/06/05	2007

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Regulated
Considered Tariff Regime	Regulated
Applied for Exemption ?	Yes
Exemption granted ?	Yes
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2015 Q2
FID	2013 Q2
Construction	2015 Q2
Commissioning	2018 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+1.318,00
Total Compressor Power (MW)	+345,00
Maximum Capacity (GWh/d)	+724,66
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Nabucco from Caspia (CA)	Yes	entry	724,66		Interconnector Nabucco
Nabucco into Hungary (HU)	Yes	exit	63,01	Interconnector Nabucco	Hub Hungary
Nabucco into Bulgaria (BG)	Yes	exit	63,01	Interconnector Nabucco	Hub Bulgaria
Nabucco into Austria (AT)	Yes	exit	535,62	Interconnector Nabucco	Hub Austria
Nabucco into Romania (RO)	Yes	exit	63,01	Interconnector Nabucco	Hub Romania

DESCRIPTION OF THE PROJECT

"Nabucco West" is a modified concept of the Nabucco Gas Pipeline Project. It foresees the construction of a gas pipeline that will run from the Bulgarian/Turkish border via Bulgaria, Romania and Hungary to Austria.

EXPECTED BENEFITS

Security of Supply, Market integration (The Project will significantly increase the cross-border transmission capacity between Member States thereby contribute to integrating the European gas markets (see gas flow scenarios reflected in above table).), Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Nabucco countries), N-1 Regional (Nabucco countries), Back-up for renewables, Power-to-gas, Biogas

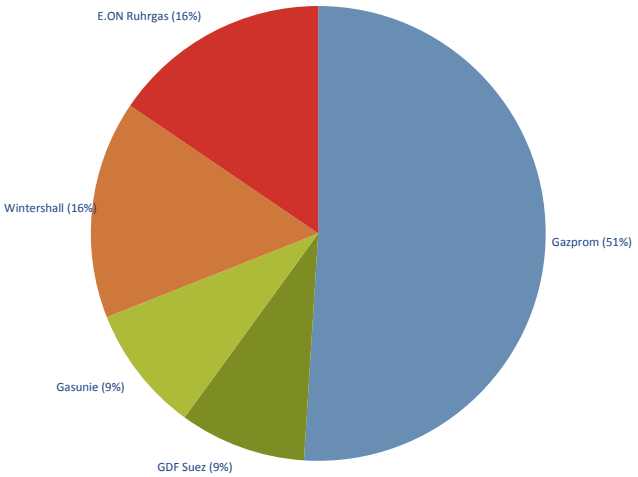
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
The Nabucco project is eligible for 200 million Euro grant funds under the European Economic Programme for Recovery (EEPR). Sovereign guarantees shall be provided through export credit agencies (ECA) based on the procurement of material supplies from specific countries.	Private financing shall be provided by commercial banks.	Mulilateral funds shall be provided by EBRD, EIB and IFC.

TRA-N-267	Nord Stream 3	Non-FID

Pipeline including CS

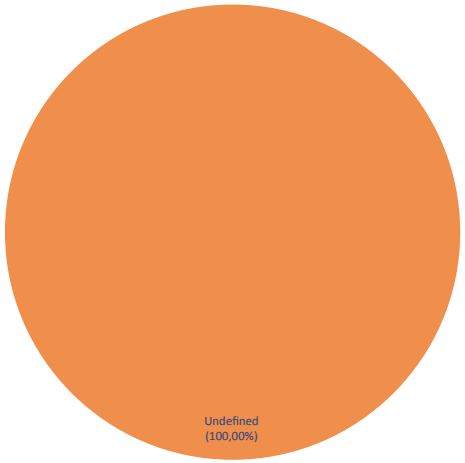
SPONSORS



GENERAL INFORMATION

Promoter	Nord Stream AG
Operator	Nord Stream AG
TEN-E Project ?	Project of European Interest
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.nord-stream.com

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Not applicable
Considered Tariff Regime	Not applicable
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2014 Q2
Construction	2016
Commissioning	2017 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+1.225,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Greifswald	Yes	exit	871,60	Interconnector Nord Stream	Hub Germany

DESCRIPTION OF THE PROJECT

3rd natural gas pipelines from Russia to Germany through the Baltic Sea

EXPECTED BENEFITS

Security of Supply, Diversification of sources, Increasing reliability of supply by a modern, direct pipeline connection; increasing the liquidity of the European gas market; meeting the growing import gap, especially of Northwestern Europe in light of declining indigenous production; will as complementary low carbon energy source serve the EU to meet its energy and de-carbonization goals

