

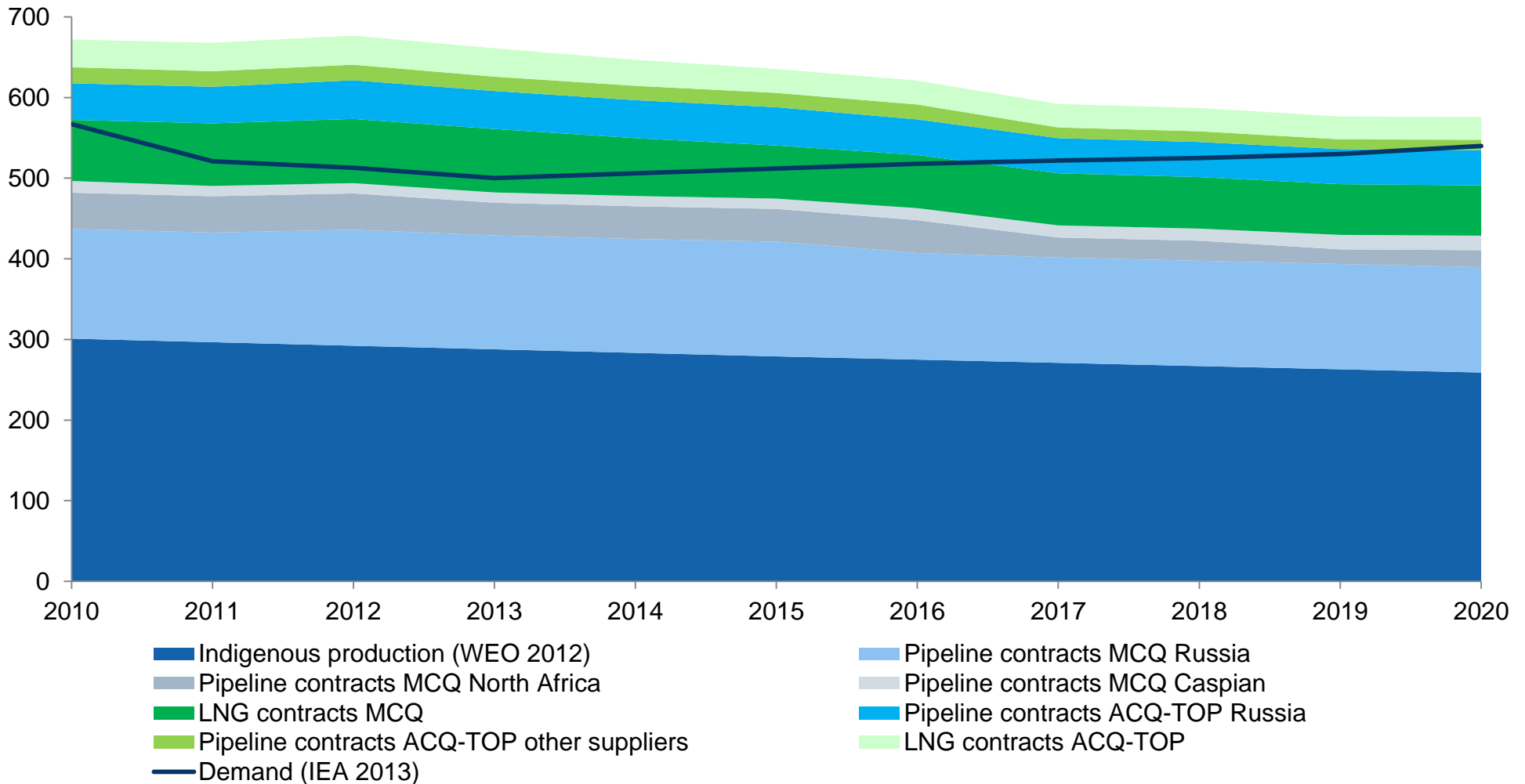
European gas markets – towards new pricing arrangements: producers` perspective on the hybrid pricing model

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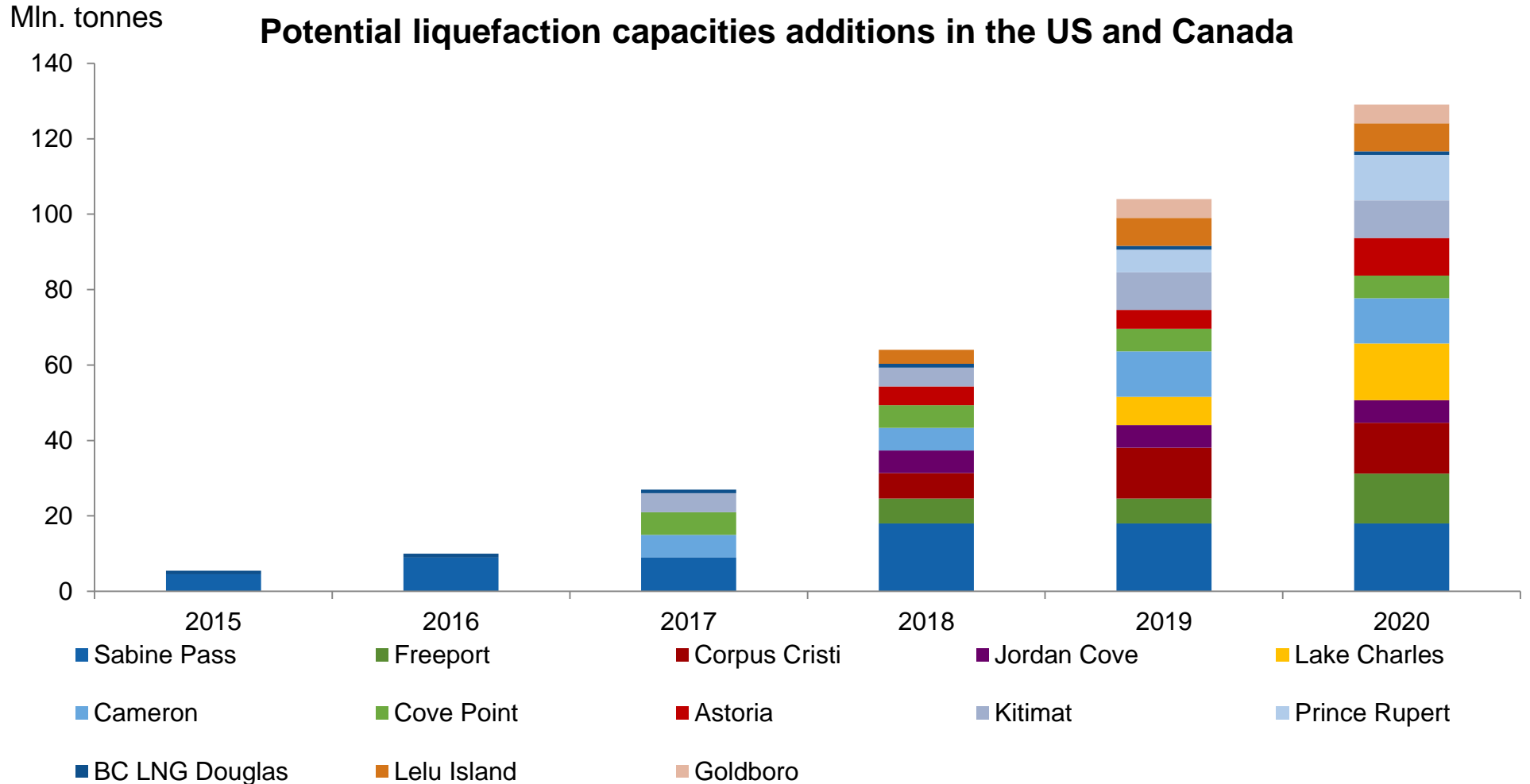
Dusseldorf
August 19, 2013

