

# WHEEL OF FORTUNE

## The Battle for Oil and Power in Russia

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Skolkovo

23 May 2017

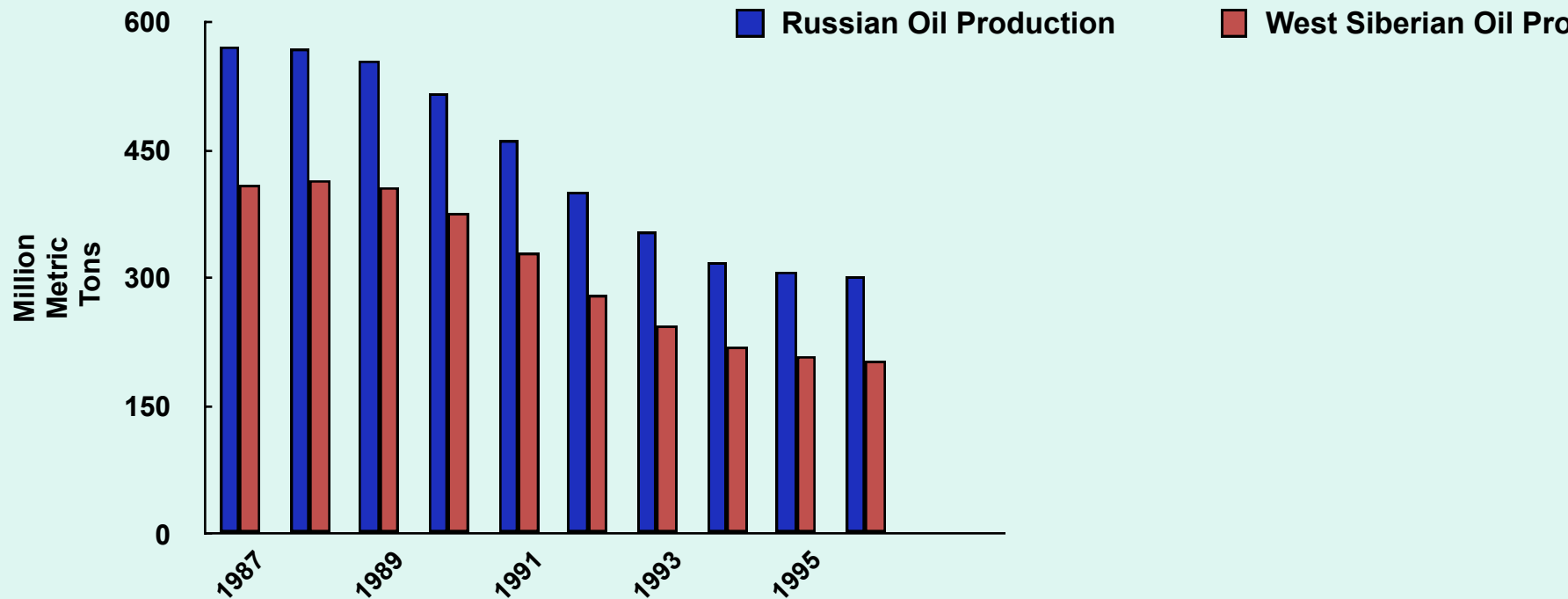


# Introducing *Wheel of Fortune*

- Part-history, part-analysis, and part-memoir, based on my 20 years of work with IHS clients in Russia since 1991
- Explains the decline and revival of the Russian oil industry and the Russian state 1991-2012 and the challenges ahead
- Key points:
  - Twenty-five years after the end of the Soviet Union, the legacy of conventional West Siberian oil is finally running down
  - But there is a tremendous potential from unconventional “tight” oil from onshore plays and offshore arctic deepwater
  - Are the Russian oil industry and the government ready for the challenge?
  - And do global trends favor Russian oil?



**The story begins in 1991, with the collapse of the Soviet Union. Between 1991 and 1996, Russian oil production dropped by half...**



