

# Russian Oil and Gas: At a Crossroad

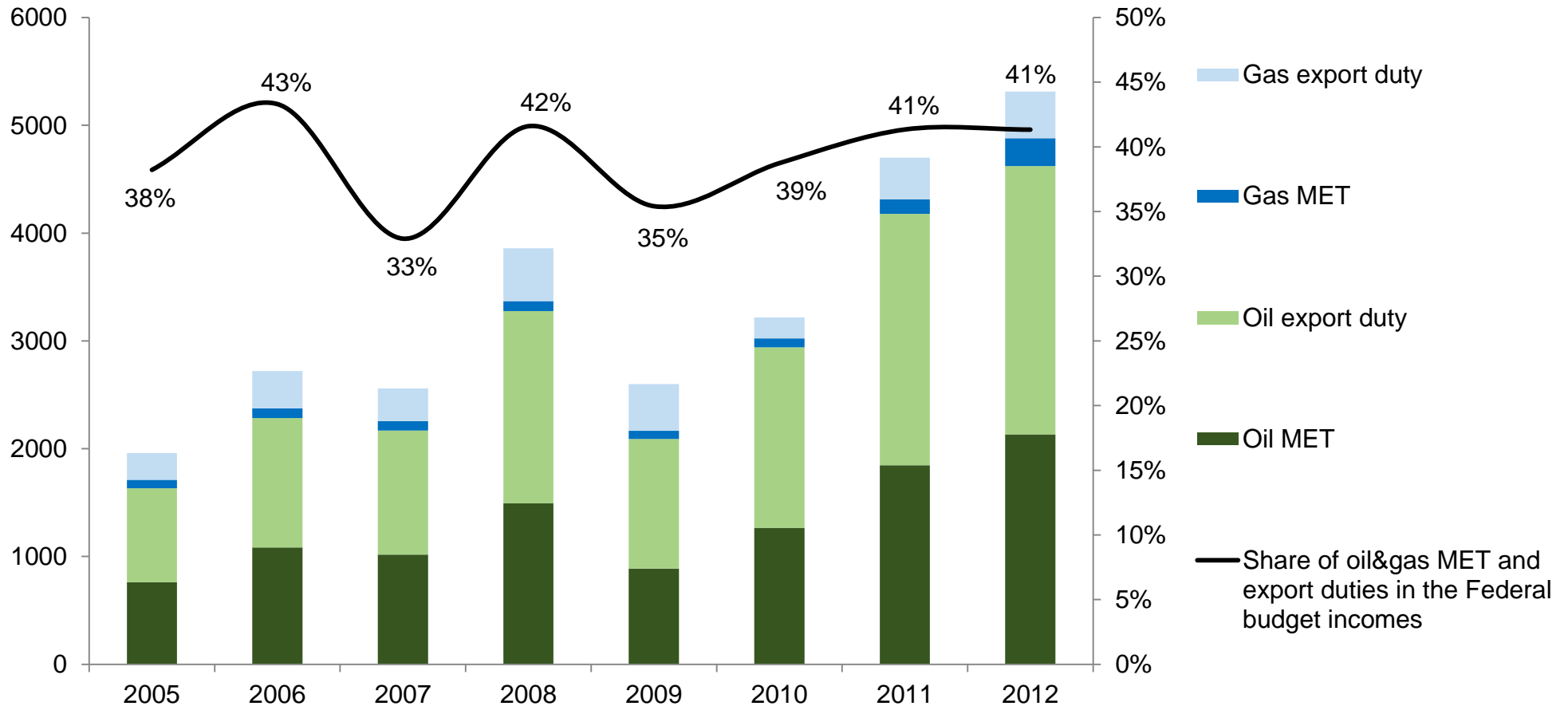
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Energy Research Institute of the Russian Academy of Sciences