No free market niche in Europe until 2020



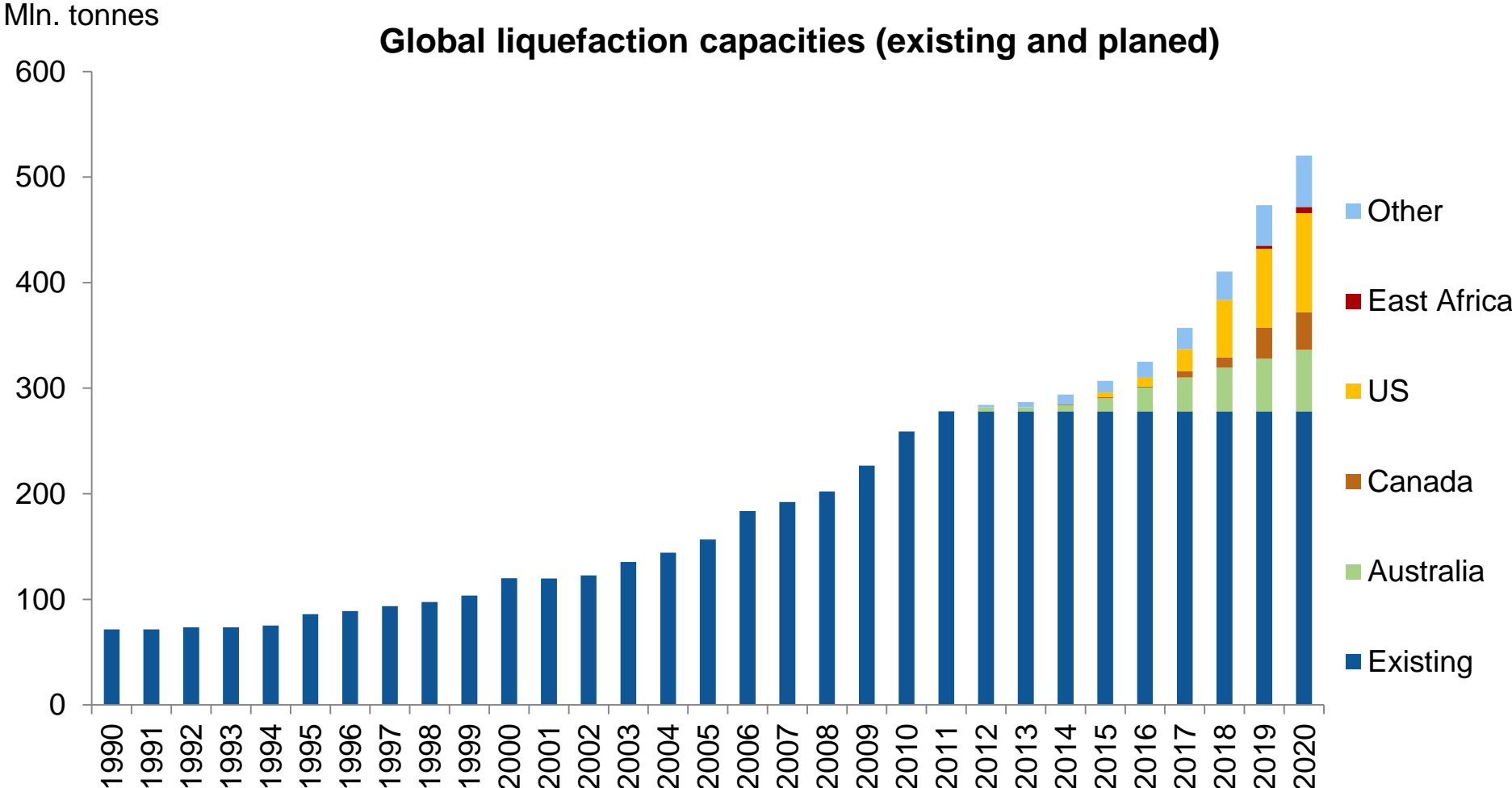
Source: WEO2011, IEA; Cedigaz; ERI RAS.

