

Il futuro del gas tra dinamiche geopolitiche e sfide ambientali

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Index

1. Energy transition and gas: new global trends
2. Geopolitics : new regions for gas
 - The evolution of price formation
3. UE: diversification of sources

1. GLOBAL TRENDS: new elements

In the “energy transition” gas will remain a crucial resource for a long time

The drivers:

- Climate change
- Technology (volumes and costs)
- Transport revolution (shipping *versus* pipelines)

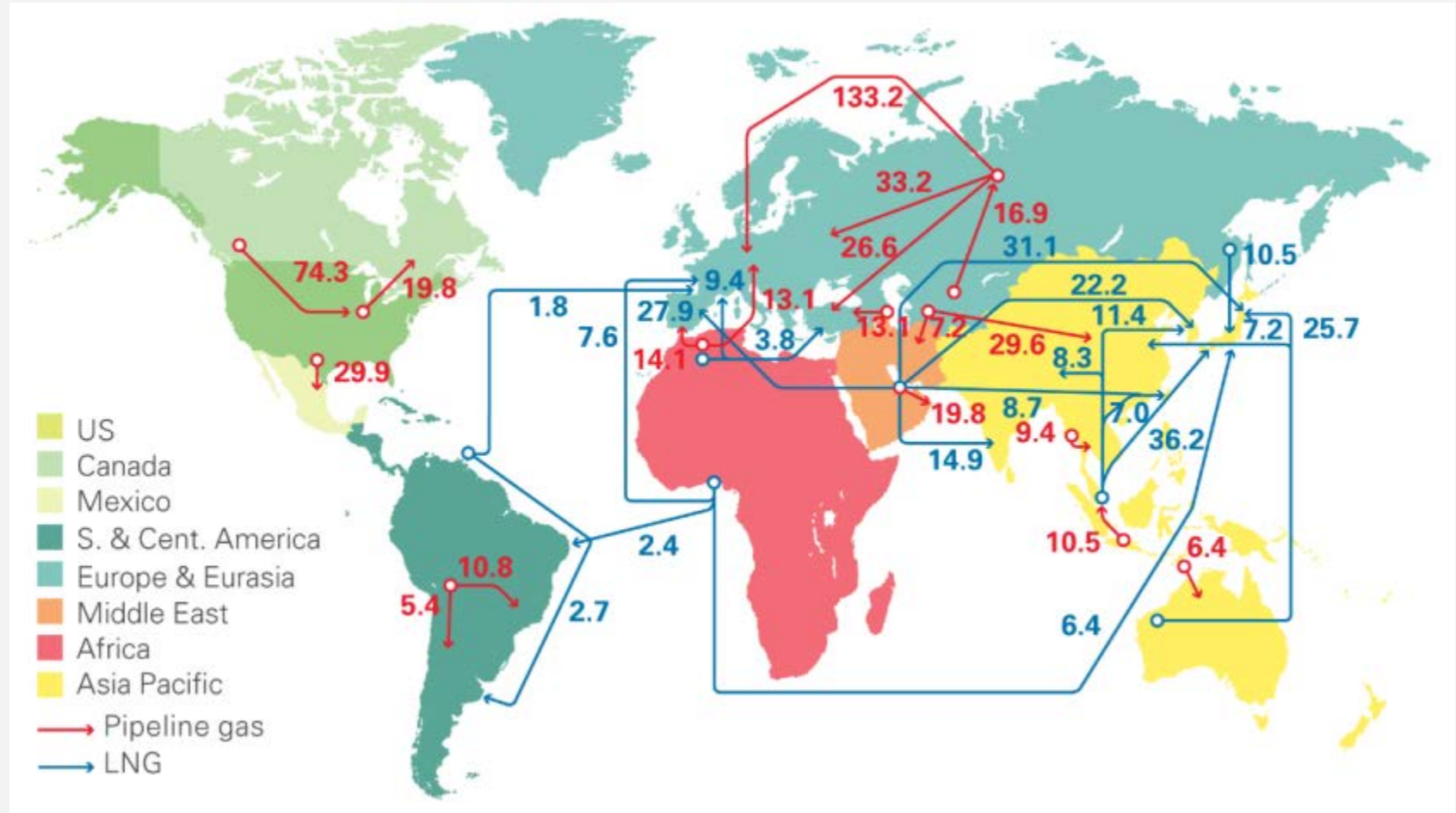
➔ Import – export: changing gas regions

LNG game changers

- **FLEXIBILITY OF SUPPLY (shipping):**
 - *portfolio traders (volumes follow prices)*
 - *flexibility of destination (ships)*
 - *short terms*