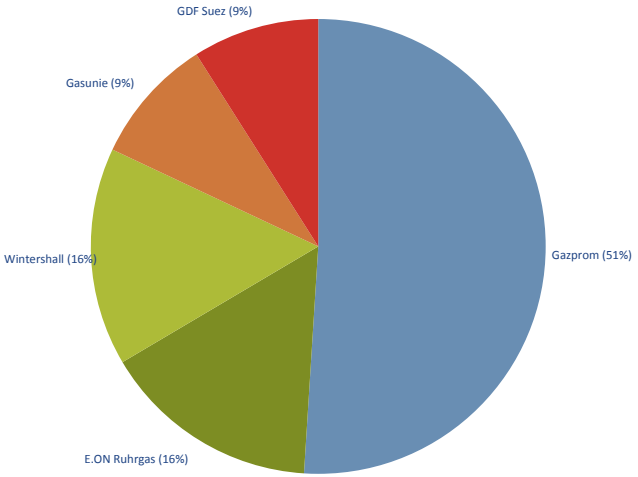
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-069	Nord Stream 4	Non-FID

Pipeline including CS

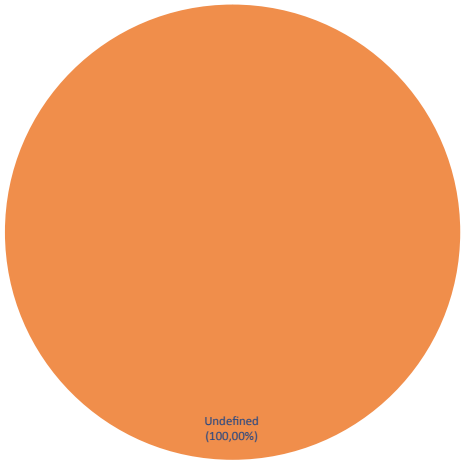
SPONSORS



GENERAL INFORMATION

Promoter	Nord Stream AG
Operator	Nord Stream AG
TEN-E Project ?	Project of European Interest
Interested by PCI ?	Not defined yet
IGAs	None
Web Link	www.nord-stream.com

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Not applicable
Considered Tariff Regime	Not applicable
Applied for Exemption ?	Not relevant
Exemption granted ?	Not relevant
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	
FID	2014 Q2
Construction	2017
Commissioning	2018 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	1
Total Pipeline Length (km)	+1.225,00
Total Compressor Power (MW)	
Maximum Capacity (GWh/d)	
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Greifswald	Yes	exit	871,60	Interconnector Nord Stream	Hub Germany

DESCRIPTION OF THE PROJECT

4 natural gas pipelines from Russia to Germany through the Baltic Sea

EXPECTED BENEFITS

Security of Supply, Diversification of sources, Increasing reliability of supply by a modern, direct pipeline connection; increasing the liquidity of the European gas market; meeting the growing import gap, especially of Northwestern Europe in light of declining indigenous production; will as complementary low carbon energy source serve the EU to meet its energy and de-carbonization goals

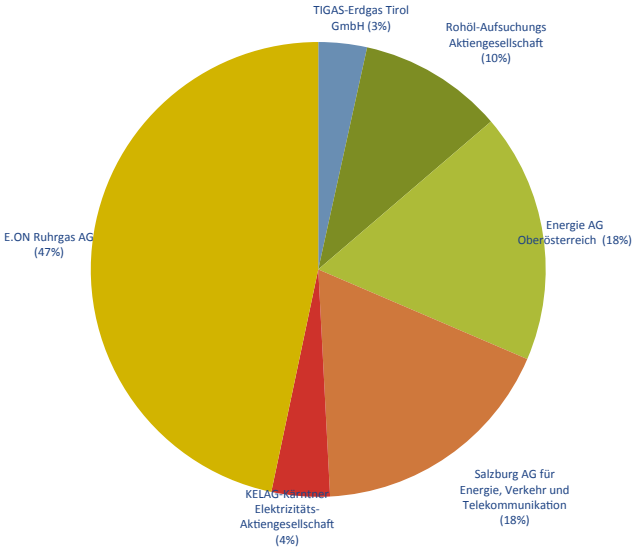
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