We don't know the future US (and Canadian) LNG export volumes



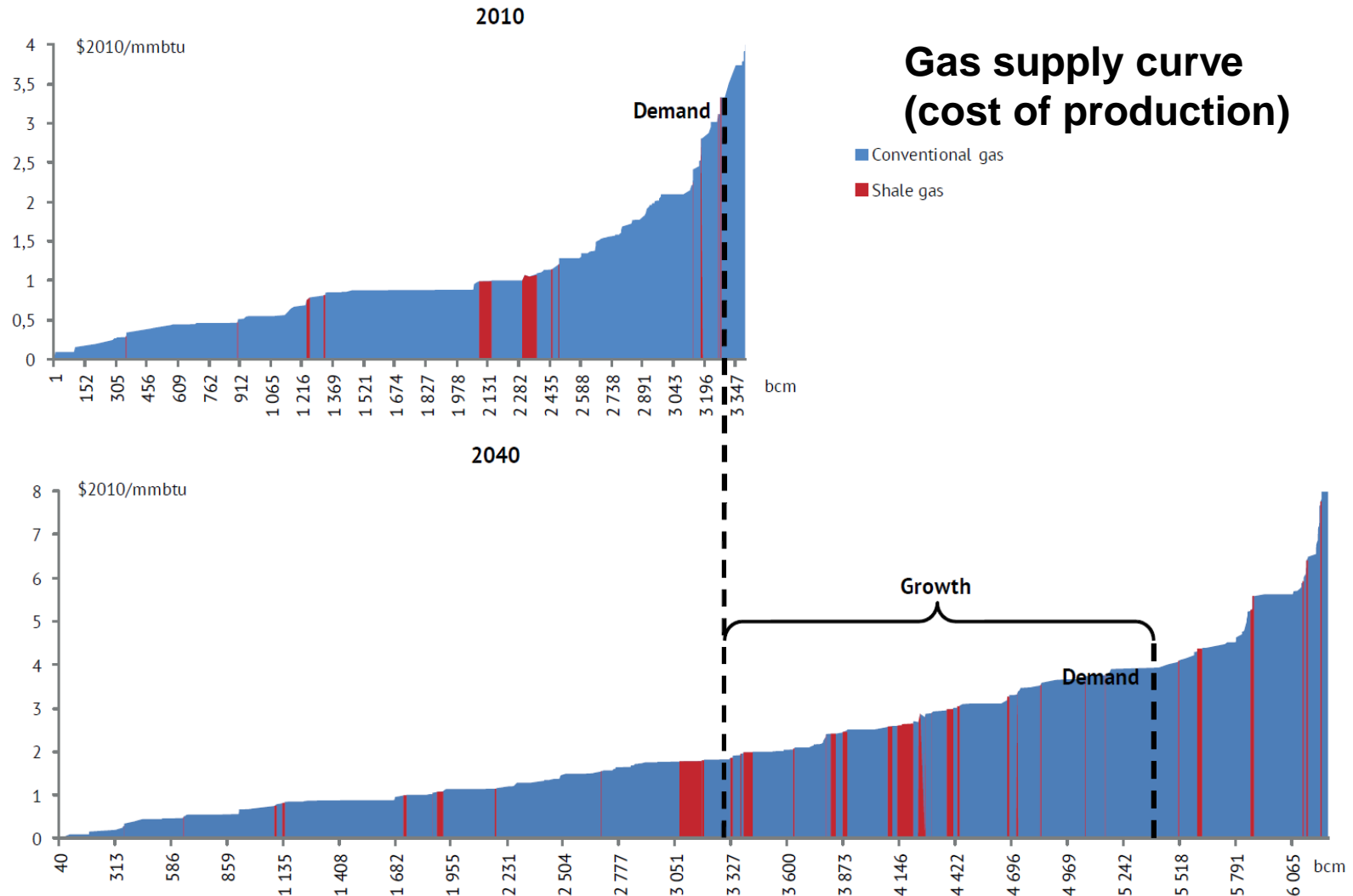
Source: ERI RAS

Global LNG supply is expected to boom during the next decade



Source: ERI RAS

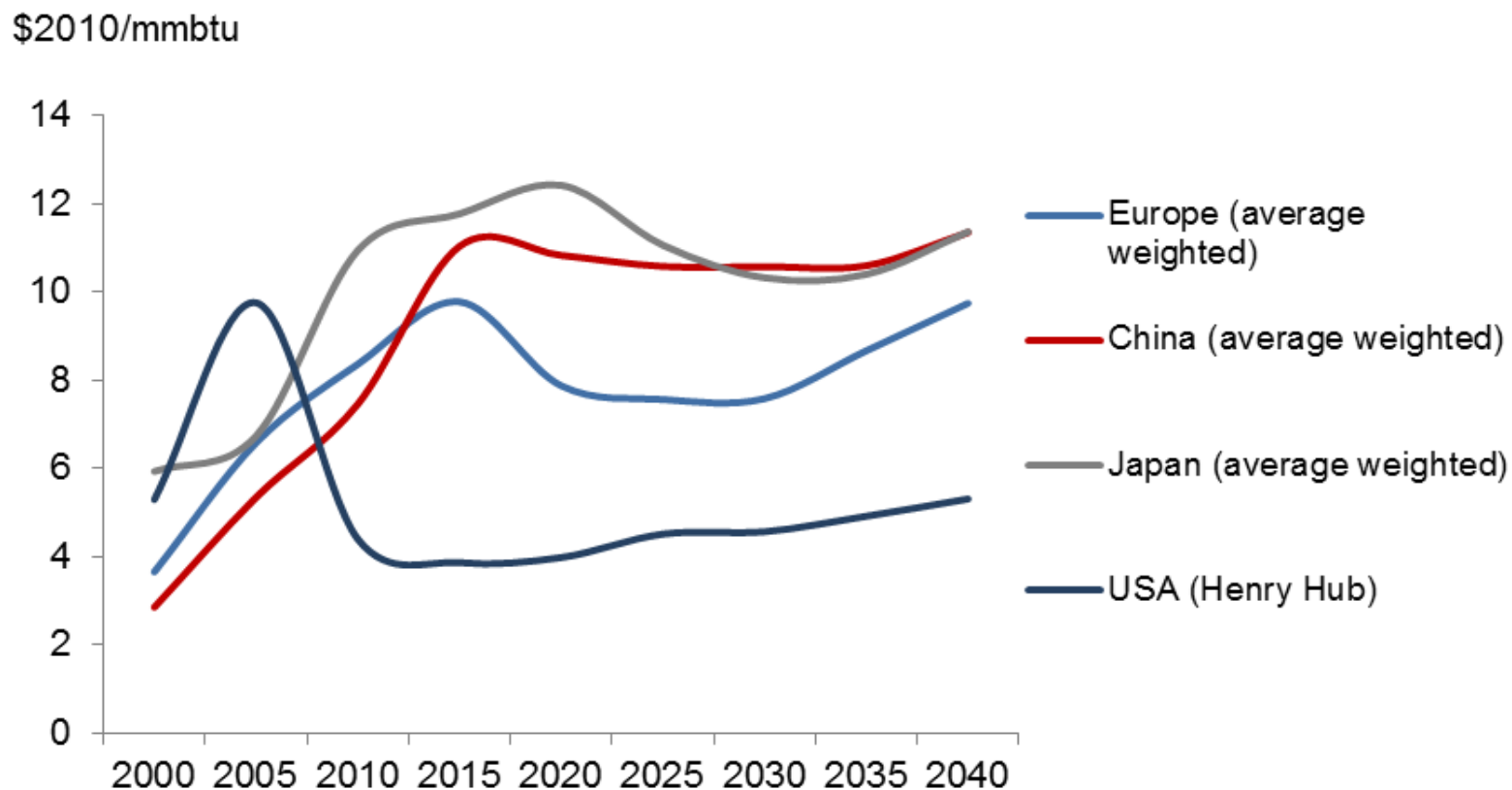
It seems that there is enough gas to expand gas production by 2 tcm by 2040 at the production costs below 4 \$/MBtu



