Before going through the content of each specific Project Fiche, please read the introduction document.

Project Group BEMIP_10 - Skulte LNG

Reasons for grouping [ENTSOG]

The project group is composed by LNG FRU project to be developed in Latvia and the evacuation pipeline of the FRU unit that will be directly linked to Latvia Incukalns underground storage facilities.

Objective of the project(s) in the group [Promoter]

The project group is composed by one stand-alone LNG project to be developed in Latvia. It does not have LNG storage, but includes direct pipeline connecting the LNG facility to the Incukalns UGS and transmission grid. The project will serve as Incukalns UGS extension – LNG entry point.

Projects constituting the group

TYNDP Project Code	Project Name	Promoter	Hosting Country	Project Status	4th PCI List Code	First Comm Year	Last Comm. Year	Compared to TYNP 2018
LNG-N-0912	Skulte LNG	AS Skulte LNG Terminal	LV	Less-Advanced	-	2023	2024	Delayed
TRA-N-1181	Connecting pipe to LNG terminal in Latvia	Conexus Baltic Grid	LV	Less-Advanced	-	2021	2022	-

Technical Information

TYNDP Project Code	Yearly Volume [bcm/y]	Storage Capacity [m3 LNG]	Ship Size [m3 LNG]
LNG-N-0912	1.5	700000	170000

TYNDP Project Code	Diameter [mm]	Length [km]	Compressor Power [MW]
TRA-N-1181*	-	-	-

*Technical information not available yet as Feasibility Study was started only recently.

Capacity Increment

The capacity increment values for each project are provided at all related Interconnection points (IP), both for “exit” and “entry” directions, being indicated the operator of the IP as well as the associated commissioning years of the capacity increments.

This information is presented in the table below and should be read per each line as follows: a certain project, TRA-N-123, can bring at a specific “Point Name” operated by “Operator X” an “exit” capacity increment “From System Y” “To System Z” which has associated an “Increment Commissioning Year”. Equally, for the same “Point Name” and operated by the same “Operator X”, an “entry” (reverse) capacity increment can be available to system “Y” from system “Z” which at its turn has associated an “Increment Commissioning Year”.

TYNDP Project Code	Point Name	Operator	From System	Exit Capacity [GWh/d]	Increment Comm. Year	To System	Entry Capacity [GWh/d]	Increment Comm. Year
LNG-N-912	Skulte (LV)	AS Skulte LNG Terminal	LNG Terminals Latvia	150	2023	Transmission Latvia	-	-
TRA-N-1181	Skulte (LV)	Conexus Baltic Grid	LNG Terminals Latvia	-	-	Transmission Latvia	170	2021

B. Project Cost Information

During the TYNDP 2020 Project Data Collection, promoters were asked to indicate whether their costs were confidential or not. The following tables display the costs provided by the promoters (as of June 2019, end of TYNDP 2020 project collection). The amounts provided can differ from the figures used by the project promoters in other contexts, where costs can be updated and/or evaluated using different methodologies or assumptions. For the purposes of this project fiche, in case promoters identified their costs as confidential, alternative costs have been provided by the promoter. The alternative costs are identified with "*".

	LNG-N-912	TRA-N-1181	Total Cost
CAPEX [min, EUR]	110	26	**136**
OPEX [min, EUR/y]	3	0.46	**3.46**
Range CAPEX (%)	10	15	-
Range OPEX (%)	15	15	-

Description of costs and range [Promoter]

The total costs compose of the following project components:

- LNG terminal – 110MEUR. This figure can change after finalising the technologies used for FRU. Currently there are three kind of technical solutions reviewed in the EIA process in order to choose the efficient want with the less impact on Environment. We expect that 110MEUR is the maximum cost of the FRU.
- Connecting pipe from Inčukalns underground gas storage to LNG terminal in Latvia – 26MEUR

C. Project Benefits

C.1 Summary of project benefits

This section provides a summarised analysis by ENTSOG of the main benefits stemming from the realisation of the overall group and according to the guidelines included in the ENTSOG 2nd CBA Methodology. More details on the indicators are available in sections D and E.

National Trends

Benefits explained (but Sustainability) [ENTSOG]

> **Competition:**

Because of **reducing the LICD indicator value**, the projects group significantly contributes to the diversification of entry points (precondition for competition and arbitrage) in Existing and Low Infrastructure Levels in Finland, Estonia and Latvia now considered in TYNDP 2020 as one single market zone.
The project group allows to **decrease the dependence from Russian gas** for Estonia and Finland in Low infrastructure level thanks to the enhancement of the interconnections between Latvia and Estonia and the Balticconnector (between Estonia and Finland) considered in this level. Also, the project allows to reduce the dependency from Russian gas in Latvia and Lithuania in Low infrastructure level. The project group along with other complementary projects performed in the area improves the cooperation among the Baltic countries and reduces the overall dependence in the area.