TRA-N-035	Tauerngasleitung Gas Pipeline Project	Non-FID

Pipeline including CS

SPONSORS

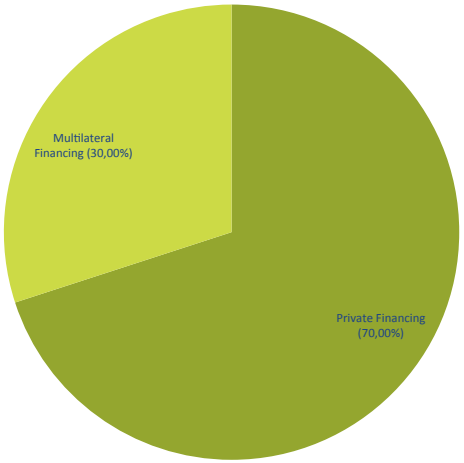


GENERAL INFORMATION

Promoter	**Tauerngasleitung GmbH**
Operator	**Tauerngasleitung GmbH**
TEN-E Project ?	**Project of common interest**
Interested by PCI ?	**Yes**
IGAs	**None**
Web Link	www.tauerngasleitung.at

TEN-E Requests	Date of Request	Year Funding Granted
	26/04/06	2007
	28/04/10	2011

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	**Regulated**
Considered Tariff Regime	**Regulated**
Applied for Exemption ?	**Not yet**
Exemption granted ?	**No**
% Exemption in entry direction	**0%**
% Exemption in exit direction	**0%**

SCHEDULE

End of permitting phase	**2014 Q4**
FID	**2014 Q2**
Construction	**2015 Q1**
Commissioning	**2018 Q4**
Last completed Phase :	**Planned**

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	**1**
Total Pipeline Length (km)	**+290,00**
Total Compressor Power (MW)	**+66,00**
Maximum Capacity (GWh/d)	**+125,27**
Expected Load Factor	

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Haiming (bayernets) - DE / Burghausen (Transit) - TGL	Yes	exit	30,14	Interconnector Tauerngas Leitung	Hub Germany(NCG)
Haiming-Oberkappel (OGE) - DE / Burghausen (Transit) - TGL	Yes	exit	33,82	Interconnector Tauerngas Leitung	Hub Germany(NCG)
Haiming (bayernets) - DE / Burghausen (Transit) - TGL	Yes	entry	180,74	Hub Germany(NCG)	Interconnector Tauerngas Leitung
Haiming (bayernets) - DE / Burghausen-Auerbach (Austrian Storage) - TGL	Yes	exit	136,65	Storage Austria	Hub Germany(NCG)
Haiming (OGE) - DE / Burghausen-Auerbach (Austrian Storage) - TGL	Yes	entry	143,82	Hub Germany(NCG)	Storage Austria
Tarvisio - IT / Arnoldstein (Transit) - TGL	Yes	entry	65,40	Hub Italia	Interconnector Tauerngas Leitung
	Yes	exit	314,96	Interconnector Tauerngas Leitung	Hub Italia
Haiming (bayernets) - DE / Burghausen (Austrian Hub) - TGL	Yes	entry	148,61	Hub Germany(NCG)	Hub Austria

DESCRIPTION OF THE PROJECT

Pipeline (incl. compressor stations) in North-South direction. TGL allows feed significant volumes from different sources from South-East regions towards Central Europe.

EXPECTED BENEFITS

Security of Supply, Market integration, Reverse Flows, Diversification of sources, Diversification of routes, N-1 National, N-1 Regional, Back-up for renewables, Power-to-gas, Biogas
SoS: Investments will be necessary, especially in cross-border gas transmission capacity, with a view to diversifying sources of supply, and gas transmission systems in general, especially where capacities may be needed in an emergency to supply areas with capacity shortfalls. The TGL is in line with these objectives, which focus mainly on security of supplies.
Market Integration: By linking the Central European (Southern Germany) with the South-East European (mainly Italy) natural gas market, the TGL increases interoperability between gas markets in Europe which are still separate, develop new natural gas sources for these markets and therefore significantly improve competition within a European single market for natural gas.
Diversification of European natural gas supplies: By creating the infrastructure required for a functioning North-South/South-North system to develop the North African and Arab supply region, including liquefied natural gas (LNG) for the Mediterranean region, the TGL will reduce dependence on individual suppliers in the North and East.

