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Insights on the changes in the Italian natural gas supplies

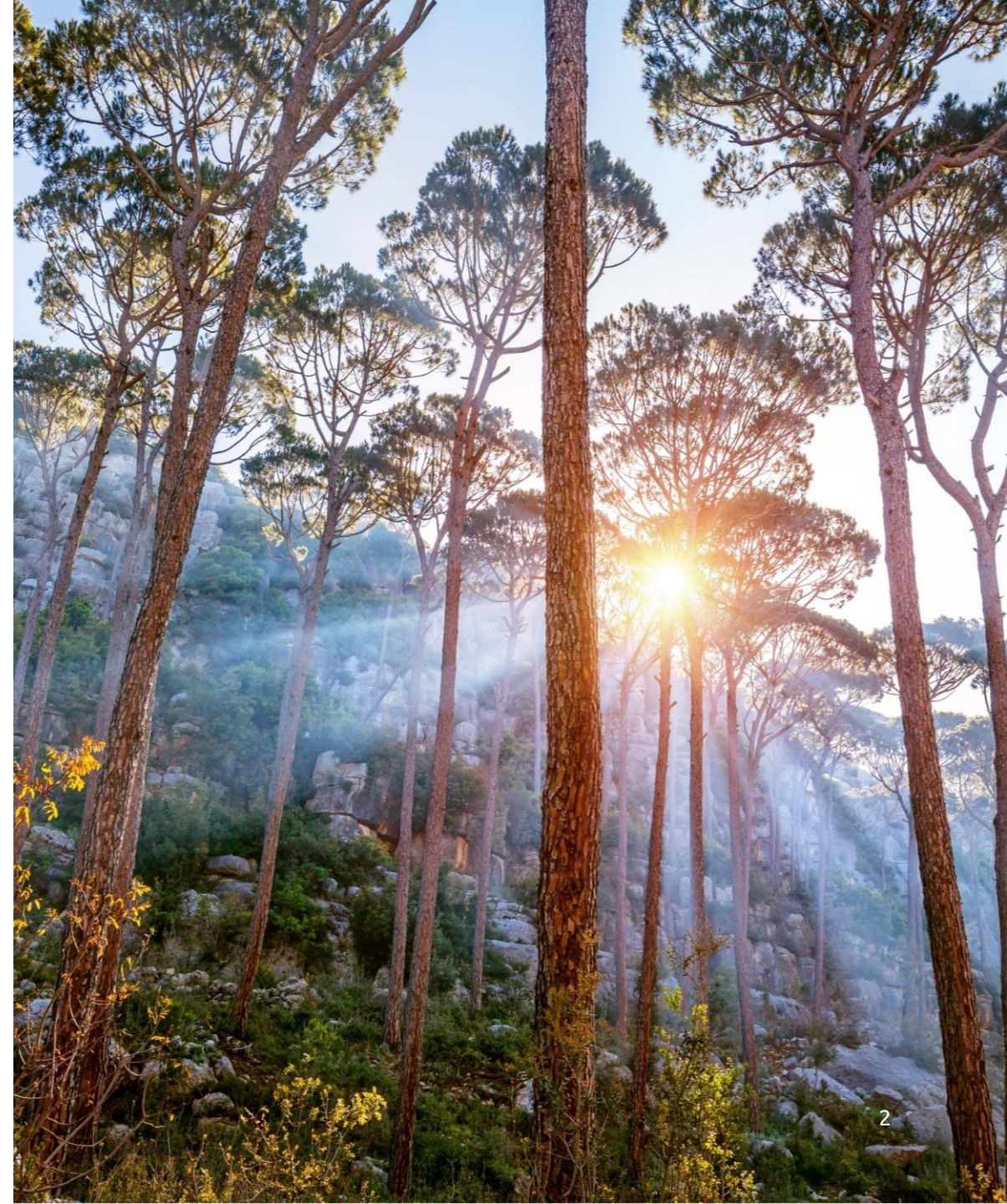
Data: 07 November 2022

Agenda

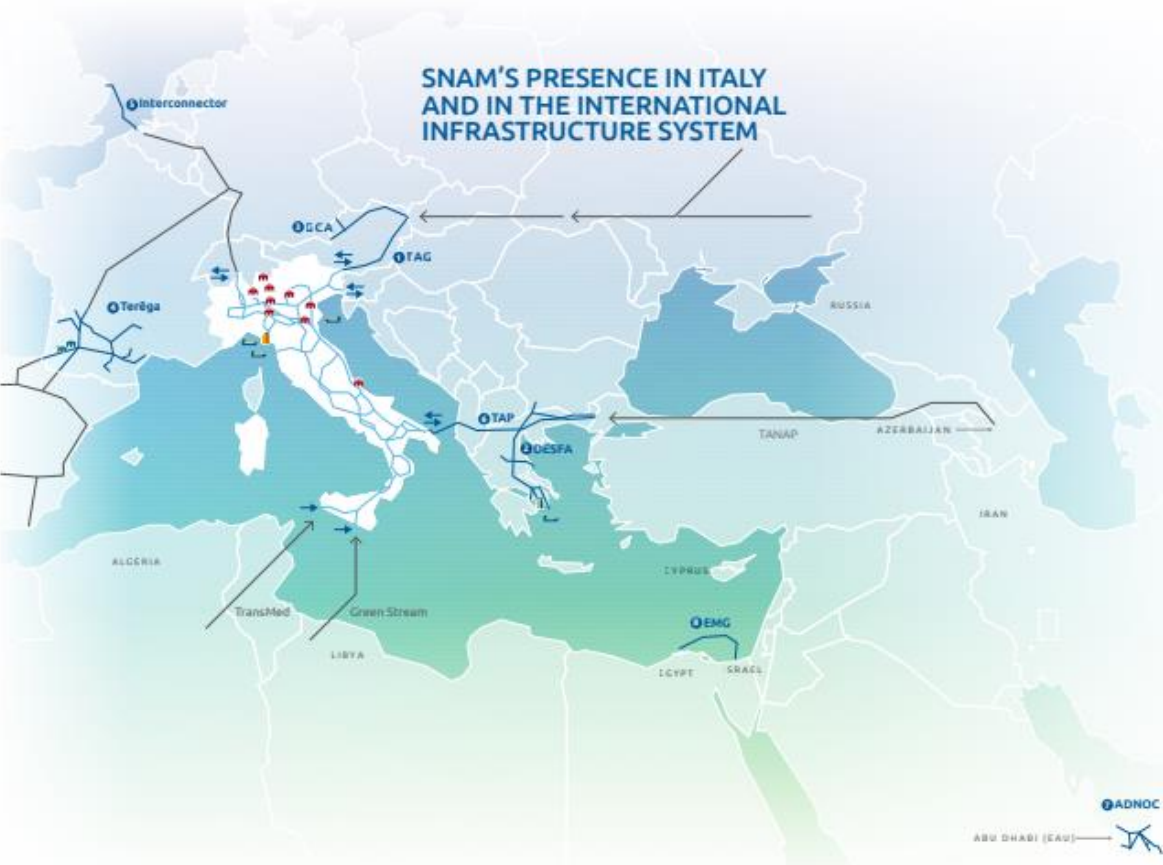
- ❑ **SNAM overview**
- ❑ **Italian gas import capacity**
- ❑ **Changes in the Italian natural gas supplies**
- ❑ **Gas Quality impacts**



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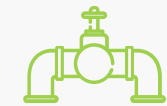


SNAM overview and presence in Europe



ITALIAN NETWORK	TRANSPORT NETWORK	32,767 Km	INVESTMENTS IN INTERNATIONAL PIPELINES
Storage fields	GAS INJECTED INTO TRANSPORT NETWORK	75.77 bcm	Storage fields
Regasification plants	TOTAL STORAGE CAPACITY	16.5 bcm	Regasification plants
LNG terminals	REGASIFICATION PLANT	1	LNG terminals
	EMPLOYEES	3,430	OTHER INTERNATIONAL PIPELINES