London  
September 6, 2013

# The role of oil and gas for the Russian Federal budget is huge and it is growing: 40% in 2012 compared to 9% in 2000

## Oil and gas taxes and duties in the Russian Federal budget



Source: <http://www.roskazna.ru/reports/fb.html>

**1**

**CHANGING GLOBAL GAS MARKETS: IMPLICATIONS FOR THE RUSSIAN GAS EXPORTS TO EUROPE**

**2**

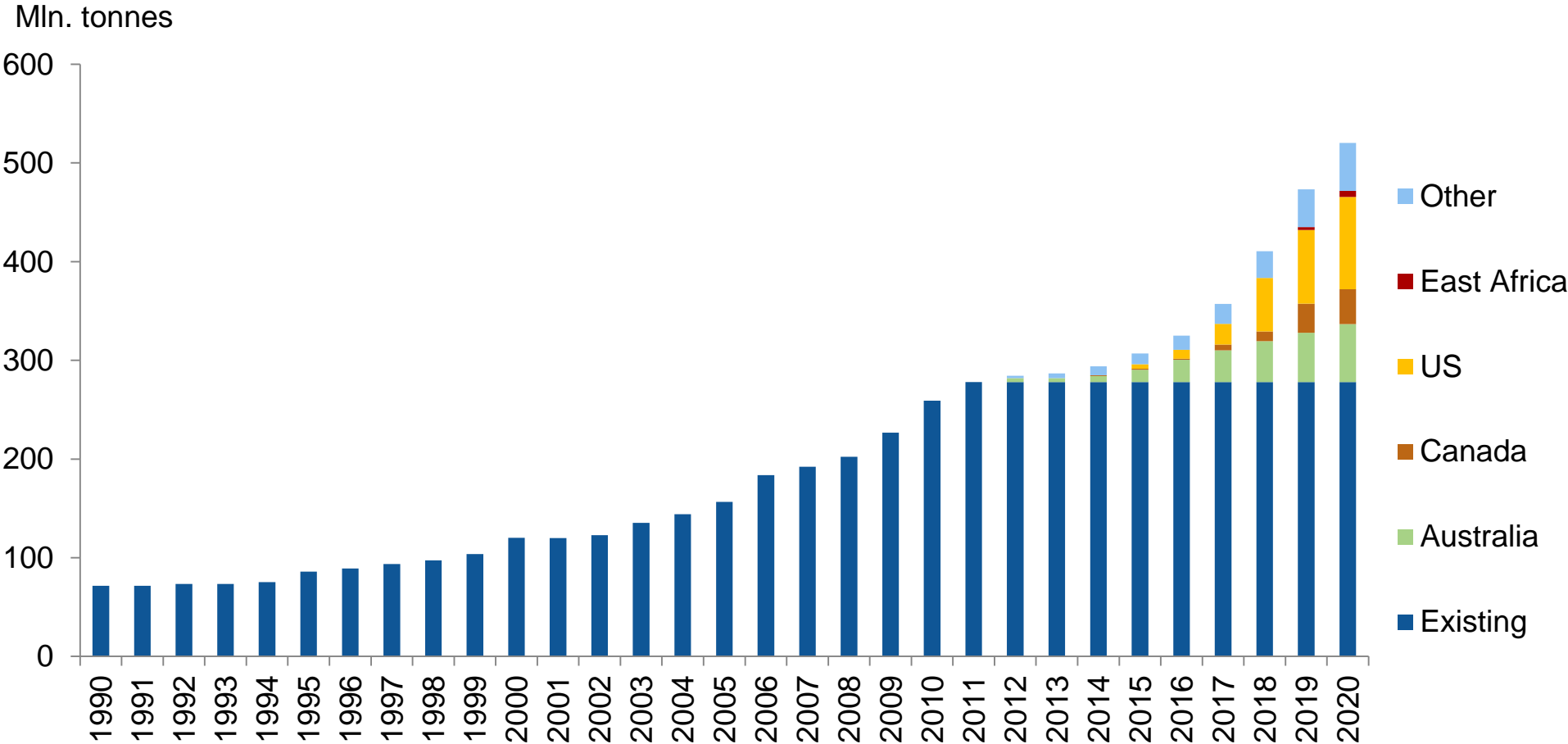
**GAS EXPORT DIVERSIFICATION AND DOMESTIC MARKET DEVELOPMENT**

**3**

**RUSSIAN OIL PRODUCTION: HOW TO SUSTAIN VOLUMES?**

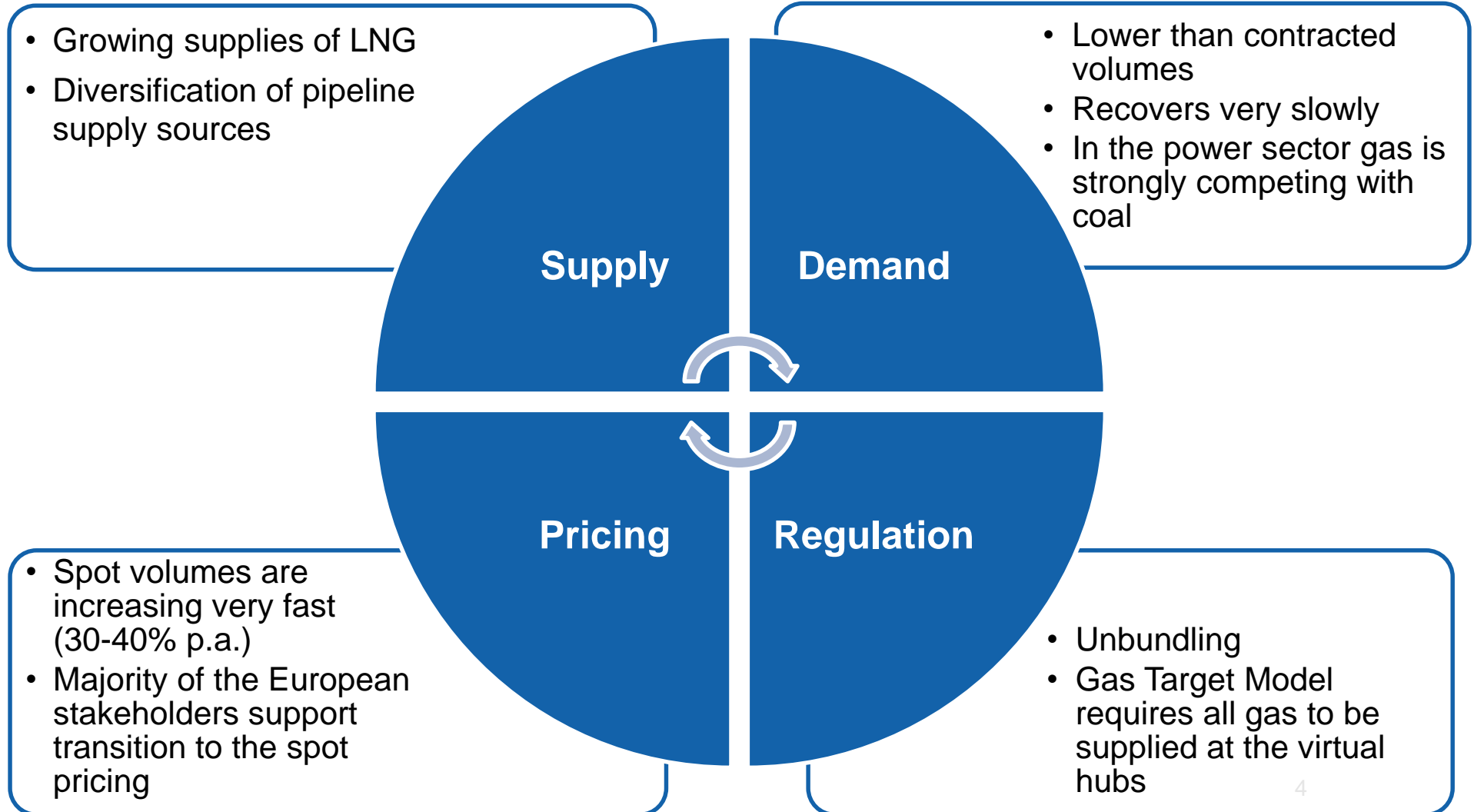
# Global LNG supply is expected to boom by the end of this decade with Australia, USA and Canada becoming the largest market players

## Global liquefaction capacities (existing and planned)



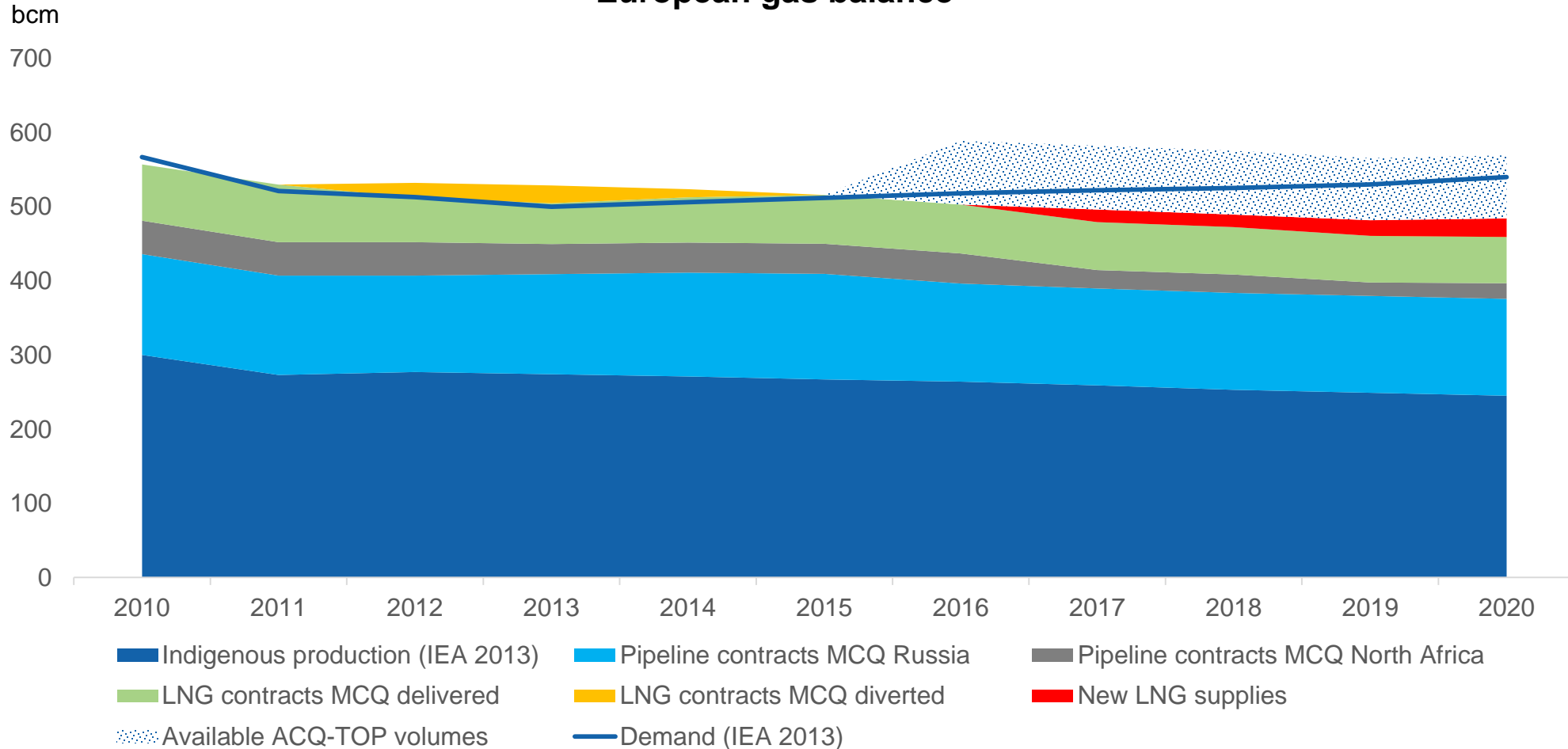
Source: ERI RAS

# Situation on the European gas market during the last years did not favor Russian exports...



...but European gas market is going to be tight until 2015-2016 as LNG is diverted to Asia; post 2016 very limited new supplies will become available and there will be an additional call on the over-take-or-pay volumes: good opportunity for Russia to enhance its position