> **Market integration:**

The project brings benefits in monetised term as a **reduction of the cost of gas supply**. In the reference supply price configuration this can be estimated around 3.5 Mln Eur/y (on average) in the Low infrastructure level. Such benefits can be explained by the savings in transportation costs thanks to the utilisation of this new alternative route.
Additional benefits compared to the reference situation can be observed in the case of Russian supply minimisation (22 Mln EUR/y on average in the low infrastructure level) and LNG supply Maximisation. Such benefits are driven by the fact that the Project Group allows some countries to further benefit from a decrease in LNG price while at the same time to rely on alternative sources in case of more expensive Russian gas prices.
In the advanced infrastructure level, market integration benefits from the project group are reduced compared to the low infrastructure level, this is explained by the reduction of LNG flows in Latvia due implementation of competing projects in the area such as LNG terminal in Estonia and higher use of the existing underground storage in Latvia.

Distributed Energy

Benefits explained (but Sustainability) [ENTSOG]

> **Security of Supply:**

In the case of Baltic-Finland disruption in Low infrastructure level, the project group fully mitigates the risk of demand curtailment in Lithuania and Latvia in Peak day in 2030.

> **Competition:**

Because of reducing the LICD indicator value, the projects group significantly contributes to the diversification of entry points (precondition for competition and arbitrage) in Existing and Low Infrastructure Levels in Finland, Estonia and Latvia now considered in TYNDP 2020 as one single market zone.
The project group allows to decrease the dependence from Russian gas for Estonia and Finland in Low infrastructure level thanks to the enhancement of the interconnections between Latvia and Estonia and the Balticconnector (between Estonia and Finland) considered in this level. Also, the project allows to reduce the dependency from Russian gas in Latvia and Lithuania in Low

infrastructure level. The project group along with other complementary projects performed in the area improves the cooperation among the Baltic countries and reduces the overall dependence in the area.

> **Market integration:**

The project brings benefits in monetised term as a reduction of the cost of gas supply. In the reference supply price configuration this can be estimated at 2 Mln Eur/y (on average) in Low infrastructure level. Such benefits are driven by the fact that the Project Group allows some countries to further benefit from a decrease in LNG price while at the same time to rely on alternative sources in case of more expensive Russian gas prices.
Additional benefits compared to the reference situation can be observed in the case of Russian supply minimisation (13 Mln EUR/y on average in the low infrastructure level) and LNG supply Maximisation. Such benefits are driven by the fact that the Project Group allows some countries to further benefit from a decrease in LNG price while at the same time to rely on alternative sources in case of more expensive Russian gas prices.
In the advanced infrastructure level, market integration benefits from the project group are reduced compared to the low infrastructure level, this is explained by the reduction of LNG flows in Latvia due implementation of competing projects in the area such as LNG terminal in Estonia and higher use of the existing underground storage in Latvia.

Global Ambition

Benefits explained (but Sustainability) [ENTSOG]

> **Security of Supply:**

In the case of **Baltic-Finland disruption** in Low infrastructure level, the project group fully mitigates the risk of demand curtailment in Lithuania and Latvia in Peak day, 2030.

> **Competition:**

Because of reducing the LICD indicator value, the projects group significantly contributes to the diversification of entry points (precondition for competition and arbitrage) in Existing and Low Infrastructure Levels in Finland, Estonia and Latvia now considered in TYNDP 2020 as one single market zone.

The project group allows to decrease the dependence from Russian gas for Estonia and Finland in Low infrastructure level thanks to the enhancement of the interconnections between Latvia and Estonia and the Balticconnector (between Estonia and Finland) considered in this level. Also, the project allows to reduce the dependency from Russian gas in Latvia and Lithuania in Low infrastructure level. The project group along with other complementary projects performed in the area improves the cooperation among the Baltic countries and reduces the overall dependence in the area.

> **Market integration:**

The project brings benefits in monetised term as a **reduction of the cost of gas supply**. In the reference supply price configuration this can be estimated around 3 Mln Eur/y (on average) in Low infrastructure level. Such benefits are driven by the fact that the Project Group allows some countries to further benefit from a decrease in LNG price while at the same time to rely on alternative sources in case of more expensive Russian gas prices.