- **EVOLUTION of PRICE FORMATION**

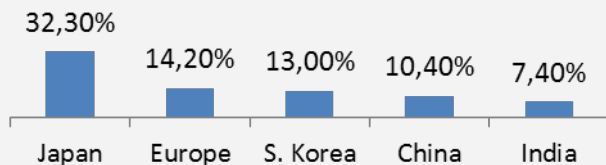
Global gas trade – shipping vs pipeline



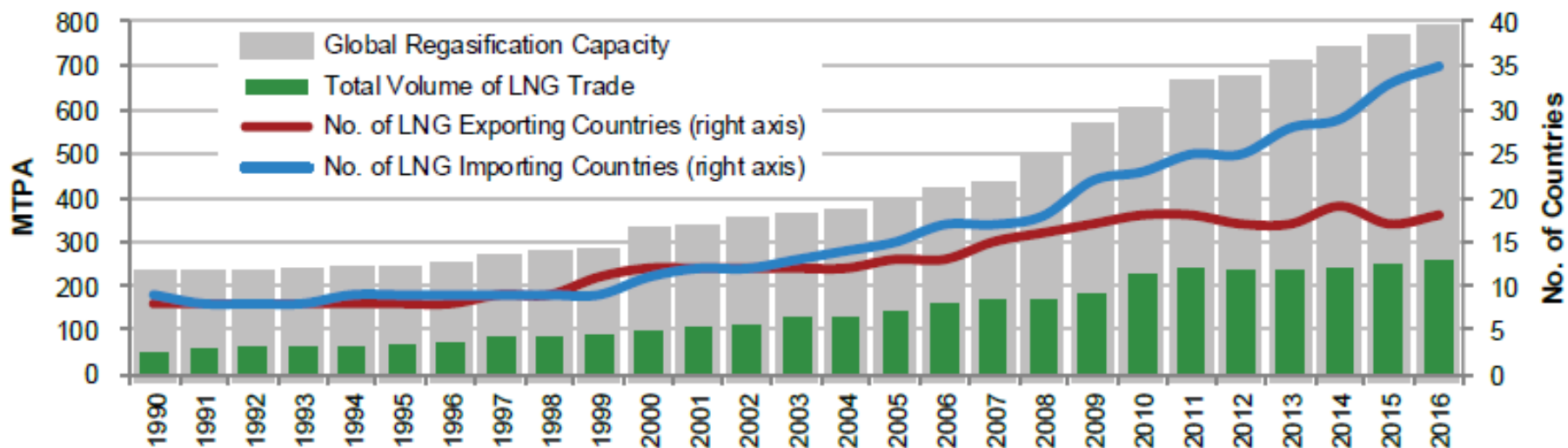
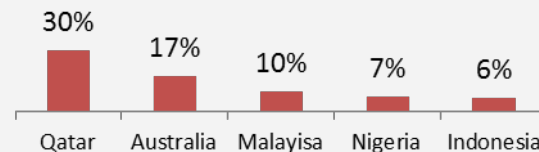
Fonte: BP Statistics 2016

LNG trade volumes (2016)