Integrated operations in Italy



TRANSMISSION

- 32.767 km of gas transmission pipelines
- 13 compressor stations (973 MW installed power)
- 75,77 Bcm injected into the network



STORAGE

- 9 storage fields (each with a compressor station and a treatment plant)
- 17,0 Bcm of total storage capacity (including strategic storage)



LNG

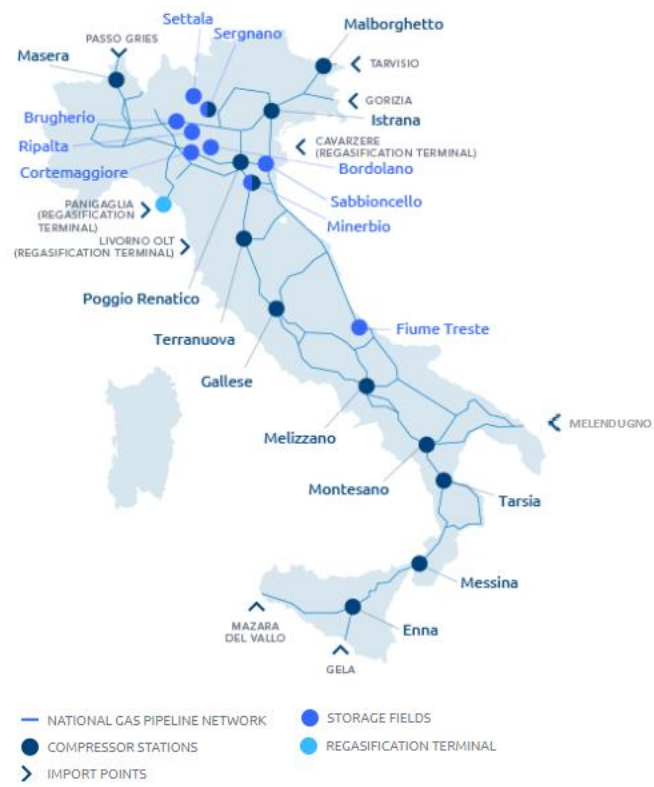
- 1 regasification terminal
- 17.500 cubic meter – maximum daily regasification capacity

International associates



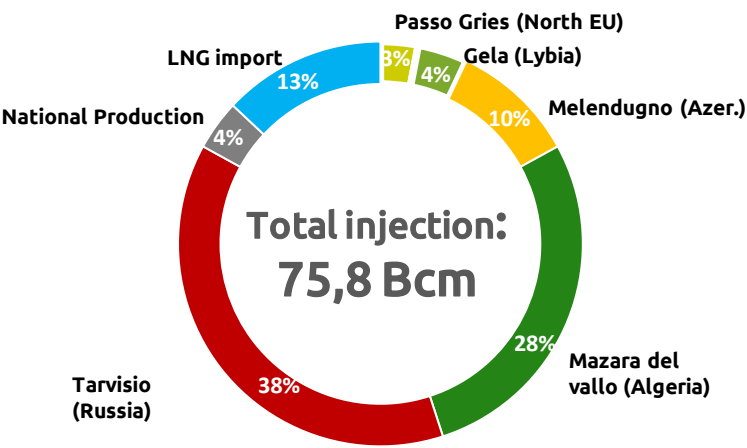
Italian gas import capacity

Entry points and national infrastructure



2021 Gas flows by sources

83% Import via Pipeline
13% Import via LNG
4% National Production



key highlights

- Russian gas imports via Tarvisio represented the strongest source of supply
- Gas from North Africa exceeded 30% of total imports
- Imports from the North, via Switzerland, were marginal

