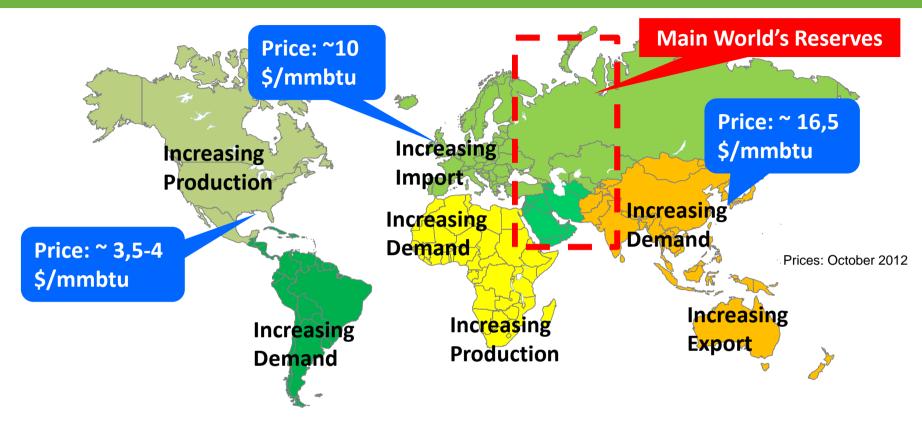
European Gas Security of Supply and the role of the Italian Gas System



World Economic Council

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From a Regional to a Global gas market?



The gas market, with the increasing role of LNG, could <u>potentially become a global market</u>. Nevertheless, today <u>markets display high price differentials</u>, well above transportation costs.

Big uncertainties on the globalization of the gas market rely mainly on:

LNG exports from North America (capability and policy)

EDISON

- China's import requirements (demand and domestic production)
- Gas Demand/Supply balance of traditional exporting countries (Russia; N. Africa)

A Globalization scenario (WEO 2012)

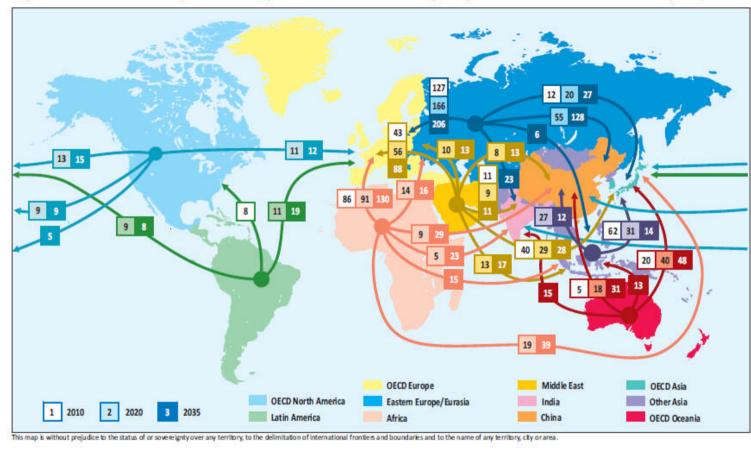


Figure 4.10 Net inter-regional natural gas trade flows between major regions in the New Policies Scenario (bcm)

Note: Trade volumes less than 5bcm are not shown.

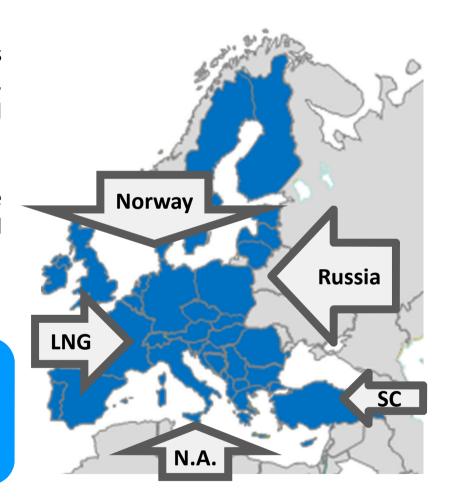
- Global Gas Demand driven by Non-OECD Countries
- Growing LNG trade with increasing role of US, Africa and Australia allowing also ME exports to shift towards Europe.



European gas demand/supply balance

- European additional import requirements will amount to approx. 150 bcm/y in 2030, driven by demand increase (post 2020) and drop of domestic production.
- Additional imports require the identification of new supply sources and routes/infrastructures.