Source: Global and Russian Energy Outlook up to 2040. ERI RAS-AC. 2013.

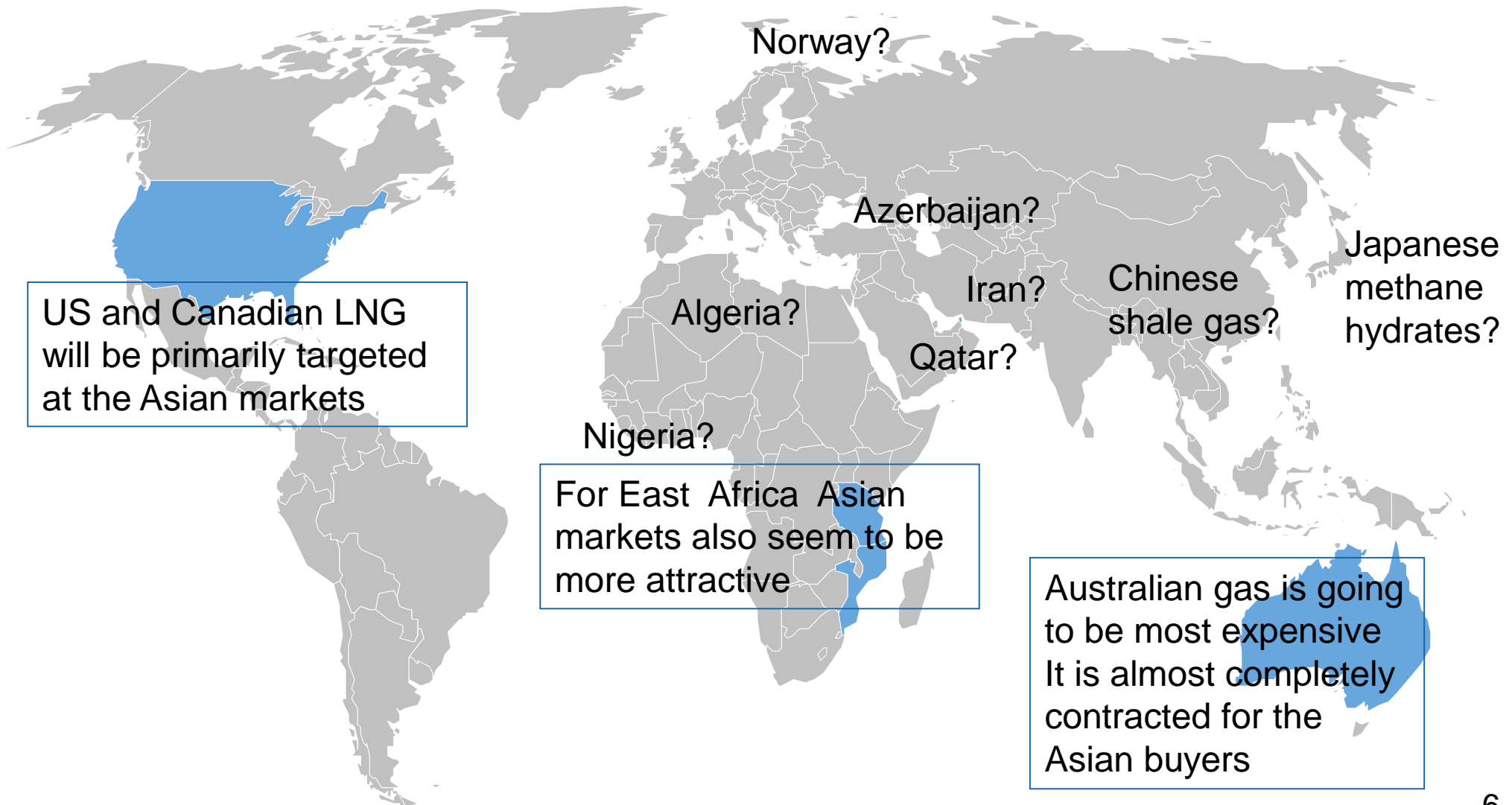
Regional equilibrium gas prices are not expected to grow