LNG Import

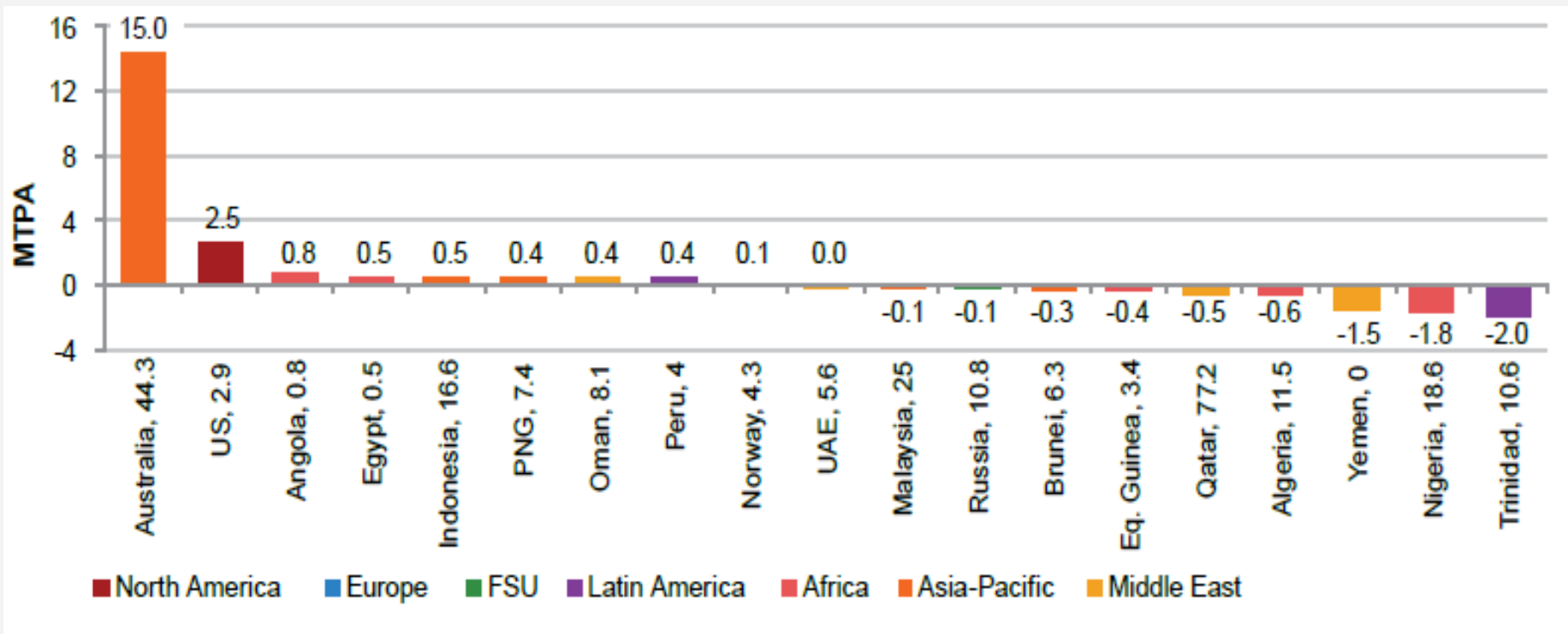


LNG Export



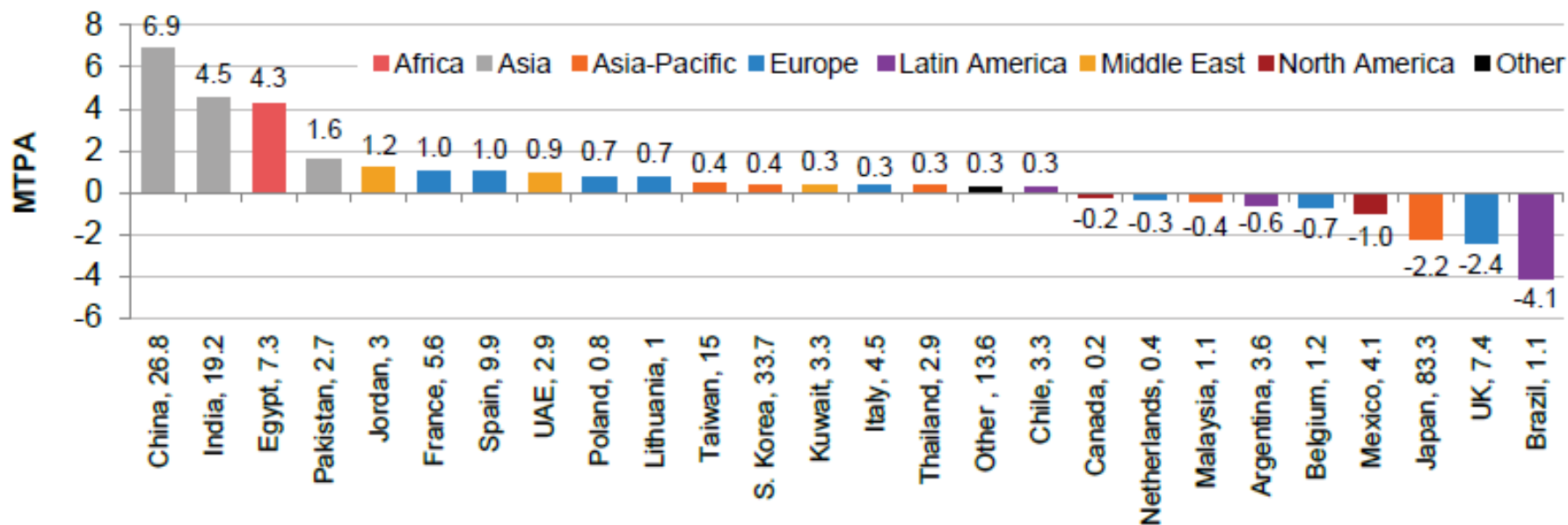
Source: IGU World LNG Report 2017

Changes: incremental LNG exports (2015)



Source: IGU World LNG Report 2017

Changes: incremental LNG imports (2015)