Additional benefits compared to the reference situation can be observed in the case of Russian supply minimisation (15 Mln EUR/y on average in the low infrastructure level) and LNG supply Maximisation. Such benefits are driven by the fact that the Project Group allows some countries to further benefit from a decrease in LNG price while at the same time to rely on alternative sources in case of more expensive Russian gas prices.
In the advanced infrastructure level, market integration benefits from the project group are reduced compared to the low infrastructure level, this is explained by the reduction of LNG flows in Latvia due implementation of competing projects in the area such as LNG terminal in Estonia and higher use of the existing underground storage in Latvia.

Sustainability benefits explained [ENTSOG]

The ENTSOG analysis shows that in the yearly assessment, the projects group realisation contributes to the replacement of more polluting fuels with natural gas, which enables fuel switch savings in Latvia up to 0.4 MEUR/y under existing infrastructure level and up to 0.6 MEUR/y under low infrastructure level. The table below shows the related reduction in terms of CO2eq/y for each scenario and infrastructure level and over the 25-years assessment period of the project group. The contribution of the project group to the CO2eq/y emissions (positive number indicate reduction in CO2eq/y emissions) is also displayed for the three simulation configurations that consider different level of tariffs for the project group.

Sustainability		EXISTING			LOW			ADVANCED		
CO2 and Other externalities (KtCO2 eq/y)	Reference	0 / 1	0 / 4	0 / 3	1 / 1	3 / 4	1 / 3	0 / 0	2 / 2	0 / 1
	Lower Tariff Sensitivity	0 / 0	1 / 1	0 / 0	1 / 1	4 / 4	1 / 3	1 / 1	3 / 4	1 / 3
	Higher Tariff Sensitivity	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0

The minimum and the maximum values displayed in the table above refer respectively to the CO2eq/y savings in case emissions from the additional gas demand increase not replacing other more polluting fuels are counted in the overall CO2eq emissions assessment or they are considered neutral. For more information, please consult the Project Fiche introduction document and the TYNDP 2020 Annex D.

Savings have been allocated to the project group based on the flows resulting from ENSTOG simulations under the reference supply price configurations and according to the methodology described in TYNDP 2020 Annex D. Such methodology is also based on the assumption that the use of the infrastructures already included in the different infrastructure levels (versus which the project group is assessed) is always prioritised.

Sustainability benefits explained [Promoter]

No additional benefits were provided by promoters.

C.2 Quantitative benefits [ENTSOG]

The following tables display all the benefits quantified by ENTSOG through specific indicators and stemming from the realisation of the considered project group. Some of those benefits are measured through quantitative indicators (i.e. SLID and Curtailment rate) and monetised ex-post. Their monetised value is displayed in section E. When assessing those type of benefits, it is important to avoid any double counting considering them both in quantitative and monetised terms.

EXISTING Infrastructure Level – National Trends

Sum of Value	Column Labels											
	2025						2030			2040		
	CBG			GBC			NT			NT		
Row Labels	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA
Competition												
LNG and Interconnection Capacity Diversification (LICD)												
Estonia	10,000	5,509	-4,491	10,000	5,556	-4,444	10,000	5,244	-4,756	10,000	5,121	-4,879
Finland	10000	5509	-4491	10000	5556	-4444	10000	5244	-4756	10000	5121	-4879
Latvia	10,000	5,509	-4,491	10,000	5,556	-4,444	10,000	5,244	-4,756	10,000	5,121	-4,879
MASD-RU												
Estonia	45%	18%	-27%	48%	26%	-22%	23%	7%	-16%	19%	0%	-19%
Latvia	45%	16%	-29%	47%	25%	-23%	23%	7%	-17%	19%	0%	-19%
Lithuania	24%	18%	-6%				13%	7%	-7%	11%	0%	-11%

LOW Infrastructure Level – National Trends

Sum of Value	Column Labels											
	2025						2030			2040		
	CBG			GBC			NT			NT		
Row Labels	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA
Competition												
LNG and Interconnection Capacity Diversification (LICD)												
Estonia	10,000	5,509	-4,491	10,000	5,556	-4,444	10,000	5,244	-4,756	10,000	5,121	-4,879
Finland	10000	5509	-4491	10000	5556	-4444	10000	5244	-4756	10000	5121	-4879
Latvia	10,000	5,509	-4,491	10,000	5,556	-4,444	10,000	5,244	-4,756	10,000	5,121	-4,879
MASD-RU												
Estonia	48%	29%	-19%	50%	37%	-13%	36%	19%	-17%	33%	11%	-22%
Finland	49%	29%	-20%	50%	37%	-13%	36%	18%	-18%	33%	10%	-23%
Latvia	48%	29%	-19%	50%	37%	-13%	36%	11%	-25%	33%	0%	-33%
Lithuania	35%	29%	-6%				31%	11%	-21%	32%	0%	-32%

ADVANCED Infrastructure Level – National Trends

No benefits.