Average weighted regional prices* of gas

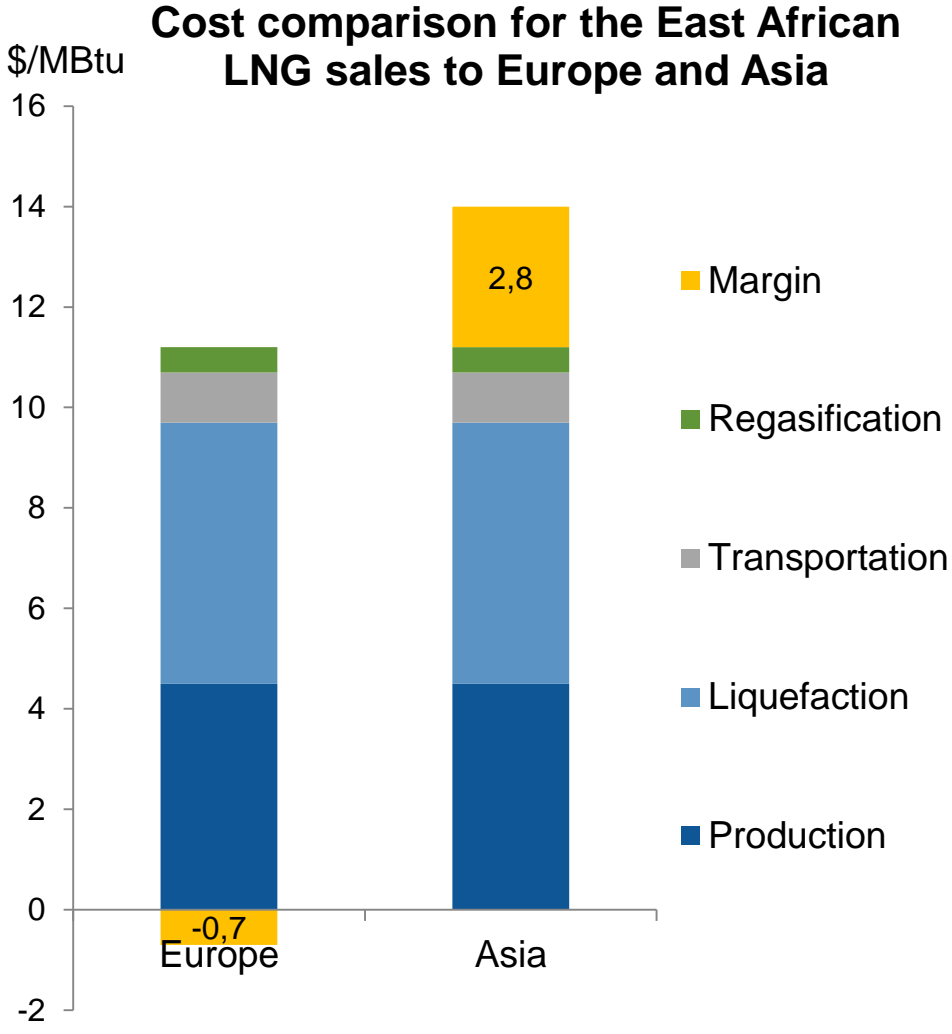
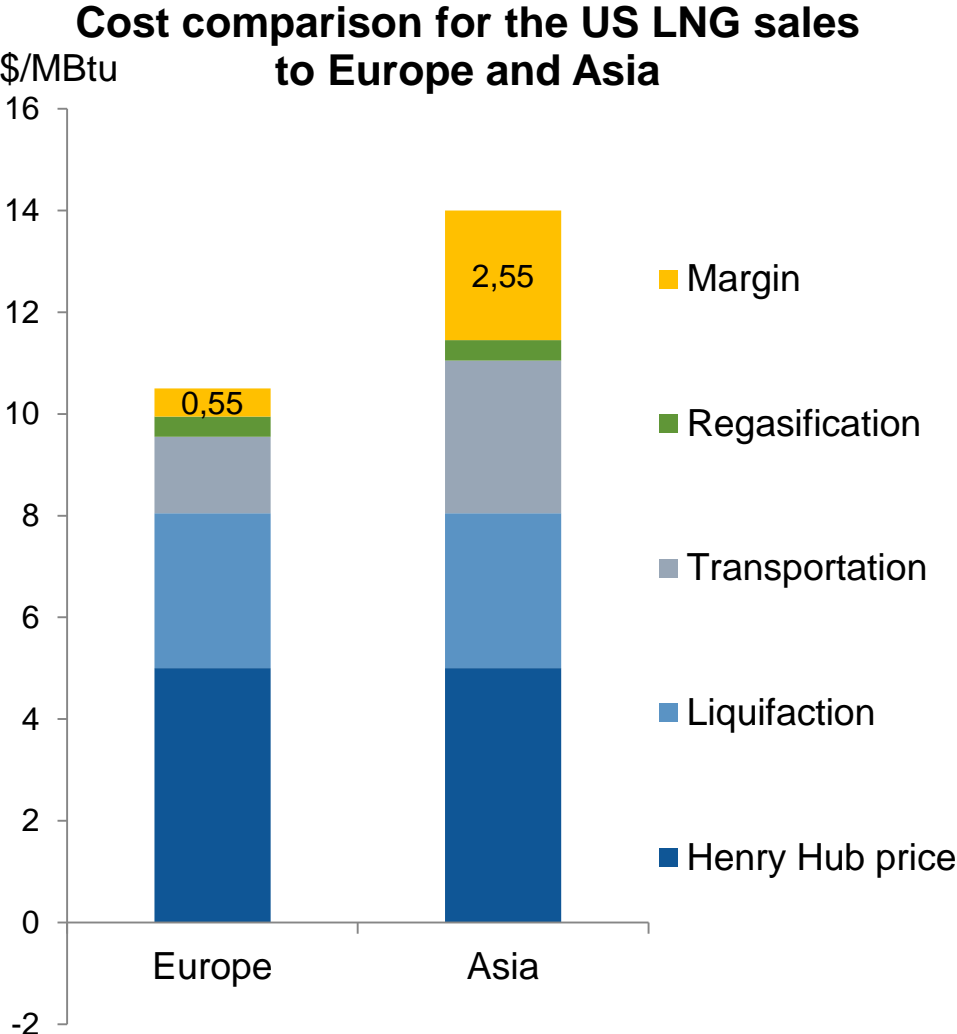


* Weighted average price between the prices of long-term contracts linked to alternative fuels, and spot prices.

Devil is in the details: new additional gas to Europe - where will it come from?