Source: IGU World LNG Report 2017



2. Geopolicy : new regions for gas (China, Russia, USA, Europe)

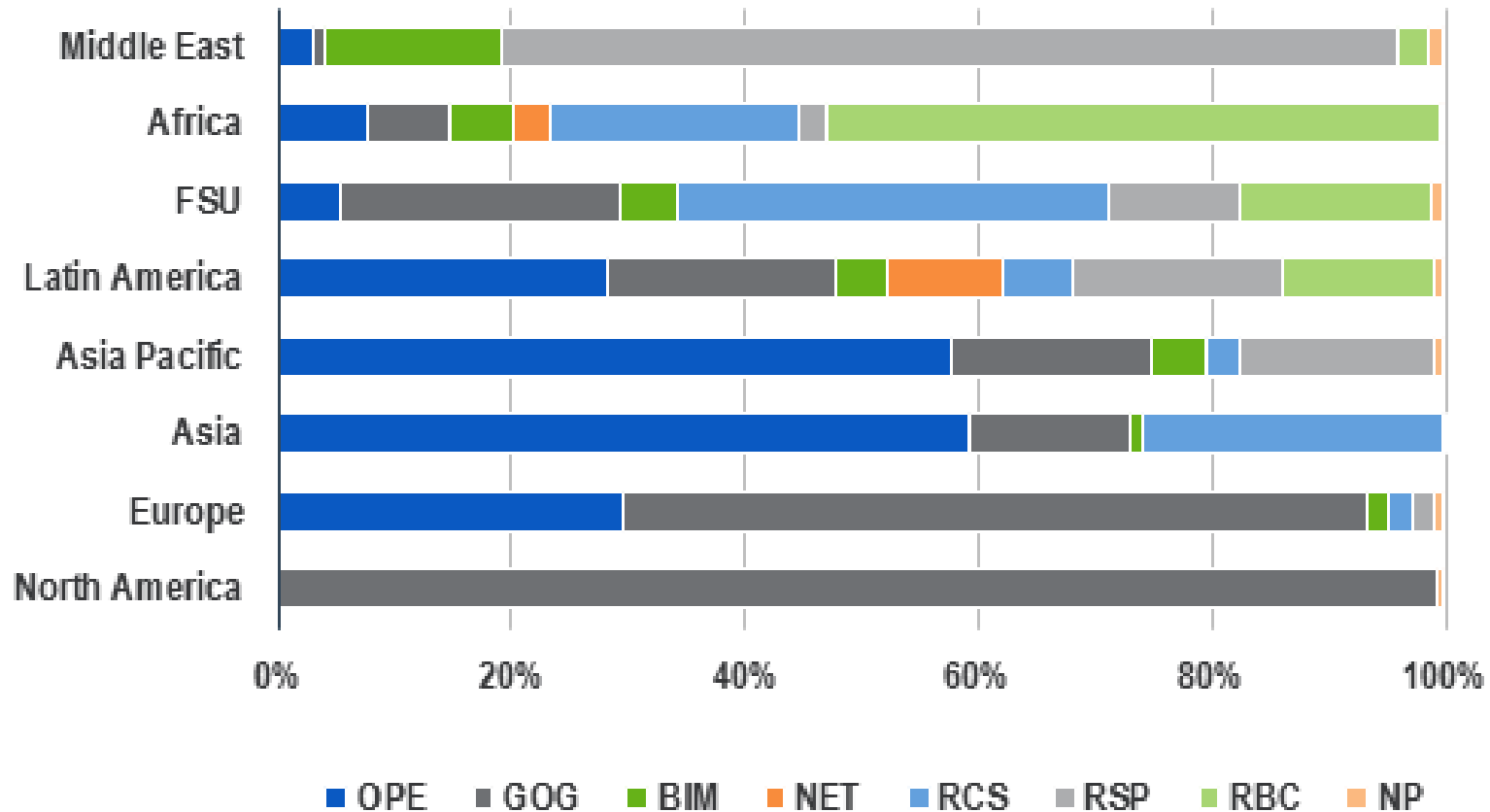
The evolution of price formation



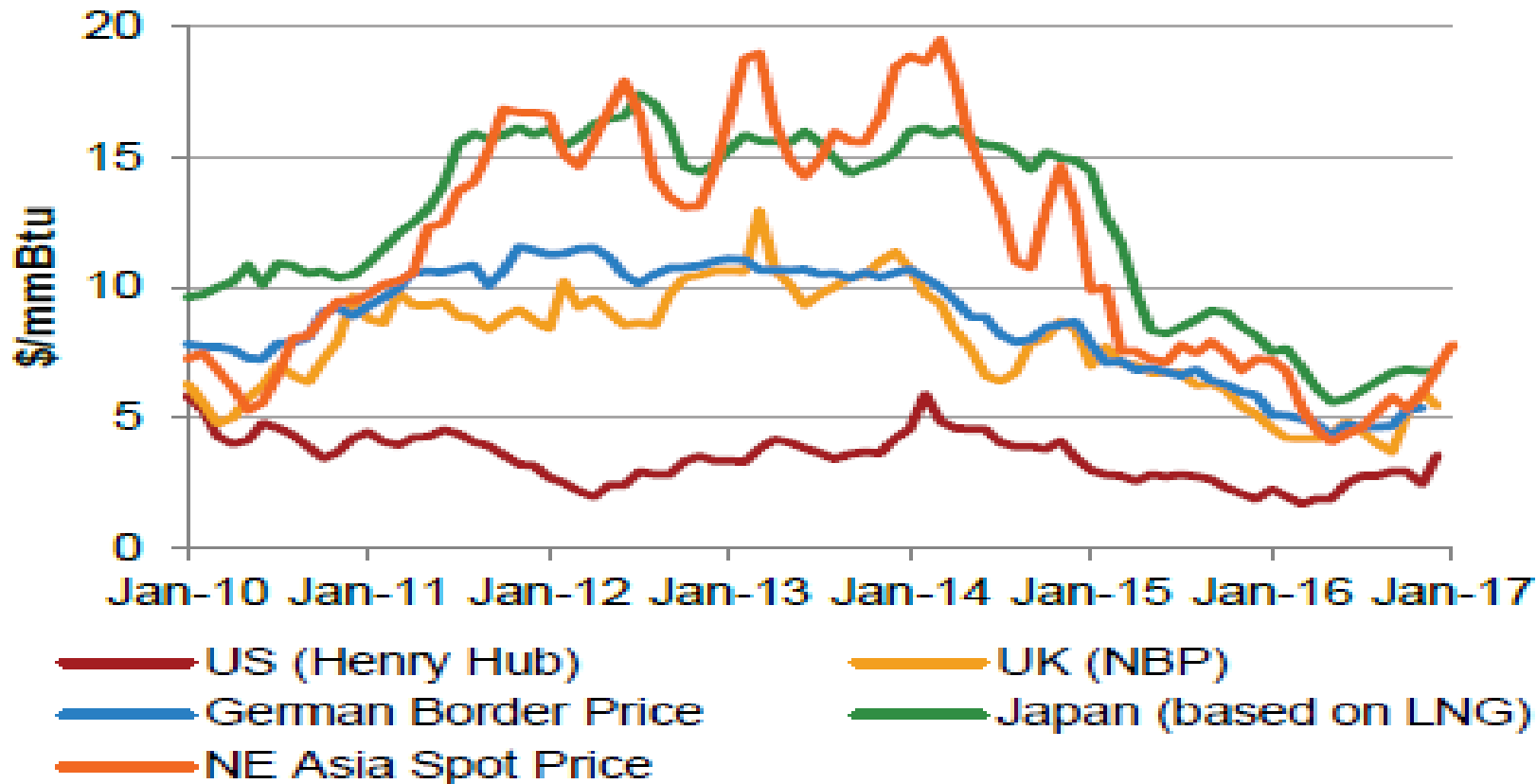
Types of Price Formation Mechanisms (PFM)

- **Oil Price Escalation (OPE)**
- **Gas-on-Gas Competition (GOG)**
- **Bilateral Monopoly (BIM)**
- **Netback from Final Product (NET)**
- **Regulation: Cost of Service (RCS)**
- **Regulation: Social and Political (RSP)**
- **Regulation: Below Cost (RBC)**