EXISTING Infrastructure Level – Distributed Energy

Sum of Value	Column Labels											
	2025						2030			2040		
	CBG			GBC			DE			DE		
Row Labels	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA
Competition												
LNG and Interconnection Capacity Diversification (LICD)												
Estonia	10,000	5,509	-4,491	10,000	5,556	-4,444	10,000	5,717	-4,283	10,000	5,117	-4,883
Finland	10000	5509	-4491	10000	5556	-4444	10000	5717	-4283	10000	5117	-4883
Latvia	10,000	5,509	-4,491	10,000	5,556	-4,444	10,000	5,717	-4,283	10,000	5,117	-4,883
MASD-RU												
Estonia	45%	18%	-27%	48%	26%	-22%	11%	3%	-8%			
Latvia	45%	16%	-29%	47%	25%	-23%	11%	2%	-9%			
Lithuania	24%	18%	-6%				6%	3%	-3%			

LOW Infrastructure Level – Distributed Energy

Sum of Value	Column Labels											
	2025						2030			2040		
	CBG			GBC			DE			DE		
Row Labels	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA
Competition												
LNG and Interconnection Capacity Diversification (LICD)												
Estonia	10,000	5,509	-4,491	10,000	5,556	-4,444	10,000	5,717	-4,283	10,000	5,117	-4,883
Finland	10000	5509	-4491	10000	5556	-4444	10000	5717	-4283	10000	5117	-4883
Latvia	10,000	5,509	-4,491	10,000	5,556	-4,444	10,000	5,717	-4,283	10,000	5,117	-4,883
MASD-RU												
Estonia	48%	29%	-19%	50%	37%	-13%	29%	9%	-20%			
Finland	49%	29%	-20%	50%	37%	-13%	29%	8%	-21%			
Latvia	48%	29%	-19%	50%	37%	-13%	29%	8%	-21%			
Lithuania	35%	29%	-6%				29%	8%	-21%			
Security of Supply												
Baltics Finland Disruption Curtailment Rate Peak Day (%)												
Latvia							-11%	0%	11%			
Lithuania							-12%	0%	12%			

ADVANCED Infrastructure Level – Distributed Energy

No benefits.

EXISTING Infrastructure Level – Global Ambition

Sum of Value	Column Labels											
	2025						2030			2040		
	CBG			GBC			GA			GA		
Row Labels	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA
Competition												
LNG and Interconnection Capacity Diversification (LICD)												
Estonia	10,000	5,362	-4,638	10,000	5,476	-4,524	10,000	5,717	-4,283	10,000	5,510	-4,490
Finland	10,000	5,362	-4,638	10,000	5,476	-4,524	10,000	5,717	-4,283	10,000	5,510	-4,490
Latvia	10,000	5,362	-4,638	10,000	5,476	-4,524	10,000	5,717	-4,283	10,000	5,510	-4,490
MASD-RU												
Estonia	35%	8%	-27%	37%	10%	-27%	27%	12%	-15%			
Latvia	35%	7%	-28%	37%	9%	-28%	27%	12%	-14%			
Lithuania	19%	8%	-12%	21%	10%	-10%	15%	12%	-2%			

LOW Infrastructure Level – Global Ambition

Sum of Value	Column Labels											
	2025						2030			2040		
	CBG			GBC			GA			GA		
Row Labels	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA
Competition												
LNG and Interconnection Capacity Diversification (LICD)												
Estonia	10,000	5,362	-4,638	10,000	5,476	-4,524	10,000	5,717	-4,283	10,000	5,510	-4,490
Finland	10,000	5,362	-4,638	10,000	5,476	-4,524	10,000	5,717	-4,283	10,000	5,510	-4,490
Latvia	10,000	5,362	-4,638	10,000	5,476	-4,524	10,000	5,717	-4,283	10,000	5,510	-4,490
MASD-RU												
Estonia	42%	19%	-23%	47%	24%	-23%	39%	26%	-13%	6%	0%	-6%
Finland	42%	18%	-24%	47%	23%	-24%	40%	27%	-13%	6%	0%	-6%
Latvia	41%	17%	-24%	46%	22%	-24%	39%	24%	-15%	6%	0%	-6%
Lithuania	30%	18%	-12%	33%	23%	-11%	33%	24%	-9%	6%	3%	-3%
Security of Supply												
Baltics Finland Disruption Curtailment Rate Peak Day (%)												
Latvia							-6%	0%	6%			
Lithuania							-6%	0%	6%			

ADVANCED Infrastructure Level – Global Ambition

No benefits.