Both for the North American and for East African LNG Asia seems to be much more attractive market



Source: ERI RAS

Is there any "plan B"? What if...

- » Economic recovery will be faster than expected?
- » Energy efficiency targets are not achieved?
- » Indigenous production will decline faster than expected (like in the UK)?
- » Offshore wind and nuclear plans will fail?
- » Under-investment in gas production during the crisis increases?
- » There will be rapid demand growth in Asia and Europe will not be able to propose prices competitive with the Asian market in order to attract LNG volumes?
- » Domestic demand will be expanding even faster in MENA?
- » CCS is not commercial by 2020?
- » Alternatives (Southern Corridor, LNG including US, domestic shale gas) will not come in time and at lower price than Russian imports?



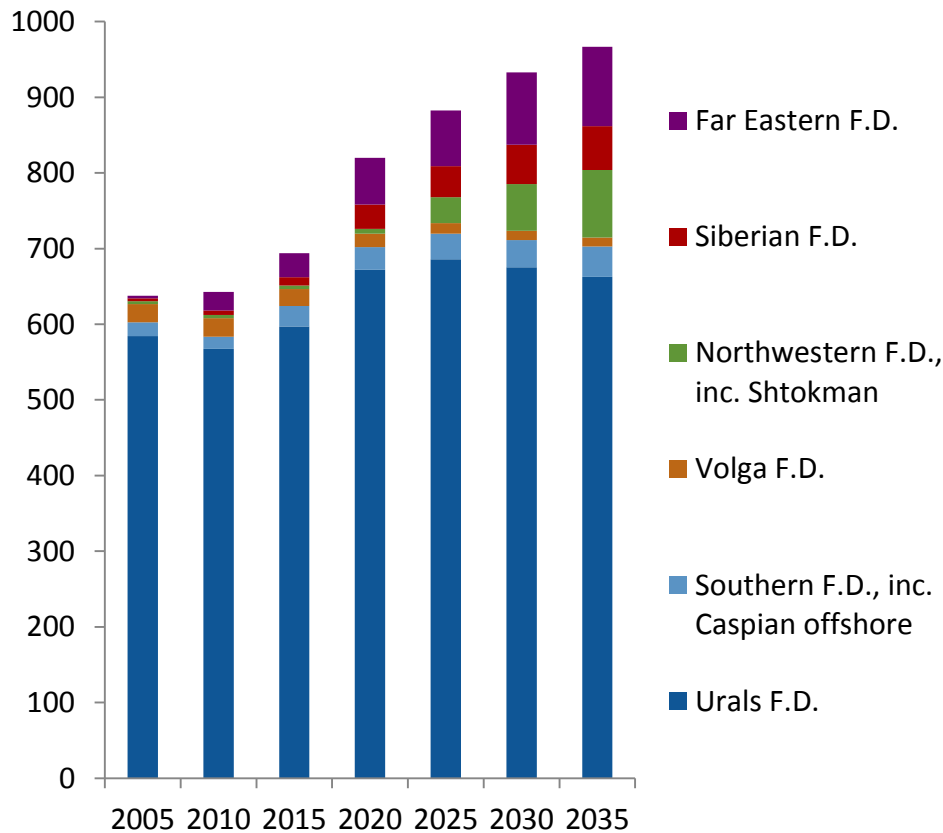
There are potentially numerous gas supply sources to Europe, but by the end of the day only few of them will work. Russian long-term contracts are insurance in case “if something goes wrong” – it will be called upon after some other options have not materialized. It`s better to have your options open, just in case...

Evolution of the Russian gas export strategy: what will be the Russian response?