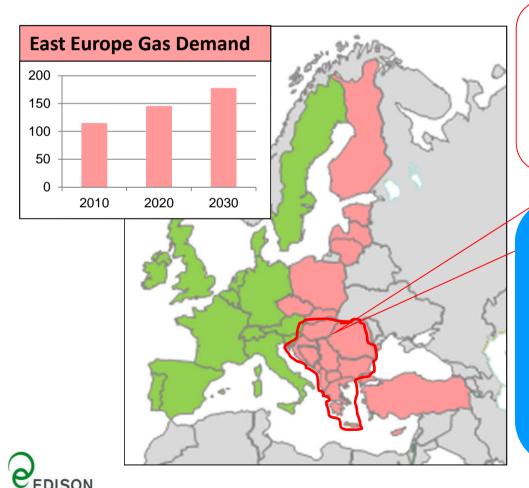
Assessment of European Security of Supply issues requires Sub-Regional understanding of Market dynamics





EAST Europe

- European gas demand growth is concentrated in East Europe.
- Large dependency on a single gas supplier.
- Limited production capabilities (shale gas potential in Poland).
- Limited contribution of LNG.



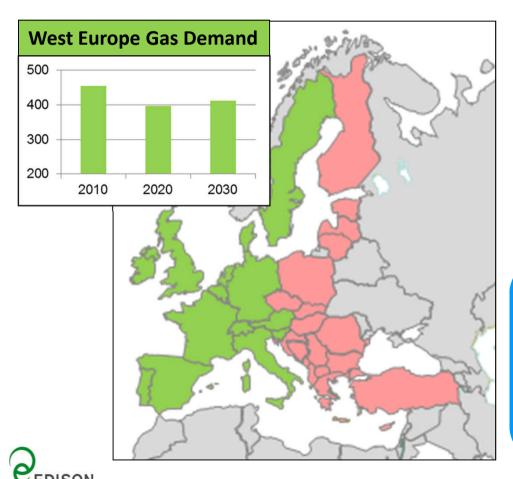
SEE countries, in particular, remain dependent mostly from a <u>unique</u> <u>infrastructure</u>, the pipeline from Russia through Ukraine, exposing the region to serious energy supply risks.

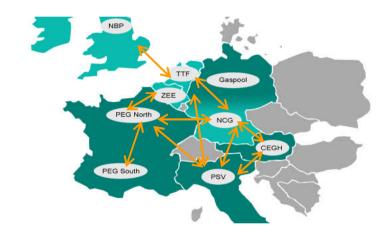
Priorities in East Europe are:

- i. to add and diversify routes and sources of gas supply
- ii. To maximize contribution of domestic productions
- iii. To secure participation to LNG global market

WEST Europe

- Gas consumption reduction/stability.
- Additional Import requirements driven by declining production.
- Most of the countries have access to diversified sources of gas.
- Insufficient level of intra-EU cross-border capacity availability and different levels of markets' liquidity represent the main obstacles to market integration.





The priority is to enhance availability of cross-border capacity by means of new infrastructures and regulations in order to foster the development of the Internal Gas Market

The Italian Gas System



---- Existing

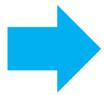
Under Construction

— — Authorised

The Italian gas system could provide significant contribution to European security of supply by evolving into a transit gas hub for Central and North-West Europe, leveraging on:



abundant and diversified
existing import capacity (4
pipes and 2 LNG terminals)



the existing interconnections with Central and North-West Europe suitable to re-export gas



several <u>new infrastructure</u> <u>projects</u> (2 pipes and 3 LNG) already authorised



The National Energy Strategy

The objective of transforming the Italian gas system into a transit hub for Europe has been included by the Italian Government among the priorities of the **National Energy Strategy** currently under public consultation.

In particular, the Government envisages a set of measures to favor the development of the Italian hub:

- Promote cooperation among Member States, NRAs and TSOs to ensure full utilization of capacity into adjacent systems (in particular of Transitgas)
- Build **strategic infrastructures** (mainly LNG terminals) to ensure capacity availability (to be paid by the system)
- Promote **reverse flow capacity** towards northern and central Europe
- 4 Establish a effective and liquid **Gas exchange** with spot and forward markets



Edison / EDF contribution to European gas supply security