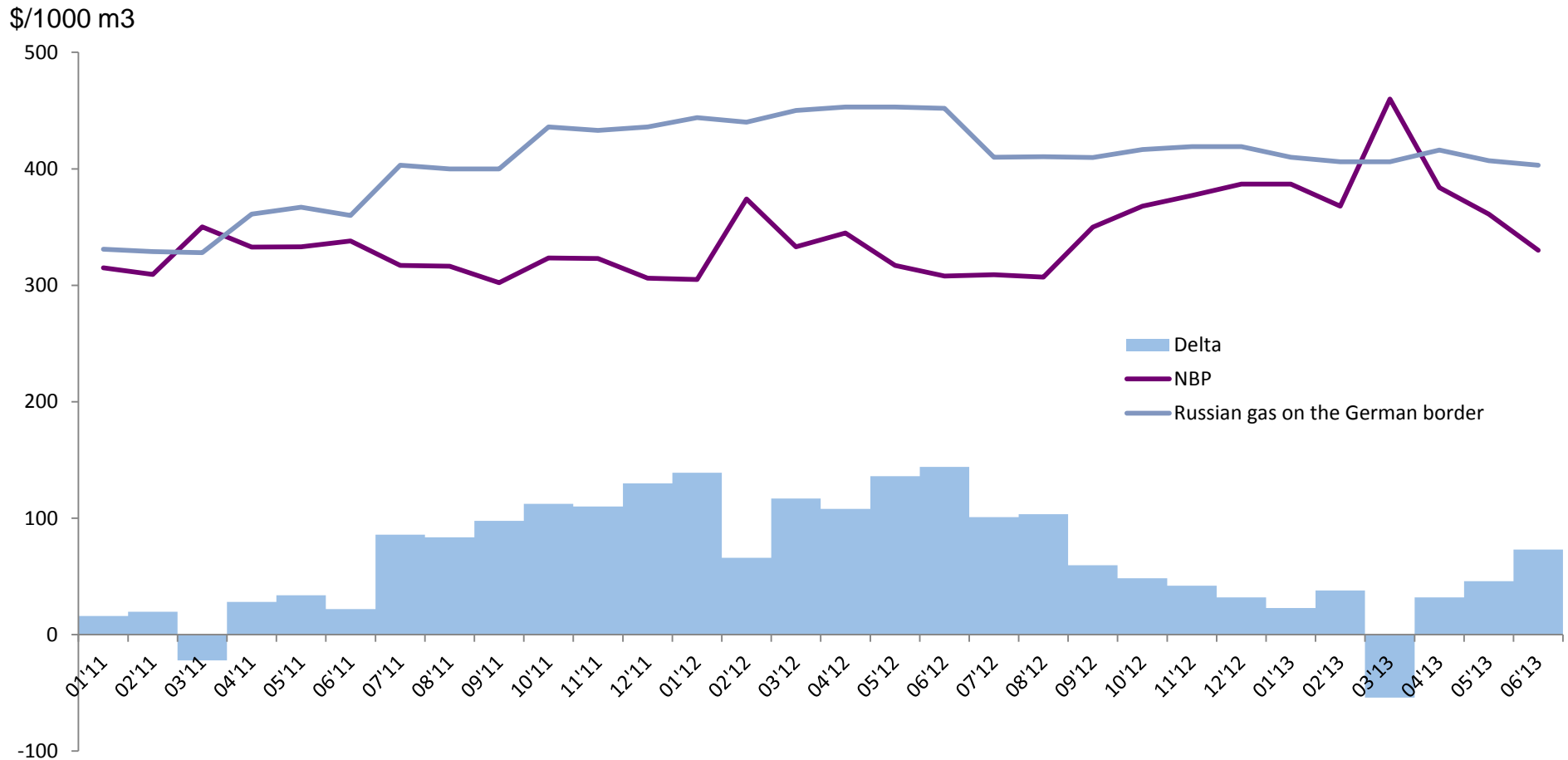
European gas balance



Source: WEO2011, IEA; Cedigaz; ERI RAS.

# Russian position in Europe will largely depend on gas pricing: traditional “Groningen” model is questioned now, as even renegotiated oil-linked contract prices are higher than spot-based

## European spot and oil-linked gas prices



Source: Bloomberg; ERI RAS.

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





## Gazprom could give further price discounts and increase its market share, but Russia's strategic choice is in favor of the short-term profit maximization...



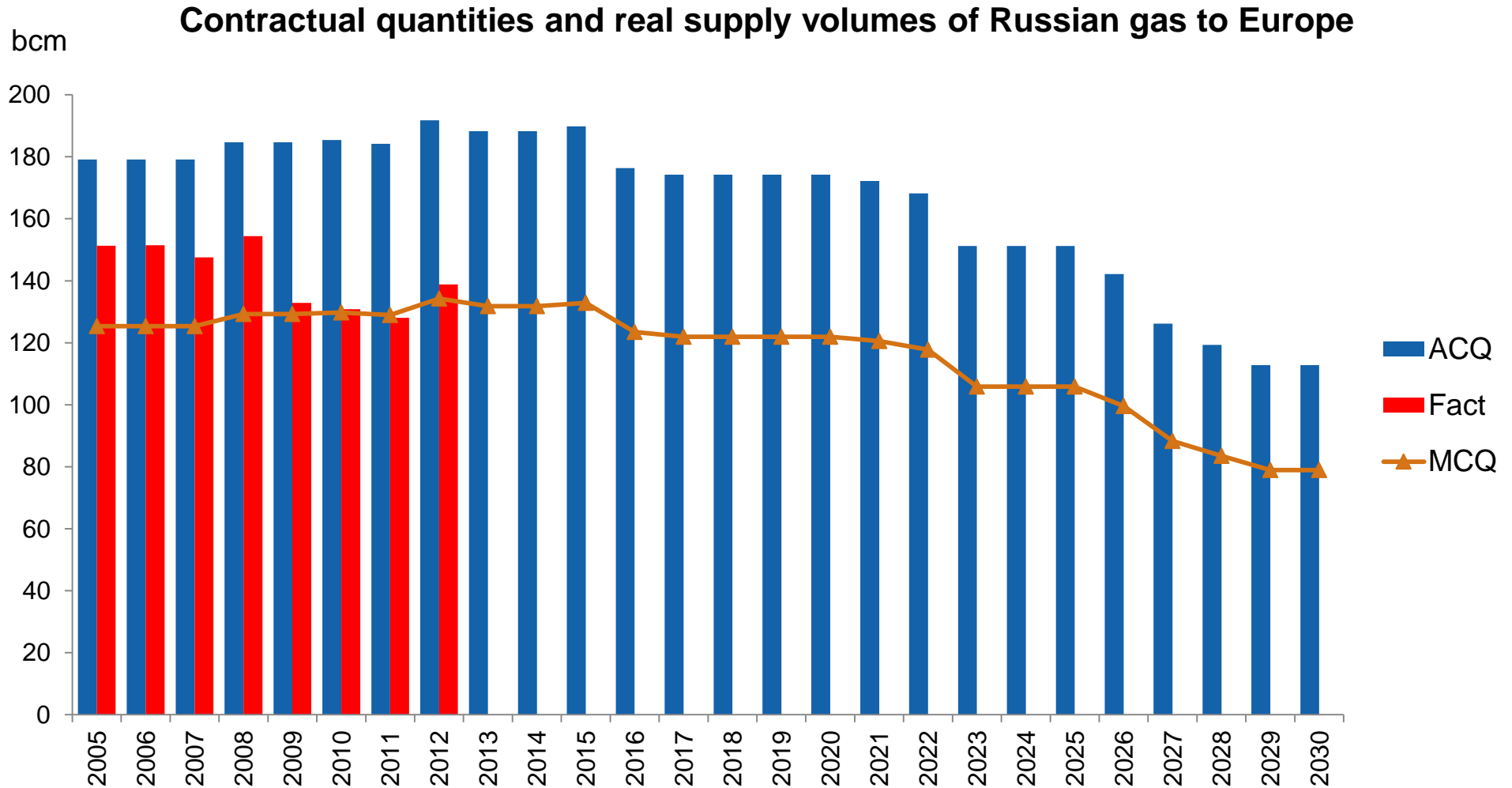
We were faced with the choice of whatever was **to maintain the supply volumes and the market share, or make the profit our high priority.**

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*

...ensured by the existing portfolio of the long-term contracts, which guarantees stable sales volumes for Russia until at least 2022



Sources: Cedigaz, Gazprom, ERI RAS.

# Oil indexation vs. gas indexation: "a bird in hand is worth two in the bush" approach

## Oil indexation

- Disappearing gas glut on the European gas market in the medium term – gap between oil-indexed and spot prices already started to narrow
- Gazprom will face next price reopening only after 2015, and contract expiration – only by 2022
- With high oil prices even lower volumes are providing high revenue
- New projects demand high prices (they have negative margins under spot prices, given that they have to pay export duties) and oil indexation is more convenient for the project financing
- Russian Government needs the money right now

## Spot indexation

- Strong pressure from the customers side
- Investigation of the European Commission against Gazprom`s pricing
- 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 manipulating the spot market by adjusting its supply volumes

**There are strong commercial reasons for Gazprom to protect the oil indexation at least during the next 3-5 years**

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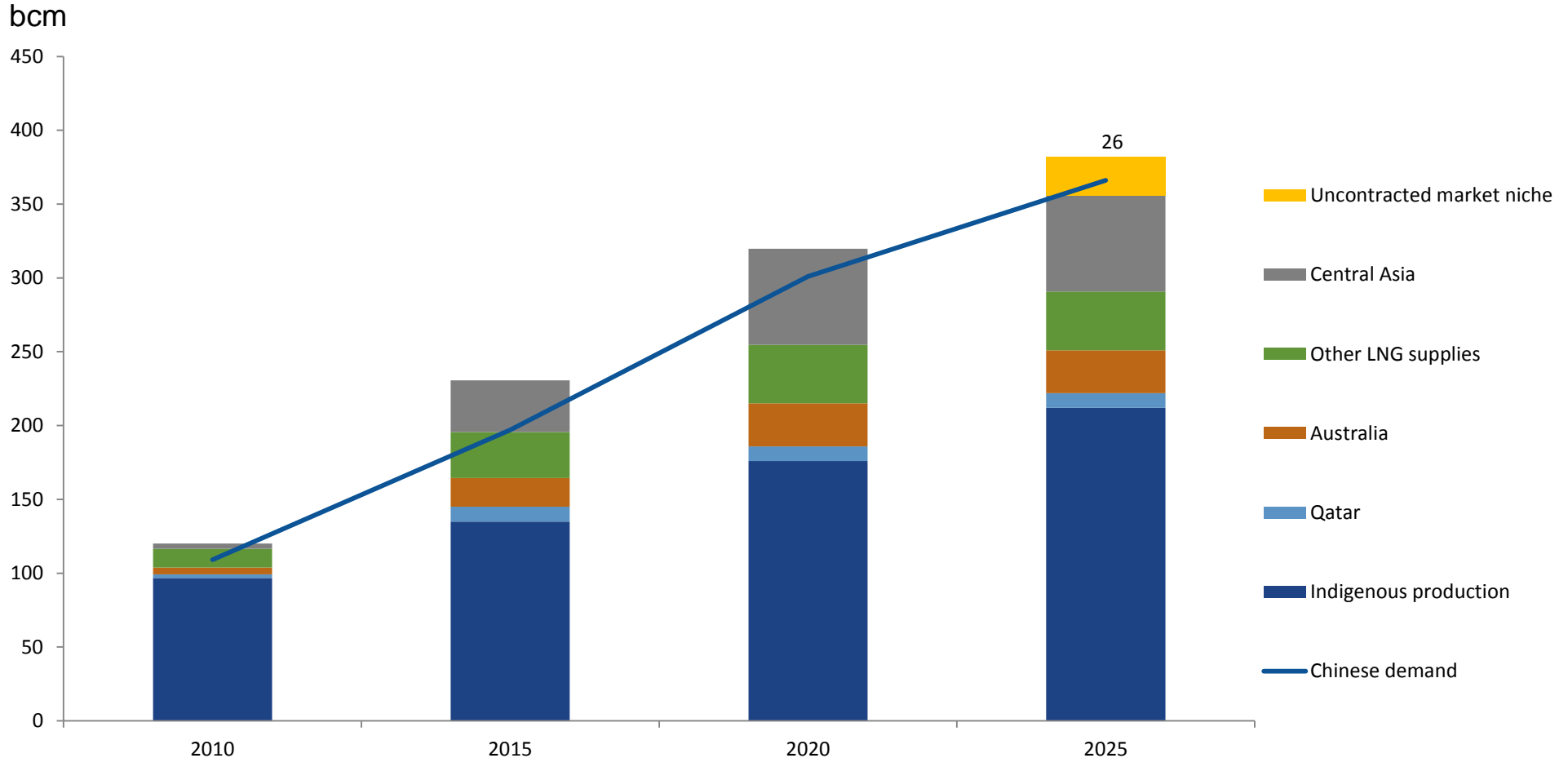
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RUSSIAN OIL PRODUCTION: HOW TO SUSTAIN VOLUMES?