C.3 Monetised benefits [ENTSOG]

This section includes all benefits stemming from the realisation of a project that are quantified and monetised. Some benefits are monetised ex-post while others directly as a result of the simulations and are impacted by the modelling assumptions chosen (e.g. tariffs or supply price assumptions). Monetised benefits are showed at EU level. In order to keep the results in a manageable number, those have been aggregated per Infrastructure Level and Demand Scenarios. In line with the CBA Methodology, promoters could provide additional benefits related to Sustainability or Gasification. In the tables below these benefits are displayed separately from the ones computed directly by ENTSOG and are labelled as "(Promoter)". More information on how to read the data in this section is provided in the Introduction Document.

		EXISTING			LOW			ADVANCED		
Benefits (Meur/year)		NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION	NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION	NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION
EU Bill benefits With Tariffs	Reference Supply	0.3	0.0	0.0	3.5	2.3	3.1	0.0	0.0	0.0
	Supply Maximization	5.6	3.5	4.4	22.0	13.2	15.1	0.3	0.4	0.4
Security of Supply	Design Case	0.0	0.0	0.0	0.0	0.3	0.5	0.0	0.0	0.0
	2-weeks Cold Spell	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2-weeks Cold Spell DF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sustainability	CO2 and Other externalities savings	0 / 0	0 / 0.2	0 / 0.1	0 / 0	0.2 / 0.2	0 / 0.1	0 / 0	0.1 / 0.1	0 / 0.1
	Additional benefit (Promoter)	0	0	0	0	0	0	0	0	0

Comparison between the assessed SCENARIOS

ENTSOG runs the assessment for 5-year-rounded years (2020, 2025, 2030 and 2040) and interpolates these results to compute the benefits for the 25-years economic lifetime of projects. The following tables show the benefits as computed in the specific assessment years.

Year of assessment		*2020*									*2025*								
		EXISTING			LOW			ADVANCED			EXISTING			LOW			ADVANCED		
Benefits (Meur/year)		NT	DE	GA	NT	DE	GA	NT	DE	GA	NT	DE	GA	NT	DE	GA	NT	DE	GA
EU Bill benefits With Tariffs	Reference Supply	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	0.0	0.0	0.0
	Supply Maximization	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3	9.3	9.3	24.7	24.7	24.7	1.1	1.1	1.1
Security of Supply	Design Case	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2-weeks Cold Spell	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2-weeks Cold Spell DF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sustainability	CO2 and Other externalities savings	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
	Additional benefit (Promoter)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Year of assessment		*2030*									*2040*								
		EXISTING			LOW			ADVANCED			EXISTING			LOW			ADVANCED		
Benefits (Meur/year)		NT	DE	GA	NT	DE	GA	NT	DE	GA	NT	DE	GA	NT	DE	GA	NT	DE	GA
EU Bill benefits With Tariffs	Reference Supply	0.4	0.0	0.0	5.5	5.2	7.8	0.0	0.1	0.1	0.4	0.0	0.0	2.8	0.0	0.1	0.0	0.0	0.0
	Supply Maximization	5.6	3.1	5.8	24.0	21.0	25.9	0.2	0.4	0.4	3.1	0.0	0.0	18.9	0.0	0.9	0.0	0.0	0.0
Security of Supply	Design Case	0.0	0.0	0.0	0.0	0.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2-weeks Cold Spell	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2-weeks Cold Spell DF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sustainability	CO2 and Other externalities savings	0 / 0	0 / 1	0 / 0	0 / 0	1 / 1	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
	Additional benefit (Promoter)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

C.4 Sensitivities analysis on monetised benefits [ENTSOG]

In line with ENTSOG Adapted 2nd CBA Methodology, ENTSOG has also run sensitivities on some relevant assumptions such as tariffs, commissioning year and lower supply source price differential. The results included in the tables below have to be compared with the ones included in section C.3. Further information is available in the common introduction (Pages 1-6) to all project fiches. Independently from the source of the input as described in C3 (ENTSOG or Promoter), the sensitivity analysis has been caried out by ENTSOG and according to the criteria in the approved CBA Methodology.