Regional Price Formation 2015 – Total Consumption

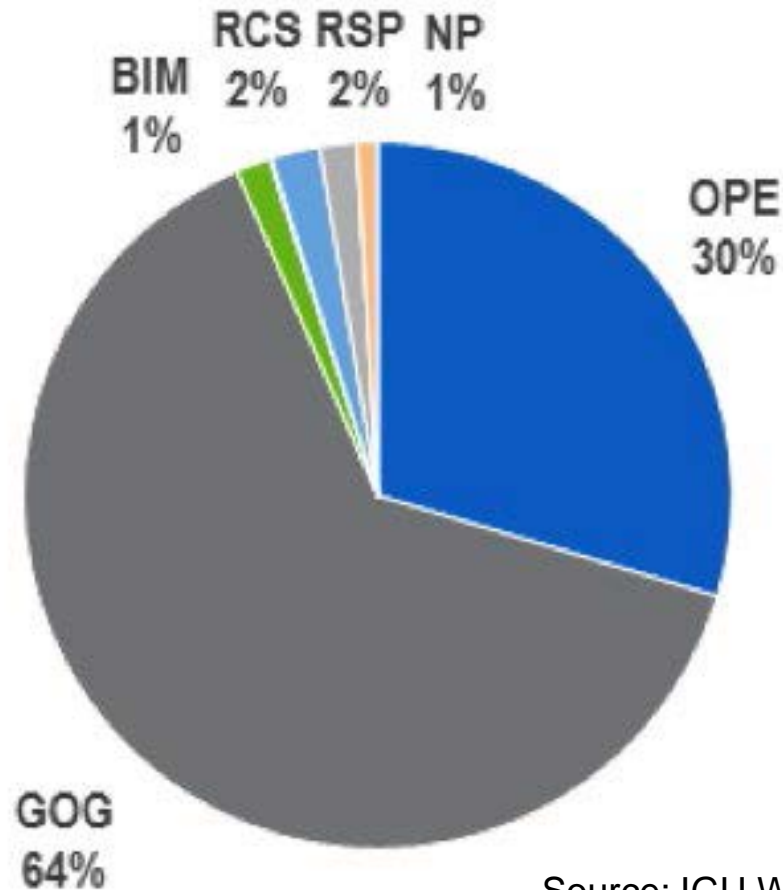


Average Regional Gas Prices



Sources: IHS, Cedigaz, US DOE

Europe Price Formation 2015

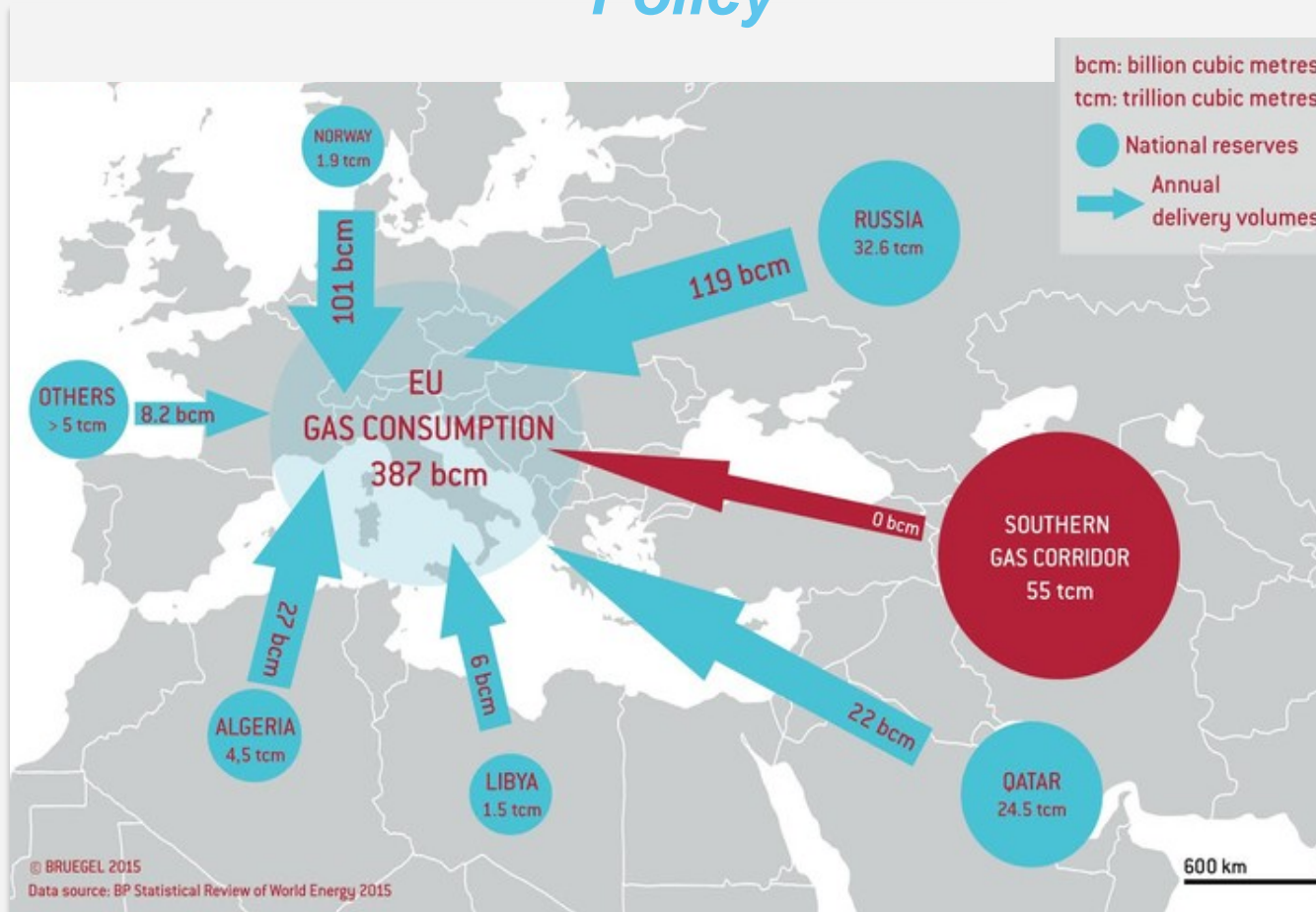


Source: IGU World LNG Report 2017

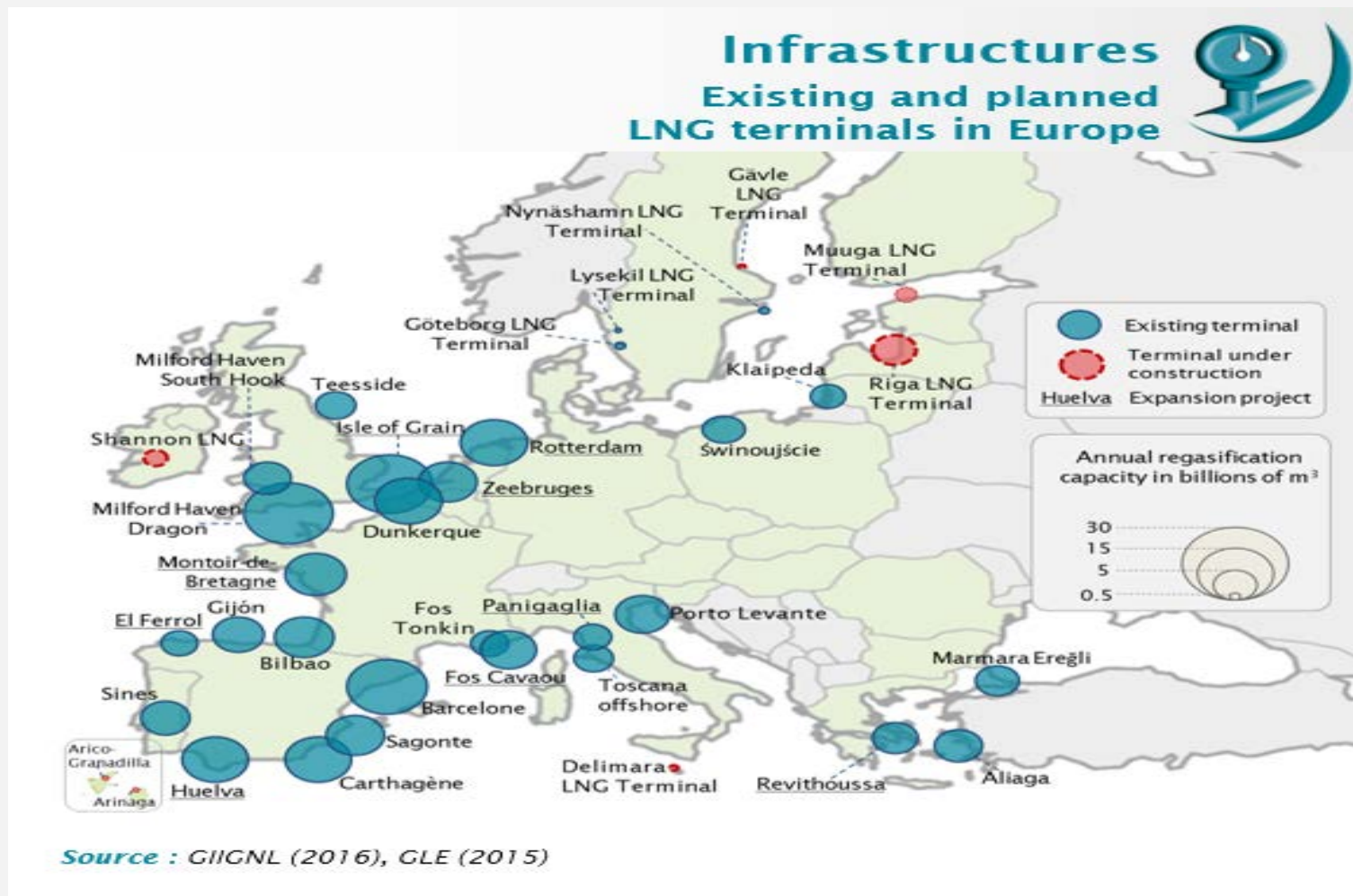
3. UE: diversification of sources

EU Energy Union

Policy