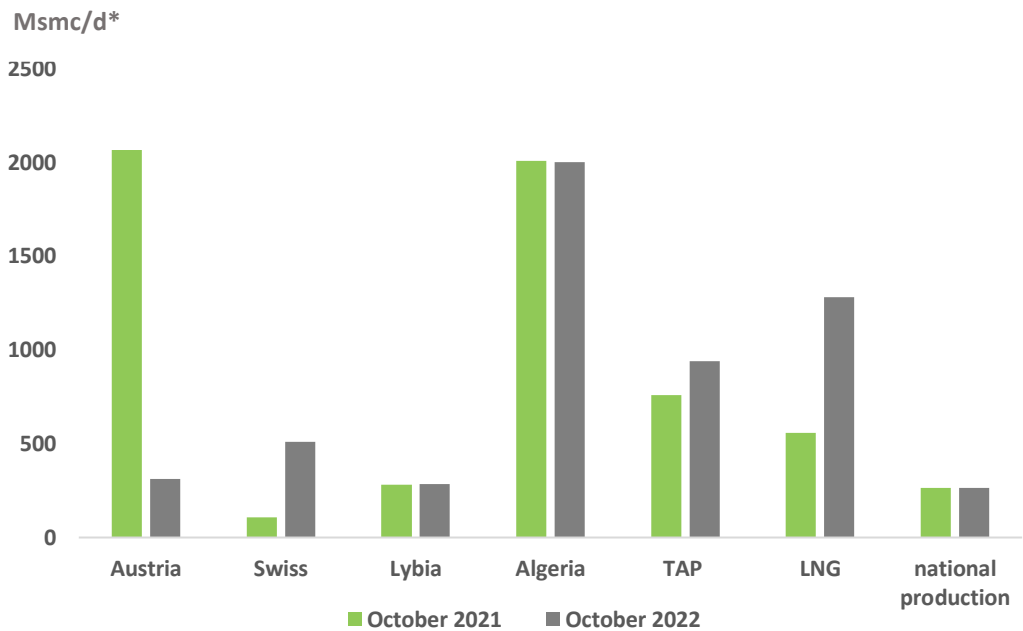


Several import sources with different gas qualities

Changes in the Italian natural gas supplies

Gas supply in October 2022

(indicative trend)



*GCV 10.57275 kWh/Sm3

Source: Snam Analysis

Main evidence



Strong reduction of Russian gas imports



Substantial imports from North Africa

Increased imports from Azerbaijan via TAP

Increase in LNG imports

Flexibility role of imports from North Europe



Do changes in gas supplies have an impact on gas quality?

Gas Quality impacts

No substantial changes in the GQ parameters

- Higher flows from south
- No relevant changes in the GQ
- Natural gas characterized by a high GCV value

GQ Analysis in south-center Italy

Gas Quality	JAN	OCT
Methane*	88,523	88,038
Helium*	0,071	0,042
Nitrogen*	1,303	1,890
Carbon Dioxide*	1,263	1,154
Ethane*	7,106	7,096
Propane*	1,287	1,329
i-Butane*	0,145	0,141
n-Butane*	0,196	0,199
i-Pentane*	0,049	0,049
n-Pentane*	0,045	0,043
Hexanes and sup. HC*	0,012	0,019
Gross Calorific Value**	39,96	39,82
Wobbe Index**	50,49	50,22
Relative density	0,62645	0,62842

GQ Analysis in north Italy

Gas Quality	JAN	OCT
Methane*	94,603	88,710
Helium*	0,019	0,028
Nitrogen*	0,608	1,670
Carbon Dioxide*	0,613	0,964
Ethane*	3,512	7,016
Propane*	0,458	1,190
i-Butane*	0,071	0,131
n-Butane*	0,072	0,185
i-Pentane*	0,019	0,049
n-Pentane*	0,018	0,040
Hexanes and sup. HC*	0,007	0,017
Gross Calorific Value **	38,75	39,85
Wobbe Index**	50,54	50,46
Relative density	0,58774	0,62352

Relevant GQ changes after no Russian gas

- Strong reduction/absence of Russian gas (with high levels of methane)
- Increase in LNG and flows from the south
- Increase in GCV (change in the “local” mix, converging to the Central-Southern levels)

* %MOLE
** MJ/Sm3

Thank you for your attention

Alejandra Casola Lopez

Gas Quality Expert

Mail: alejandra.casolalopez@snam.it

Salvatore Lanzilotti

Regulatory Development Expert

Mail: salvatore.lanzilotti@snam.it



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