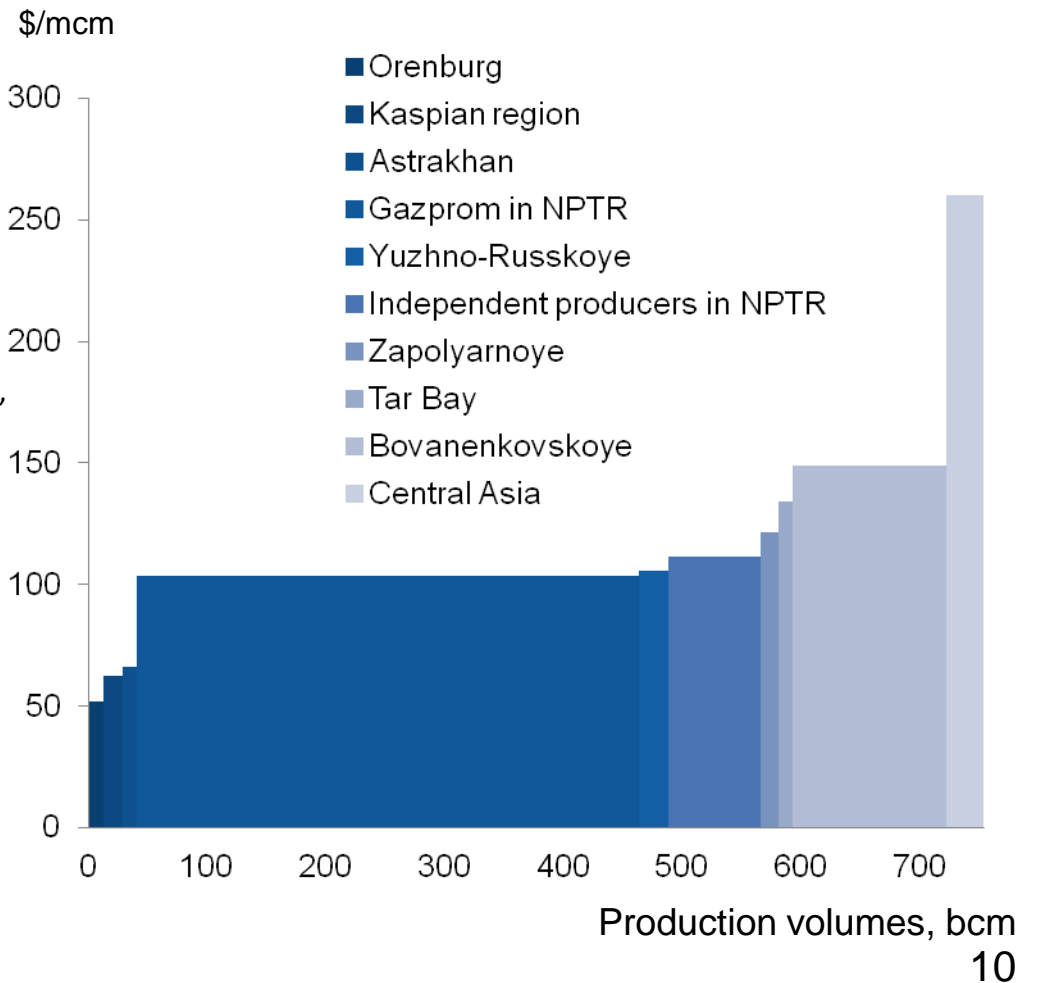


Russian production will increase, but this is going to be more expensive gas

Long-term Russian gas production forecast



Cost of gas supply to central Russia in 2020



Gazprom's strategic choice



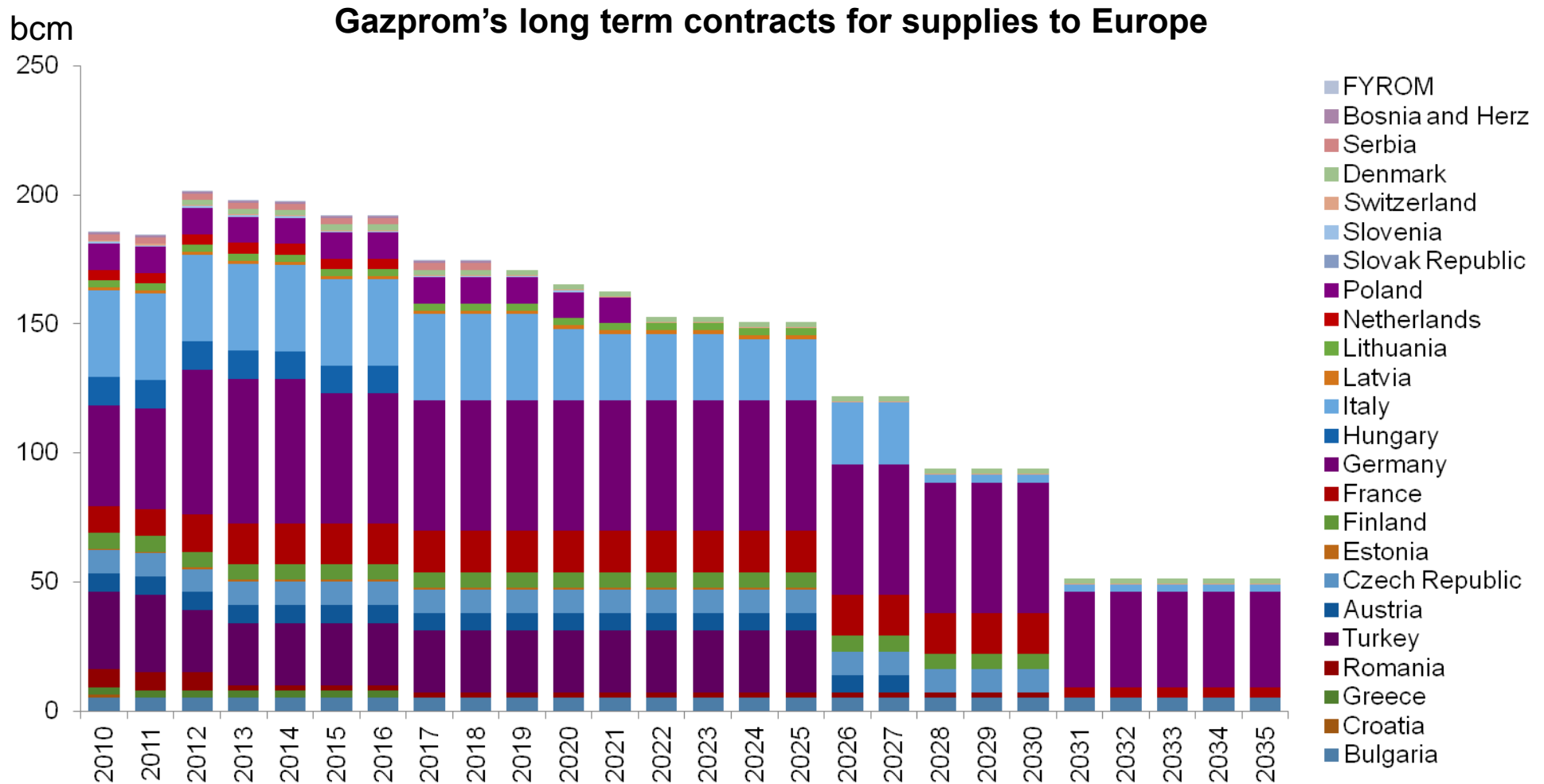
We were faced with the choice of whatever was **to maintain the supply volumes and the market share, or make the profit our high priority.**

As a public and commercially oriented company, Gazprom is interested in increasing profits to provide income to shareholders. Therefore, **the choice was made, the correct one, in favor of the revenues,** and the year results confirmed that.