Existing & Planned LNG Terminals in Europe



EU Energy Union *Regulation*

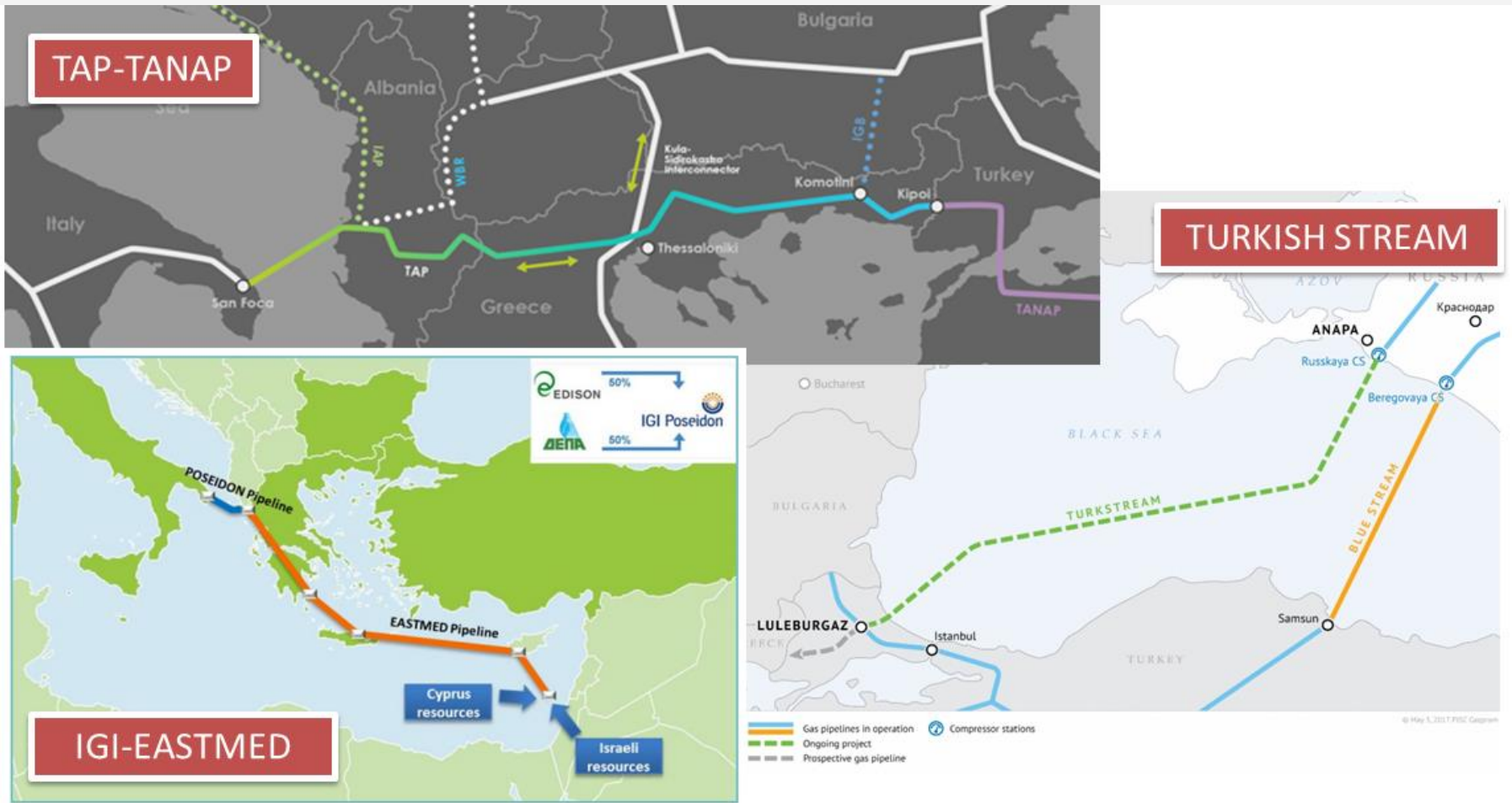
- **Reverse flow projects along existing pipelines**
- **New infrastructure projects for North-South corridors**
- **EU strategy for liquefied natural gas and gas storage**
 - *Competition*
 - *Increased security of supply*



Mediterranean Energy Context



Southern corridor: main projects



Gas Context : Discoveries

Name	Country	Discovery	Size (bcm)
Gaza Mar.	Palestinian Terr.	1999	28
Mari-B	Israel	2000	28
Tamar	Israel	2009	280
Dalit	Israel	2009	14
Leviathan	Israel	2010	620
Aphrodite	Cyprus	2011	130
Tanin	Israel	2012	34
Tamar SW	Israel	2013	26
Karish	Israel	2013	51
Royee	Israel	2014	91
Zohr	Egypt	2015	850