# Everybody is expecting new opportunities on the booming Asian gas markets, but by 2020 there is already no market niche in China...

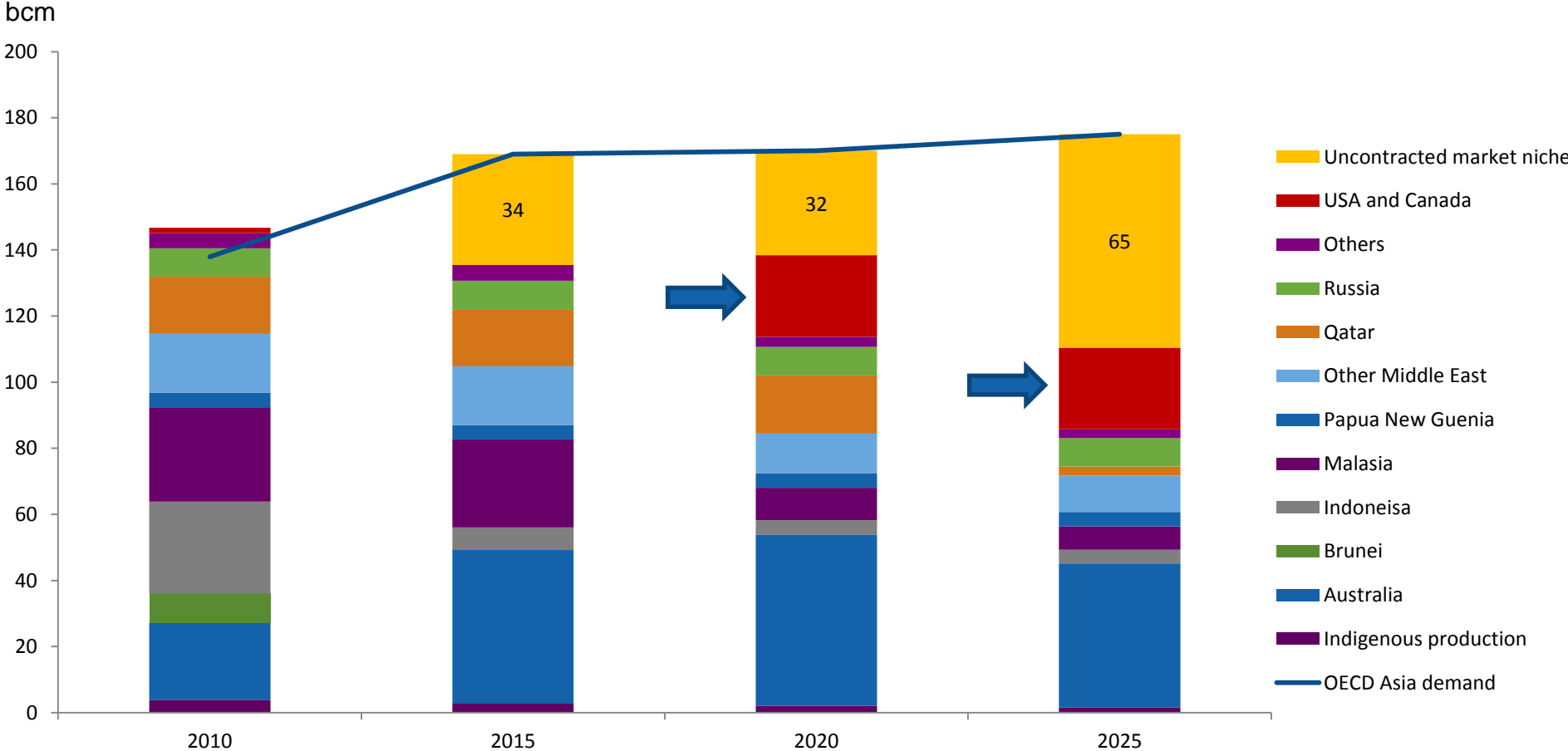
## Chinese gas contracts and gas balance



Sources: IEA, Cedigaz, Enerdata, ERI RAS.

# ...and OECD Asia is quickly contracting the North American LNG

## Japan and South Korea contracts and gas balance



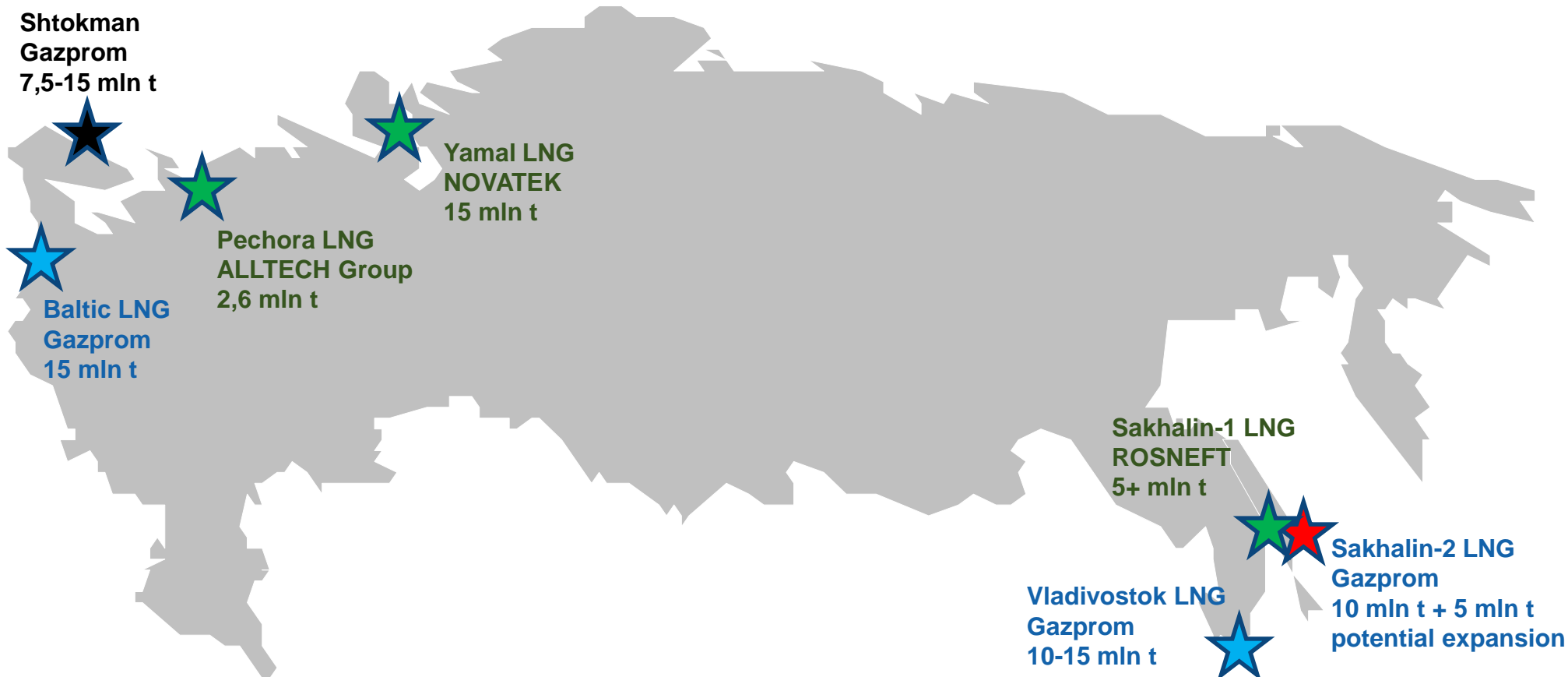
Sources: IEA, Cedigaz, Enerdata, ERI RAS.

