Future of Russian Oil and Gas:

Leaving the West

Scenarios and Expected Impact

on

Crude and Gas flows and Oilfield Services

REnergyCO

About Report

Includes: 170 slides, most containing 3 figures (see the last slide for sample presentations). Three hours of zoom discussion are included.

Delivery: Protected PDF file by email. Selected data in excel may be requested.

Price: \$3900/00 (USD)

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Content

1. Global context

Global production shares, Russian export, and sanctions impact history

2. Scenarios' description

Key factors moving forward, impact on production, refining throughput, and export

3. Export crude and petroleum products from Russia

Export routes and economics review. Export bottlenecks and impact on production

4. Crude production and activity levels by regions and companies in 2010-2022

Crude and gas production. Producing wells. Development and exploration drilling. Sidetracking. New wells completions. Workovers/well-servicing jobs. Fracturing. Comparative data points

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5. Oilfield Services Market by segments in 2010-2022

Market segments included: Development drilling vertical, Development drilling horizontal, Exploration drilling, Prospecting drilling, Rig transport (mobilization)/Rig assembly, Drill bits and bits program supervision, Turbines, Drilling fluids, MWD/LDW, Rotary Steering Systems, Pressure pumping, Cementing, Hydraulic fracturing, Coiled Tubing, Wireline services, Open hole logging, Cased hole logging, Perforation, Completion (crews only), Well servicing/workovers, Sidetracking (crew time), Seismic, Artificial Lift Systems, Casing. Selected segments on slides with comparative analytics

6. Scenario "F" – production, drilling, and other activities, OFS market till 2030

Crude and gas production. Producing wells. Development and exploration drilling. Sidetracking. New wells completions. Workovers/well-servicing jobs. Fracturing. Comparative data points

Market development forecast with slides on selected segments

7. Scenario "S" – production, drilling, and other activities, OFS market till 2030

Crude and gas production. Producing wells. Development and exploration drilling. Sidetracking. New wells completions. Workovers/well-servicing jobs. Fracturing. Comparative data points

Market development forecast with slides on selected segments

8. Upstream structure - Oil Companies

Large companies' historical revenues, profit, CAPEX, a sample calculation of a large company's key financial attributes

9. OFS industry brief description

History, competitive environment, market shares, largest drilling companies, Western Majors role, probable evolution of the industry in the new environment

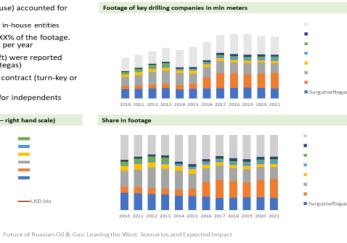
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Sample slides

Drilling segment – key players

- Top-five drilling companies (including in-house) accounted for about XX% of the footage
 - About XX% of the footage was drilled by in-house entities
- The largest independent EDC with about XX% of the footage. Other large drillers drill about X min meters per year
- Revenues of some in-house entities (Rosneft) were reported while others are fully integrated (Surgutneftegas)
- Revenue per meter depends on the type of contract (turn-key or day rate).
- The general trend was toward the day rate for independents





Crude and condensate production 2023-2030 (mln tons per annum)

N Caucasus

Timan-Pechora

East Siberia

Volga-Urals

KHMAD and Tomsk

YANAD

Offshore*

Revenue of the largest in 2003-2021 in \$ bln and total in RUR trillion

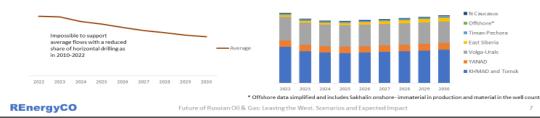
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Regional crude and condensate production and wells 2023-2030 - Slow scenario

- · Crude and condensate production minus xx mt
- Producing well count probably will decline by about xx% due to optimization in 2023-2025.
 - Sharper reduction is possible based on commercial logic (closing low productivity high water cut wells)
 However, commercial logic is not going to work as it did not work in 2020
 - Cost of keeping a well producing is not a concern
- Average daily flow will decline along with fewer new wells drilled in 2023-2025
- Key trend simplification of services and lower productivity but also cheaper wells
- New drilling of simpler wells will lead to an increased number of lower-productivity wells in the stock

Average daily flow of a well in Russia (crude and condensate in tons a day)

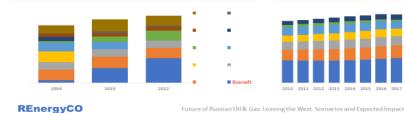


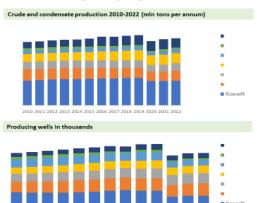
oducing wells in thousand

Crude and condensate production and wells 2010-2022 by company

- Rosneft was a very small producer in 2004
- Industry has undergone significant restructuring in 2010-2022 mostly by consolidating assets in the state's hands
 - TNK sold to the state-owned Rosneft
 Bashneft sold to Rosneft
- Rosneft offloaded assets to NNK in reverse nationalization (privatization)
- Since 2018 industry is in full control of the state (directed by the top production cuts, employment policies and etc.)

Changing ownership 2004 to 2022 (crude and condensate mt)





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