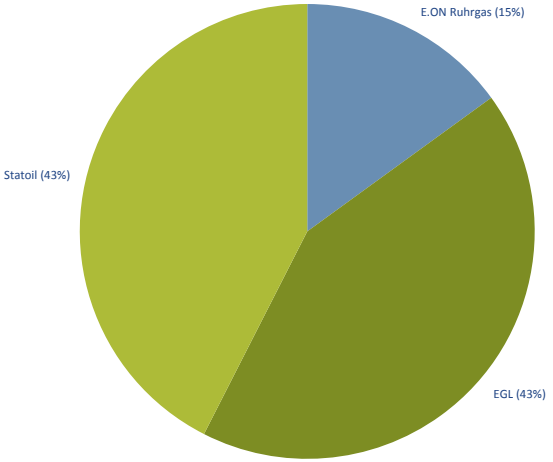
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
	Own financing 30%. Loans 70% of which 70-80% fromcommercial banks and the rest from multilateral financing	20-30% of 70% of the overall external financing needs

TRA-N-051	Trans Adriatic Pipeline	Non-FID

Pipeline including CS

SPONSORS

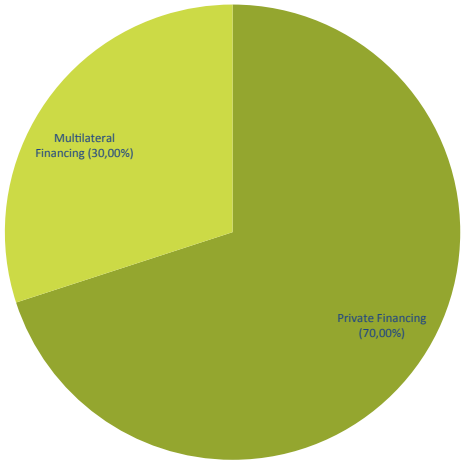


GENERAL INFORMATION

Promoter	Trans-Adriatic Pipeline AG
Operator	Trans-Adriatic Pipeline AG
TEN-E Project ?	Project of Common Interest
Interested by PCI ?	Yes
IGAs	4
Web Link	www.trans-adriatic-pipeline.com

TEN-E Requests	Date of Request	Year Funding Granted
	16/05/05	2009
	21/04/04	2008

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Yes
Exemption granted ?	No
% Exemption in entry direction	100%
% Exemption in exit direction	100%

SCHEDULE

End of permitting phase	2013 Q2
FID	2013 Q2
Construction	2015 Q1
Commissioning	2018 Q4
Last completed Phase :	FEED

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+791,00
Total Compressor Power (MW)	+180,00
Maximum Capacity (GWh/d)	+337,00
Expected Load Factor	90,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
Komotini (DESFA) - GR / TAP	Yes	exit	269,60	Interconnector Trans-Adriatic Pipeline	Hub Greece
Melendugno - IT / TAP	Yes	exit	337,00	Hub Greece	Interconnector Trans-Adriatic Pipeline
Komotini (DESFA) - GR / TAP	Yes	entry	337,00	Interconnector Trans-Adriatic Pipeline	Hub Italia
Melendugno - IT / TAP	Yes	entry	269,60	Hub Italia	Interconnector Trans-Adriatic Pipeline

DESCRIPTION OF THE PROJECT

The Trans Adriatic Pipeline will start in Greece near Komotini and continue onshore all the way to the Adriatic Sea coast, after crossing the entire territory of Albania from east to west. The offshore part of the pipeline begins near the Albanian city of Fier and crosses the Adriatic Sea to tie into Italy's gas transportation grid operated by Snam Rete Gas in the province of Lecce. In its upstream part, TAP will interconnect with the existing DESFA pipeline system in Greece, which is linked further to the east with systems in Turkey, to secure access to the Shah Deniz natural gas field in Azerbaijan.