Eastern Gas Program is developing, but as there are still no SPAs, the window of opportunities is becoming smaller and price negotiations have now to take into account Henry Hub pricing of the US LNG



Sources: Gazprom

## There are 7 Russian LNG projects under consideration currently, but all of them face commercial, technical and regulatory challenges

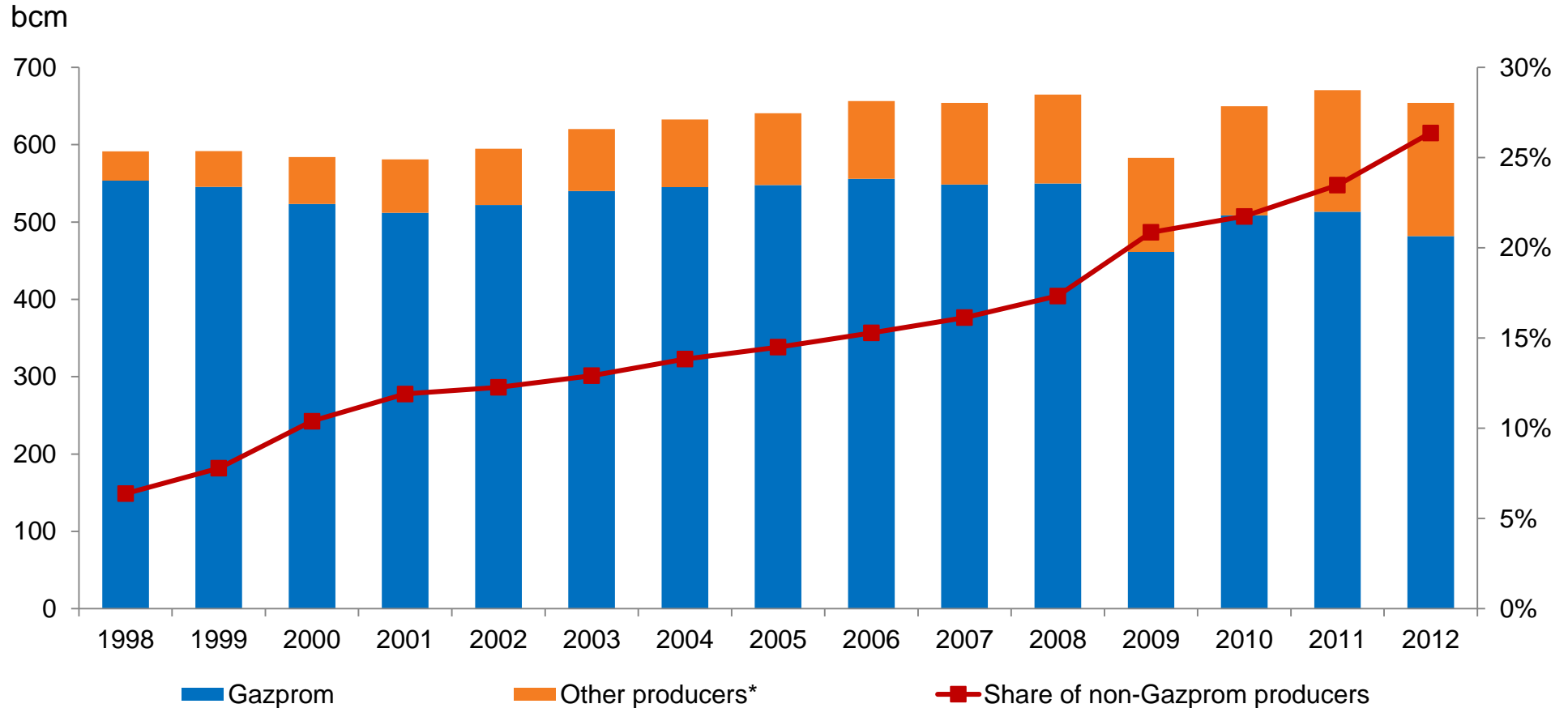


*LNG export permissions might be approved only for special cases and only under very strict control of the State. Due to the limited volumes and long lead time these LNG projects will not significantly affect Russian and global balance during this decade. In the longer term Russian LNG export could reach up to 50-70 bcma.*



Independents are improving their positions on the domestic market, though complete market liberalization and Gazprom's ownership unbundling are not currently under discussion

Russian gas production structure

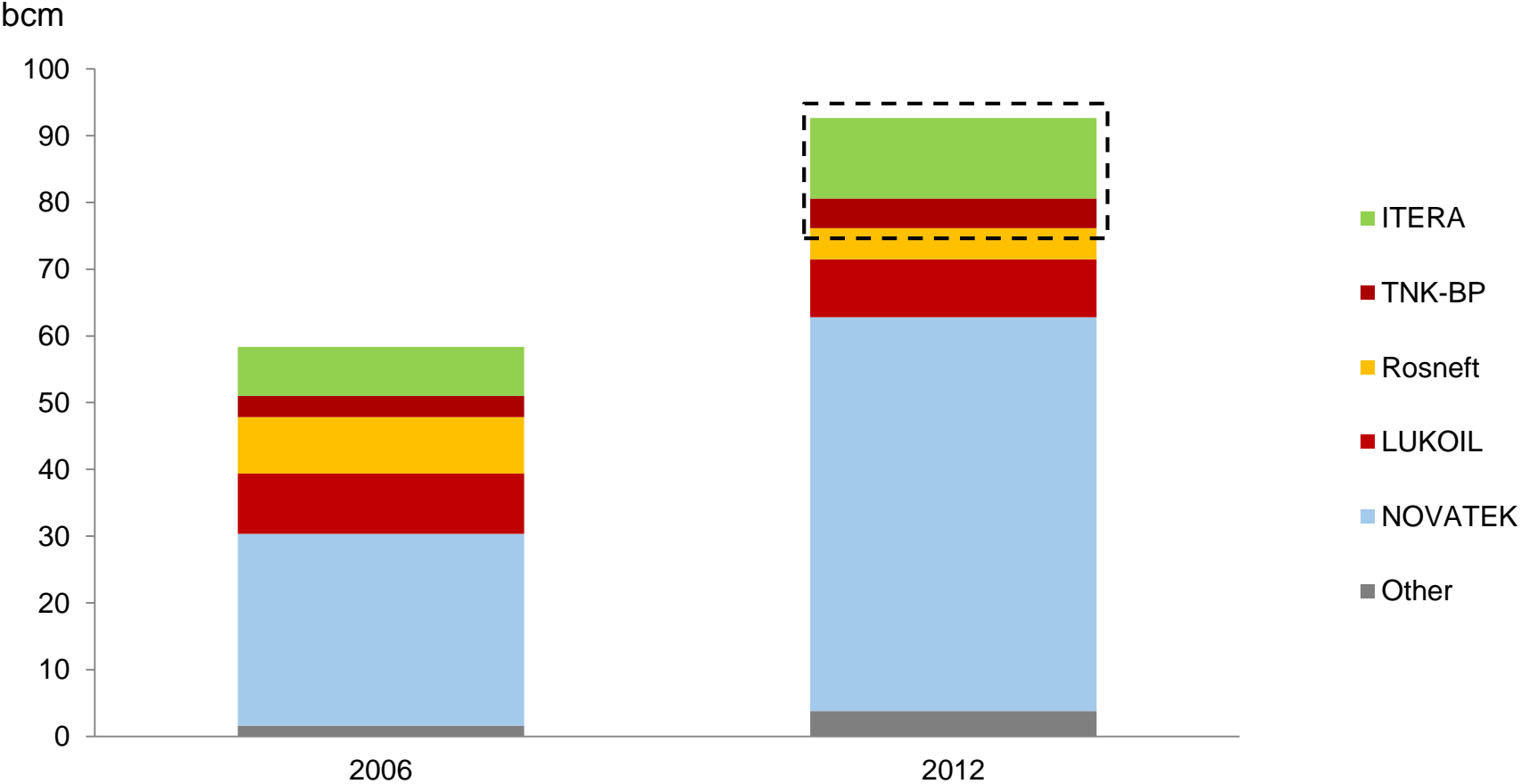


\* Other producers include PSA and APG

Sources: CDU TEK, ERI RAS

# But at the same time the industry is consolidating, now there are only three major non-Gazprom players left on the market: NOVATEK, Rosneft and LUKOIL