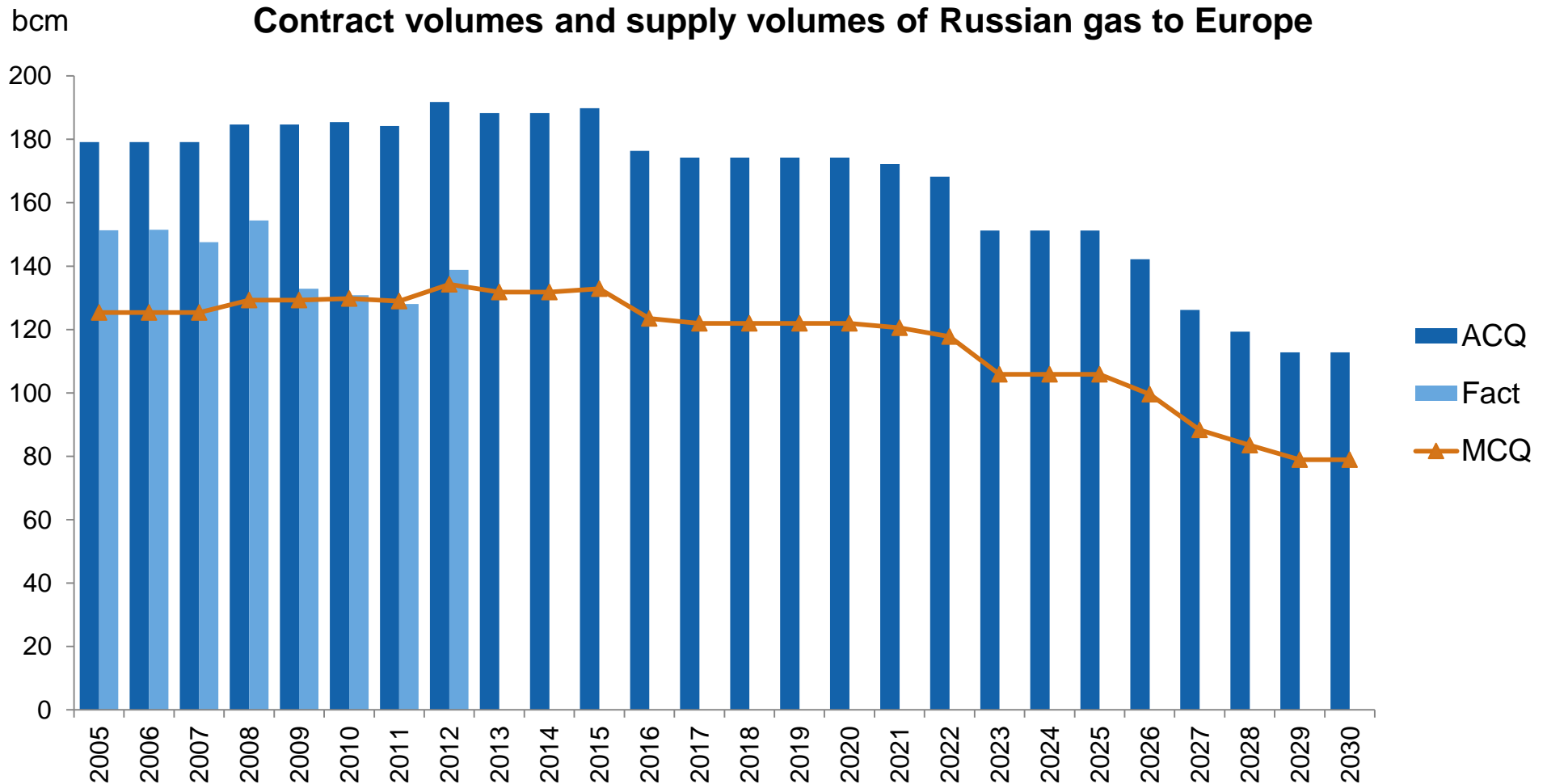
*Alexander Medvedev,
Gazprom Export*

Gazprom has a huge portfolio of oil-linked long term contracts for supplies to Europe for the next 25 years and longer



Source: Enerdata, ERI RAS..

Existing long-term contracts guarantee stable sales volumes for Russia until at least 2022



Sources: Cedigaz, Gazprom, ERI RAS.

Gazprom`s contracts renegotiations

| Company and Country | Contracted Volumes (bcm) | Contract Status |
|---------------------|--------------------------|--|
| Italy | | |
| Edison | 2,0 | The Parties agreed on a discount (70 \$/mcm acc. to Morgan Stanley). Total compensation of €200 mln. for FY2011. |
| Eni | 3,0 | 15% spot pricing |
| ERG | N/A | 15% spot pricing |
| Sinergiitaliane | N/A | 15% spot pricing in 2009. Price discount (lower P0) in 2012. |
| Germany | | |
| E.ON | 20,0 | 15% spot pricing in 2009. Price revised down by 10% in 2012. |
| RWE | 8,0 | Lawsuit in arbitration. |
| Verbundnetz Gas | 6,4 | Discount negotiated |
| BASF | N/A | In negotiations with Gazprom |
| Wingas | | Price discount (lower P0) in 2012 |
| Baltics | | |
| Estonia | 0,4 | 15% discount granted |
| Latvia | 0,7 | 15% discount granted |
| Lithuania | 2,7 | Demands a 15% discount |
| Others | | |
| PGNiG(Poland) | 9,0 | Demands a 10% discount, lawsuit filed to Stockholm arbitration Court |
| Botas(Turkey) | 6,0 | 6,5% discount granted in 2009. 10% discount granted in 2011. Turkey declined to extend the expiring contract. |
| GDF Suez (France) | 8,0 | 15% spot pricing in 2009, price discount (lower P0) in 2012 |
| Econgas (Austria) | 5,6 | 15% spot pricing in 2009. In 2012 price discount (lower P0) |
| SPP (Slovakia) | N/A | Price discount (lower P0) in 2012 |

Sources: MorganStanley. press

Arguments: oil indexation vs. gas indexation

Oil indexation

- Disappearing gas glut on the European gas market in the medium term – gap between oil-indexed and spot prices will narrow
- Arbitration lasts for several years
- Gazprom will face price reopening and contract expiration only after 2015
- With high oil prices even lower sales volumes are providing high revenue
- New projects need high prices
- Oil indexation is needed for the project financing

Spot indexation

- Strong pressure from the customer side
- Gazprom could demand financial compensation for contract review + 3rd Package exemption for the South Stream and NEL + transitional period for price adjustments + European-level financial support for its mega-projects (like EBRD and other European financial institutions)
- Gazprom could become a dominant player dictating prices at the spot market by changing its supply volumes

There are strong commercial reasons for Gazprom to protect the oil indexation at least during the next 3 years

Contacts

Energy Research Institute of the Russian Academy of Sciences

"Global and Russian Energy Outlook up to 2040"

http://www.eriras.ru/files/Global_and_Russian_energy_outlook_up_to_2040.pdf

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