EXISTING Infrastructure Level

		Commissioning Year Sensitivity			*Lower Tariff Sensitivity*			*Higher Tariff Sensitivity*			*Cost of Disruption Sensitivity*		
Benefits (Meur/year)		NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION	NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION	NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION	NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION
EU Bill benefits With Tariffs	Reference Supply	0.4	0.0	0.0	4.7	2.3	1.5	0.0	0.0	0.0	0.3	0.0	0.0
	Supply Maximization	5.1	2.8	3.6	10.7	6.5	7.5	1.1	0.7	0.8	5.6	3.5	4.4
Security of Supply	Design Case	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2-weeks Cold Spell	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2-weeks Cold Spell DF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sustainability	CO2 and Other externalities savings (MEUR)	0 / 0	0 / 0.2	0 / 0.1	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0.2	0 / 0.1
	Additional benefit (Promoter)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

LOW Infrastructure Level

		Commissioning Year Sensitivity			*Lower Tariff Sensitivity*			*Higher Tariff Sensitivity*			*Cost of Disruption Sensitivity*		
Benefits (Meur/year)		NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION	NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION	NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION	NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION
EU Bill benefits With Tariffs	Reference Supply	3.6	2.1	2.9	29.2	17.5	20.2	0.0	0.0	0.0	3.5	2.3	3.1
	Supply Maximization	21.6	11.2	13.2	47.7	28.7	32.2	0.4	0.3	0.4	22.0	13.2	15.1
Security of Supply	Design Case	0.0	0.3	0.2	0.0	0.3	0.5	0.0	0.3	0.5	0.0	0.6	0.4
	2-weeks Cold Spell	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2-weeks Cold Spell DF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sustainability	CO2 and Other externalities savings (MEUR)	0 / 0	0.2 / 0.2	0 / 0.1	0 / 0	0.2 / 0.3	0 / 0.1	0 / 0	0 / 0	0 / 0	0 / 0	0.2 / 0.2	0 / 0.1
	Additional benefit (Promoter)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ADVANCED Infrastructure Level

		Commissioning Year Sensitivity			*Lower Tariff Sensitivity*			*Higher Tariff Sensitivity*			*Cost of Disruption Sensitivity*		
Benefits (Meur/year)		NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION	NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION	NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION	NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION
EU Bill benefits With Tariffs	Reference Supply	0.0	0.0	0.0	19.8	13.0	14.8	0.0	0.0	0.0	0.0	0.0	0.0
	Supply Maximization	0.3	0.4	0.4	27.5	20.3	21.2	0.0	0.0	0.0	0.3	0.4	0.4
Security of Supply	Design Case	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2-weeks Cold Spell	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2-weeks Cold Spell DF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sustainability	CO2 and Other externalities savings (MEUR)	0 / 0	0.1 / 0.1	0.1 / 0	0 / 0	0.2 / 0.2	0 / 0.1	0 / 0	0 / 0	0 / 0	0 / 0	0.1 / 0.1	0 / 0.1
	Additional benefit (Promoter)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

D. Environmental Impact [Promoter]

Any gas infrastructure has an impact on its surroundings. This impact is of particular relevance when crossing some environmentally sensitive areas. Mitigation measures are taken by the promoters to reduce this impact and comply with the EU and National regulations. The Tables have been filled in by the promoter.

TYNDP Code	Type of infrastructure	Surface of impact	Environmentally sensitive area

Potential impact	Mitigation measures	Related costs included in project CAPEX and OPEX	Additional expected costs

Environmental Impact explained [Promoter]

Initial Environmental impact assessments studies and public discussions for the projects have indicated impact on environment According to the program made by State Environmental Bureau the respective studies are currently made to minimize the Environmental effects for both building the pipeline and FRU. The biggest issues to be addressed are the pipeline routing details and the technology used for FRU (open loop, closed loop or hybrid).
High quality Environmental monitoring will be carried out before, during and after the construction of the infrastructure.

E. Other Benefits [Promoter]

Missing benefits are all benefits of a project which may be not captured by the current application in TYNDP 2020 of the 2nd CBA Methodology.
As a necessary condition a missing benefit cannot have discrepancies with the benefits already covered by the assessment run by ENTSOG and this condition needs to be proved and justified.

Other benefits explained

No other benefits were provided by the promoter.

F. Useful Links

The project website

https://www.skultelng.lv/en/