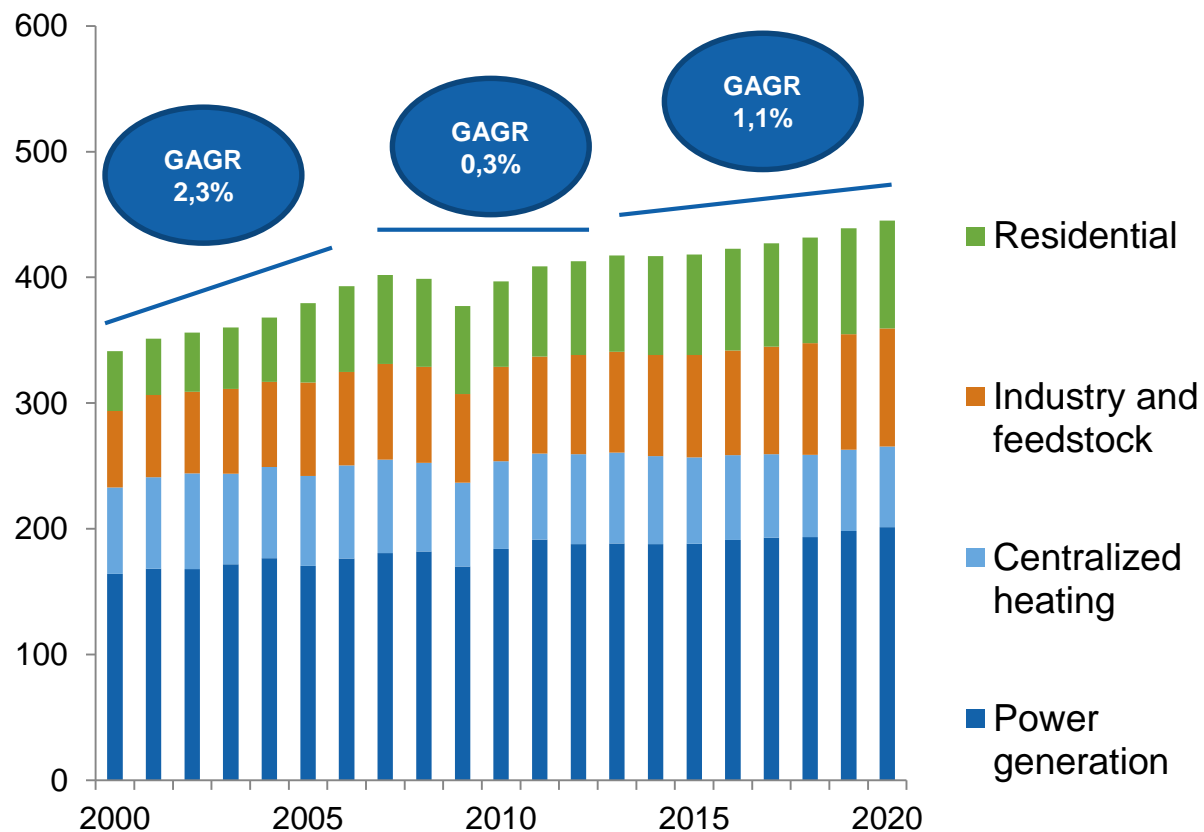
Natural gas production by the companies with access to the UGSS



Sources: CDU TEK, ERI RAS

# Limited demand growth on the domestic market enforces competition between major players for the most attractive market segments

Russian gas demand by sector until 2020 (optimistic scenario)

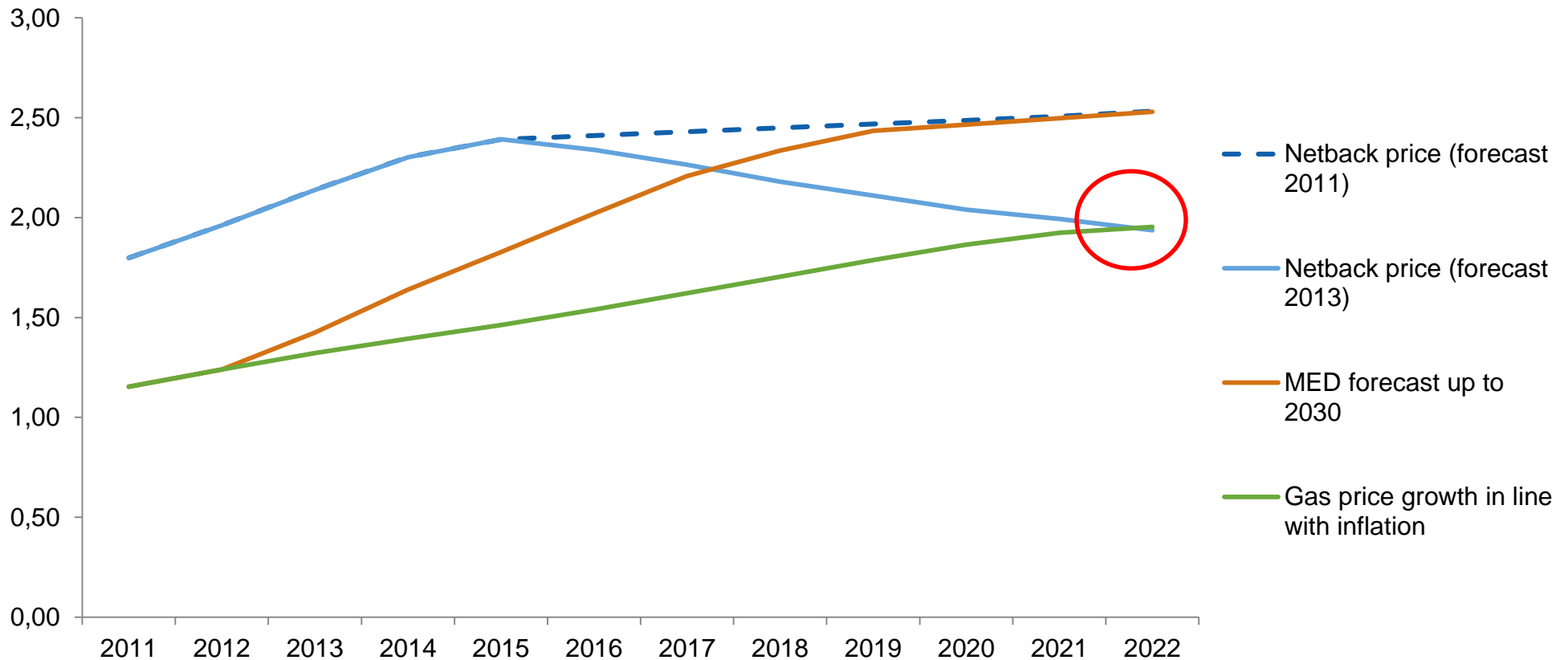


	2012	2020	Δ	AGR 2012- 2020
Total consumption	428	468	40	1,12%
Power generation	188	201	14	0,88%
Centralized heating	72	64	-7	-1,36%
Industry and feedstock	79	94	15	2,17%
Residential	75	86	11	1,78%

Sources: Rosstat, ERI RAS.

At the same time the Government frightened by the industrial output decline is ready to slow gas prices growth down to the rate of inflation, which is justified by lower European prices and weak domestic demand

Different proposed dynamics of the domestic gas price increase (compared to 2010 = 1)



Sources: MED, ERI RAS.