EXPECTED BENEFITS

Security of Supply, Market integration [Italy, Greece and potentially Albania, with the potential to further integrate the Western Balkans (Croatia) and broader South Eastern Europe area (Bulgaria, FYROM, Serbia, Hungary, Romania, Slovenia, Austria)], Reverse Flows, Diversification of sources, Diversification of routes, N-1 National (Italy, Greece, and potentially Albania), N-1 Regional [Italy, Greece and potentially Albania, Western Balkans (Croatia) and broader South Eastern Europe (Bulgaria, FYROM, Serbia, Hungary, Romania, Slovenia, Austria)], Back-up for renewables.
TAP represents the shortest and most economic way to secure gas from Shah Deniz 2 field within EU borders.
TAP will directly support the development of competition in the Italian and European gas markets. In addition to promoting diversification of routes and supply sources, TAP will also support diversification of counterparts (and shippers), as new players enter the markets together with completely new sources of gas. The entry of new counterparts in the Italian market will directly contribute to the development of the Italian gas hub and overall liquidity of the Italian market. By bringing new counterparts and increasing liquidity, TAP can make a crucial contribution to the increase of competition in European gas markets.

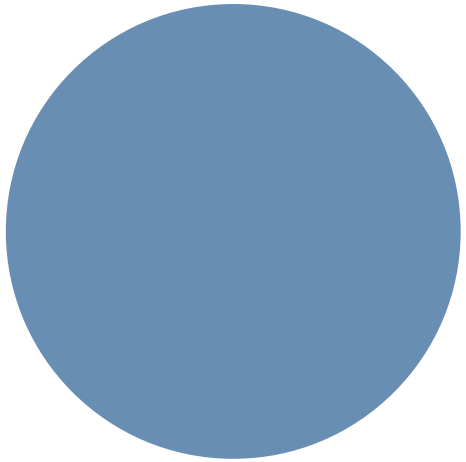
COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing
	Own financing 30%. Loans 70%, of which 70-80% from commercial banks and multilateral financing	30% of 70% of the overall external financing needs

TRA-N-053	White Stream	Non-FID

Pipeline including CS

SPONSORS

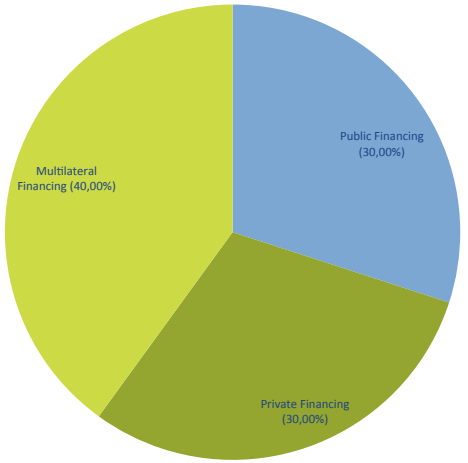


GENERAL INFORMATION

Promoter	White Stream
Operator	White Stream
TEN-E Project ?	Priority Project
Interested by PCI ?	Yes
IGAs	2
Web Link	

TEN-E Requests	Date of Request	Year Funding Granted
	31/08/07	2009
	30/06/08	2011

FINANCING



THIRD-PARTY ACCESS REGIME

Considered TPA Regime	Negotiated (e.g. Exemption)
Considered Tariff Regime	Negotiated (e.g. Exemption)
Applied for Exemption ?	Not yet
Exemption granted ?	Not yet
% Exemption in entry direction	0%
% Exemption in exit direction	0%

SCHEDULE

End of permitting phase	2016 Q1
FID	2016 Q2
Construction	2019 Q2
Commissioning	2019 Q4
Last completed Phase :	Planned

TECHNICAL INFORMATION

# of Pipelines, nodes, CS	2
Total Pipeline Length (km)	+1.250,00
Total Compressor Power (MW)	+375,00
Maximum Capacity (GWh/d)	+487,00
Expected Load Factor	95,00%

PROJECTED CAPACITY INCREASES

Interconnection	Modelled	Direction	Capacity (GWh/d)	From Zone	To Zone
White Stream into Romania (RO)	Yes	exit	505,00	Supplier Caspia	Hub Romania

DESCRIPTION OF THE PROJECT

The WS pipeline will transport gas produced in the Caspian area from Georgia to the EU. It will branch off an existing pipeline from Azerbaijan to Georgia and will include an onshore pipeline to the Black Sea Georgian coast where a major compressor station will provide the high pressue required to transmit gas to Romania, across the Black Sea.

EXPECTED BENEFITS

Security of Supply, Diversification of sources, Diversification of routes, N-1 National,, N-1 Regional, Back-up for renewables, Extension of transport capacity of Russian gas to the West, Integration of Nord Stream off- and on-Shore in the European gas infrastructure

COMMENTS ABOUT THE PROJECT FINANCING

Public financing	Private financing	Multilateral financing

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for gas

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