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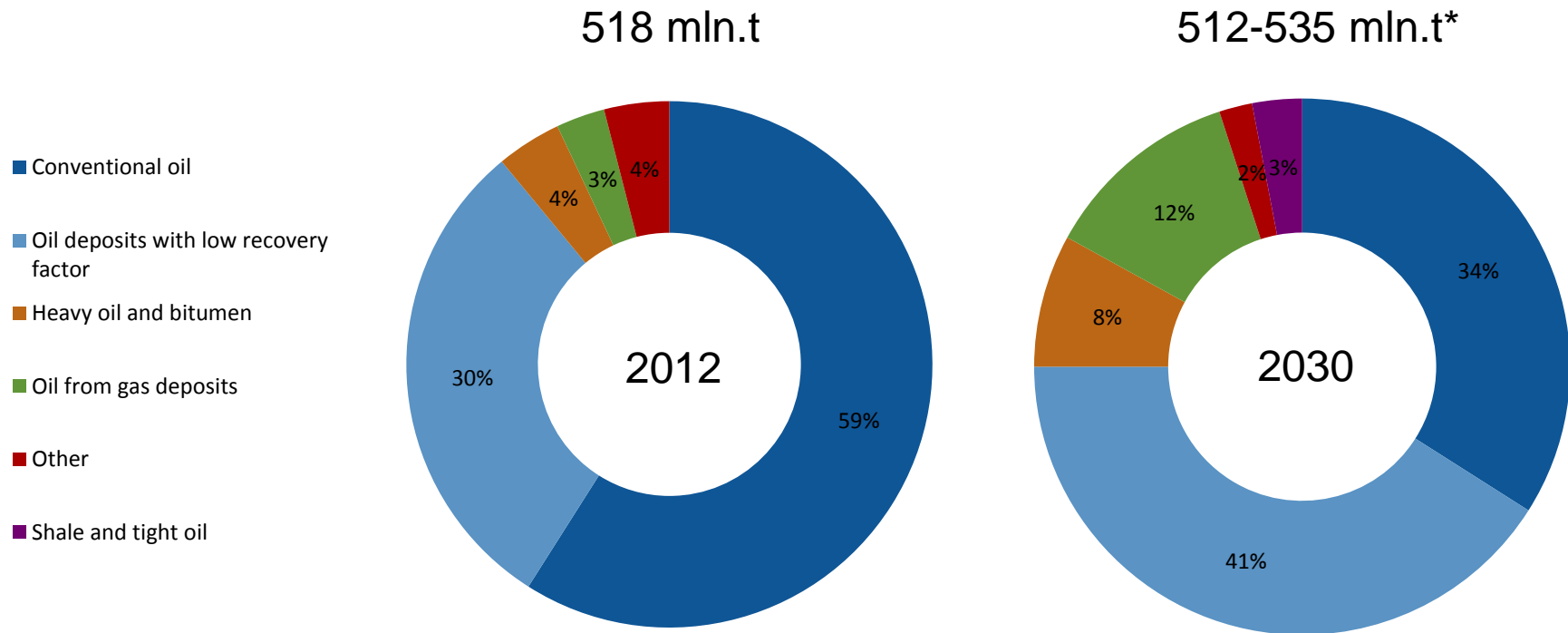
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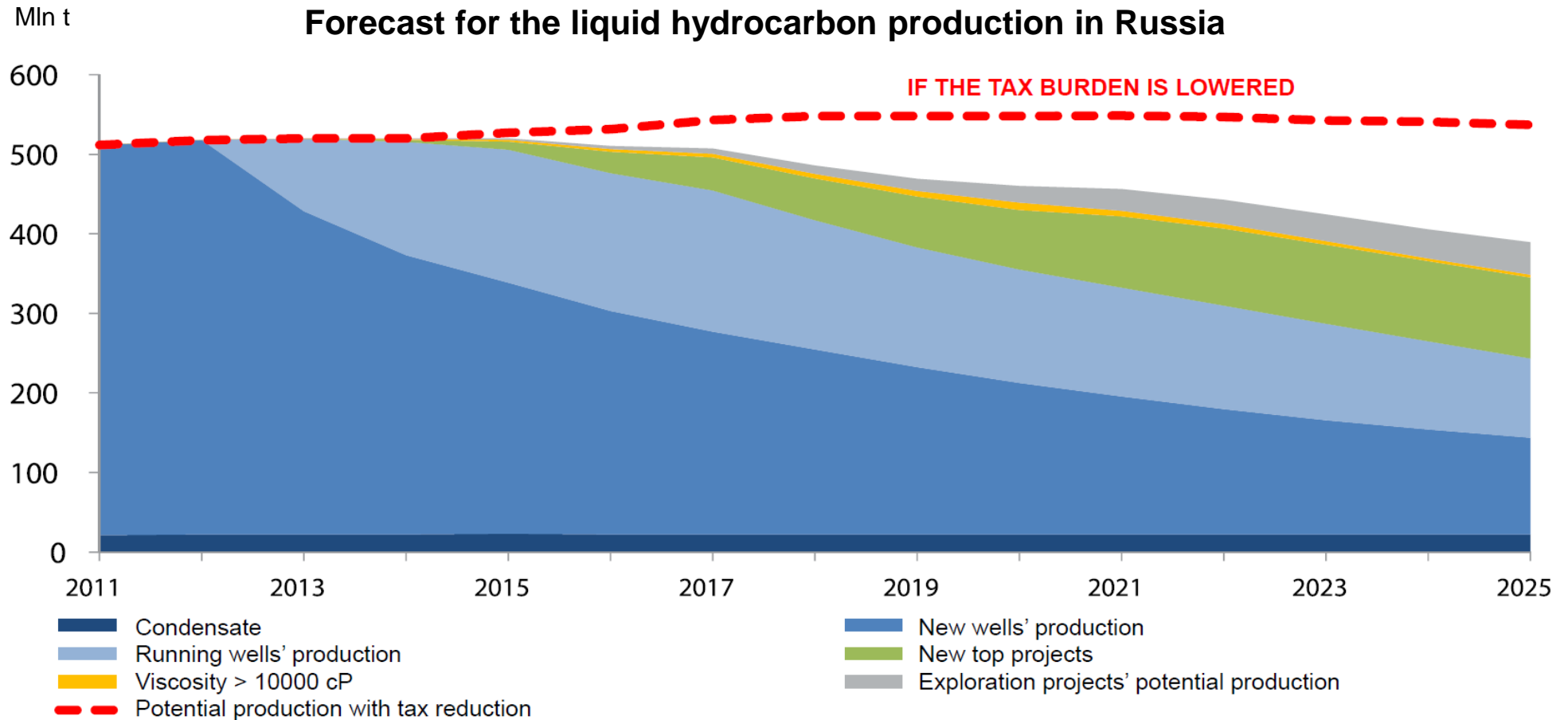
# Main part of the Russian conventional oil is concentrated in the declining Soviet-time fields

## Structure of the Russian oil production



\* According to the Energy Strategy-2030 and Social-Economical Development Forecast Up To 2030

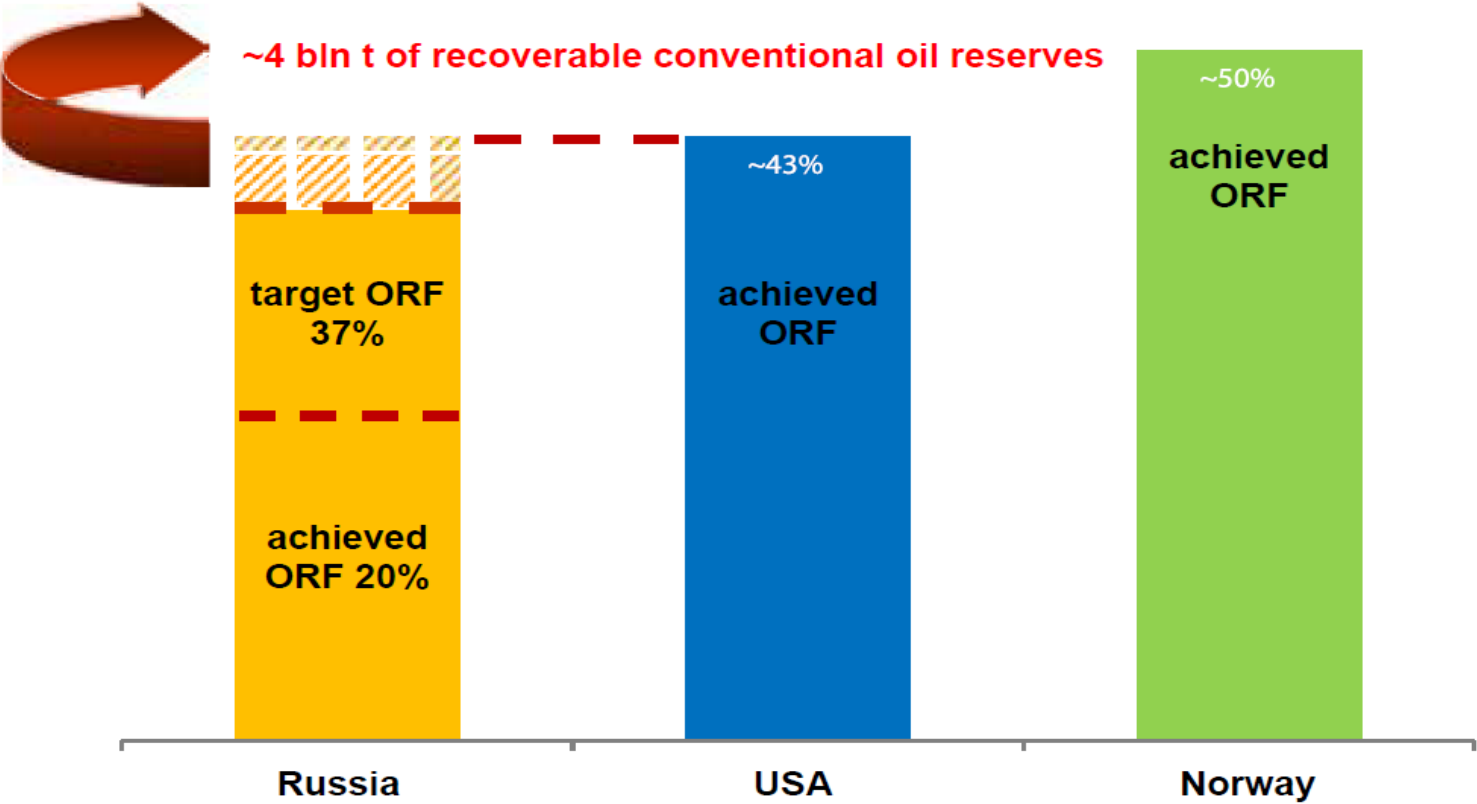
In order to sustain production, Russia needs to develop new fields, which, however, are not competitive under the current tax regime. Higher production estimates are justified by the vast resource base, but require completely different taxation system



Sources: CDU TEK, LUKOIL.

# Russia has a huge potential for Enhanced Oil Recovery: best practices would provide additional 4 bln t without the need to build new infrastructure, but adjustments of the tax regime are the must

### Potential for increasing ORF in Russia

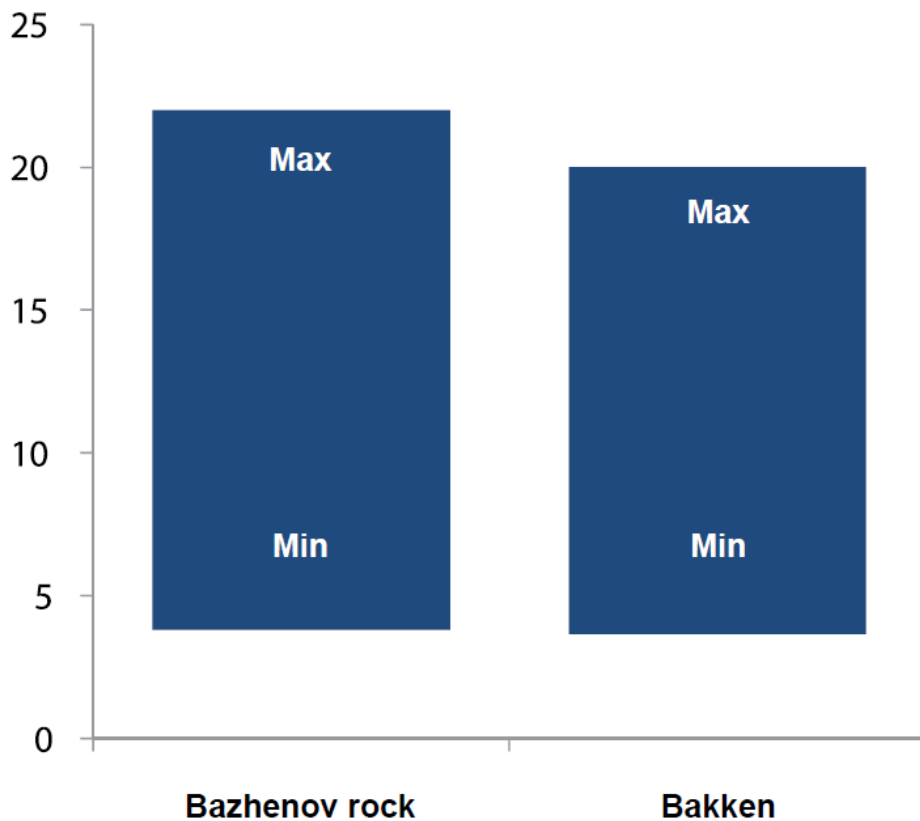


Sources: Energy Ministry, LUKOIL.

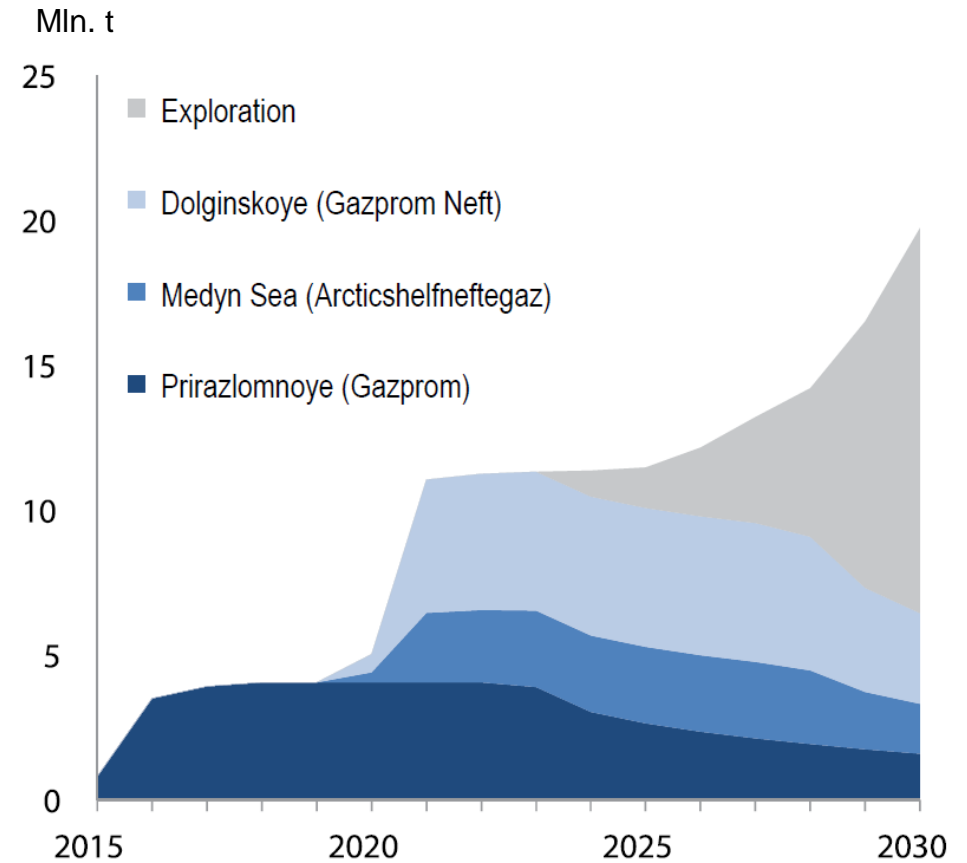


# Unconventional oil and Arctic: huge potential, but high costs and lack of technologies make these projects marginal under the current taxation

## Unconventional oil reserves

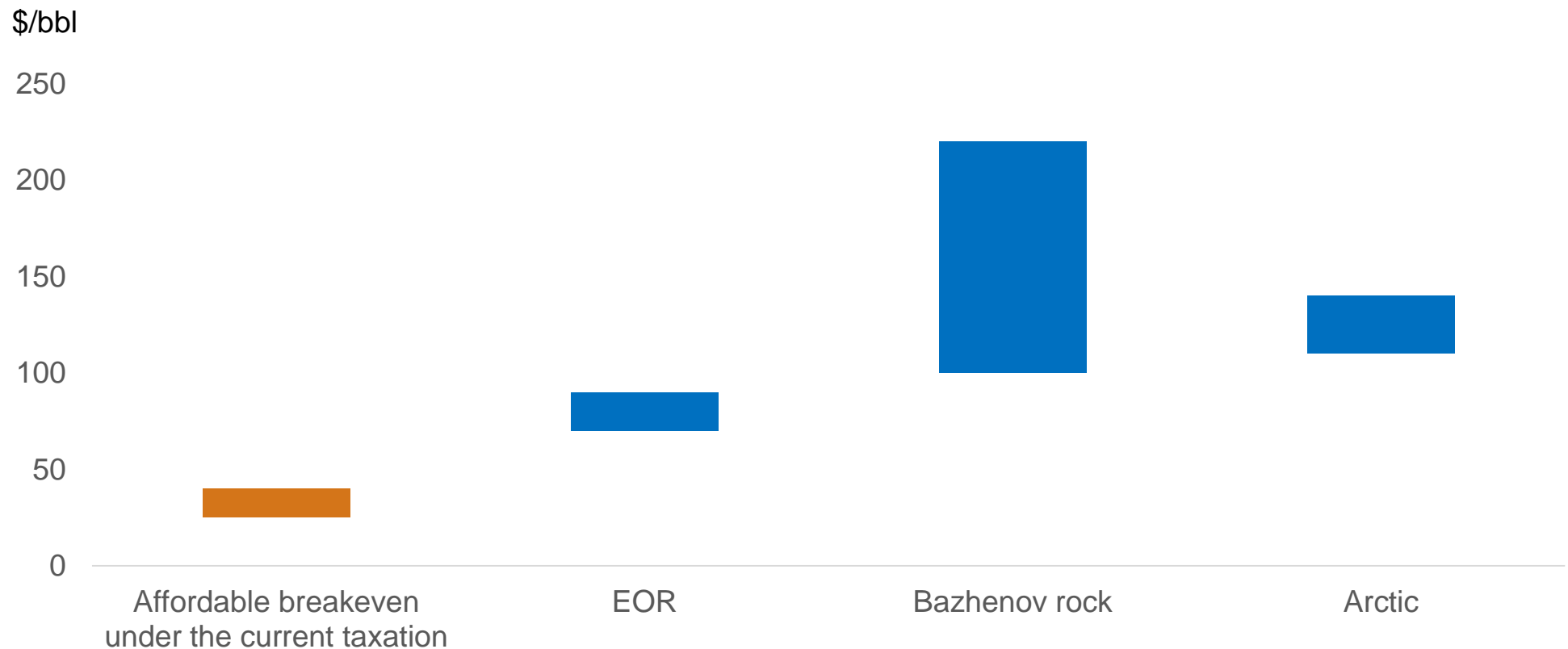


## Arctic production volume forecast



Sources: Energy Ministry, LUKOIL.

**The normal Mineral Extraction Tax and export tax require much lower breakeven costs, then all sources of new supply have; the Government is not ready to change the system for profit-based taxation, therefore all the exemptions are currently adjusted in the manual regime**



Source: ERI RAS.

## Conclusions

- ❑ More competitive external environment and domestic challenges are creating less favorable conditions for the Russian oil and gas industry. It will hardly be able to provide the same high share of the budget incomes in the future. ERI RAS estimates show, that unfavorable situation on the export markets could lead to lower export volumes and slow down Russian GDP growth by 1% p.a.
- ❑ Russian gas industry still has a huge potential for export growth, but without strict costs control, cautious evaluation of the export projects and more flexible pricing system these opportunities could be lost.
- ❑ Under current conditions, oil production in Russia can be maintained through development of the following areas:
  - enhanced oil recovery at existing fields
  - development of unconventional reserves
  - development of the new frontiers: new provinces in the Eastern Siberia and Arctic offshore

But to develop these areas, the Government has to change the whole taxation system, not just to give few exemptions.

## Contacts

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