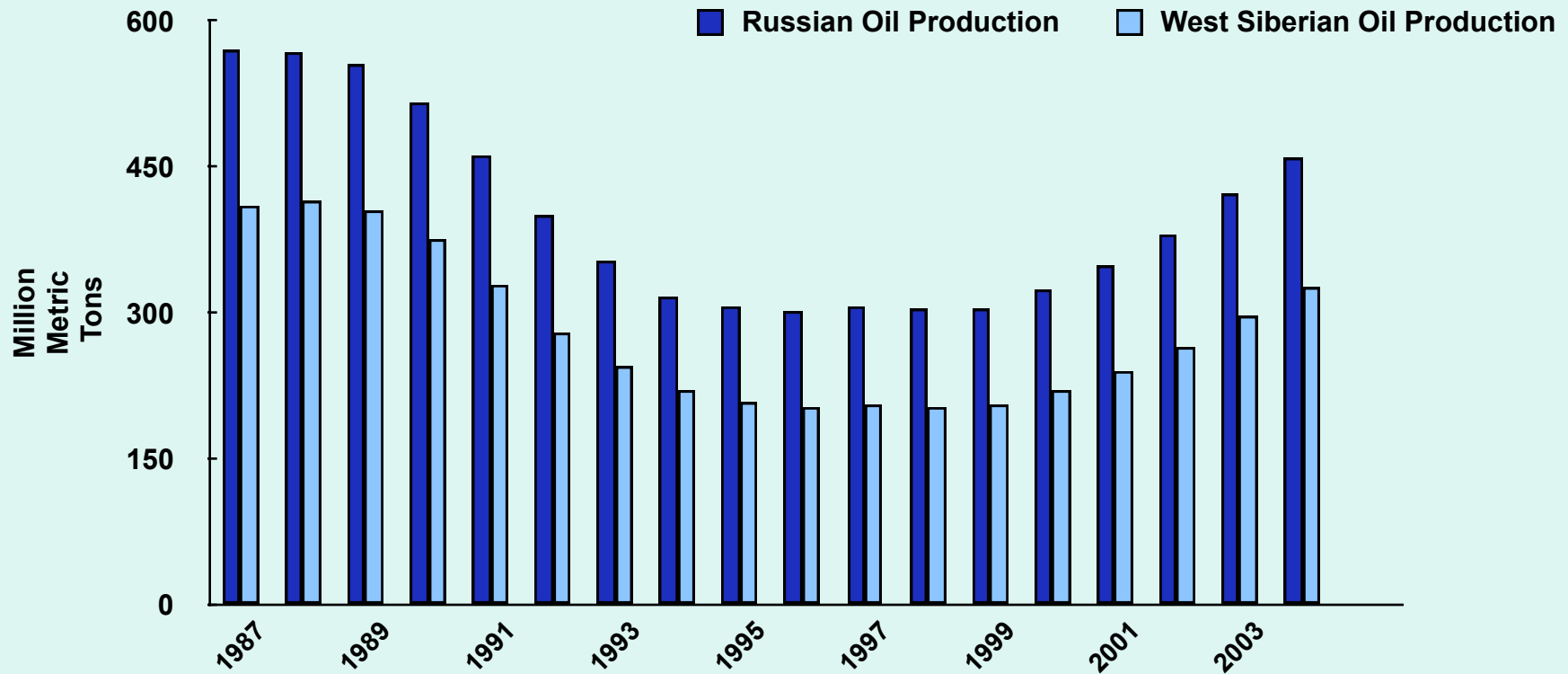


## ...setting off an all-out war for control of licenses, production, and revenues

- A weak state was unable to prevent the anarchic privatization of the oil industry
- **But in actual fact the state never did surrender its regulatory powers, even though they were temporarily paralyzed**
- Crucially, the state retained control of the pipeline system...
- ...and it established a system of licensing and export quotas
- ...while retaining the Soviet-era system regulating production plans and reserves
- **This explains why the state regained control so easily a decade later—the oil industry had never really escaped from state control**



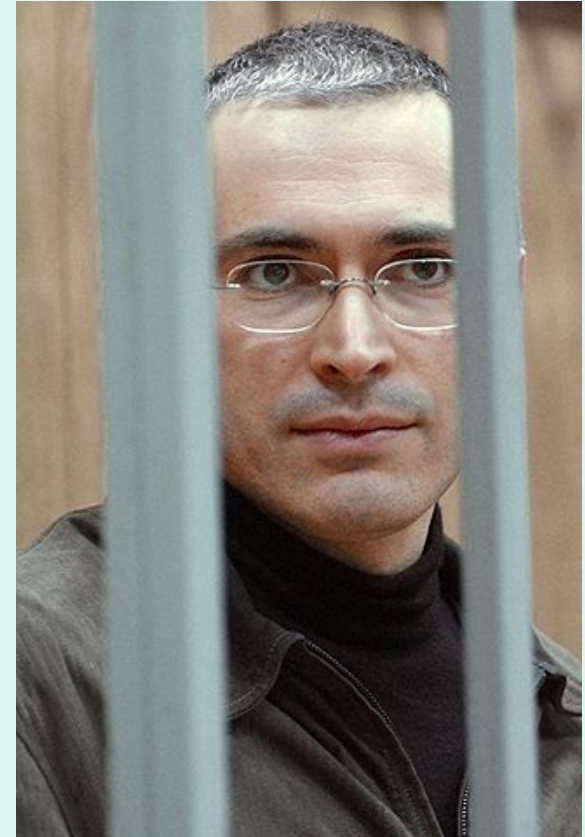
**Yet the stabilization of the oil industry after 1996, the privatizations of 1997-98, and the increase of global oil prices in 1999 and after, set off a remarkable recovery of Russian oil production, led by Yukos and Sibneft**



# The Yukos Affair was the Key Turning Point in the Putin Presidency—and in the Relationship of the State to the Oil Industry

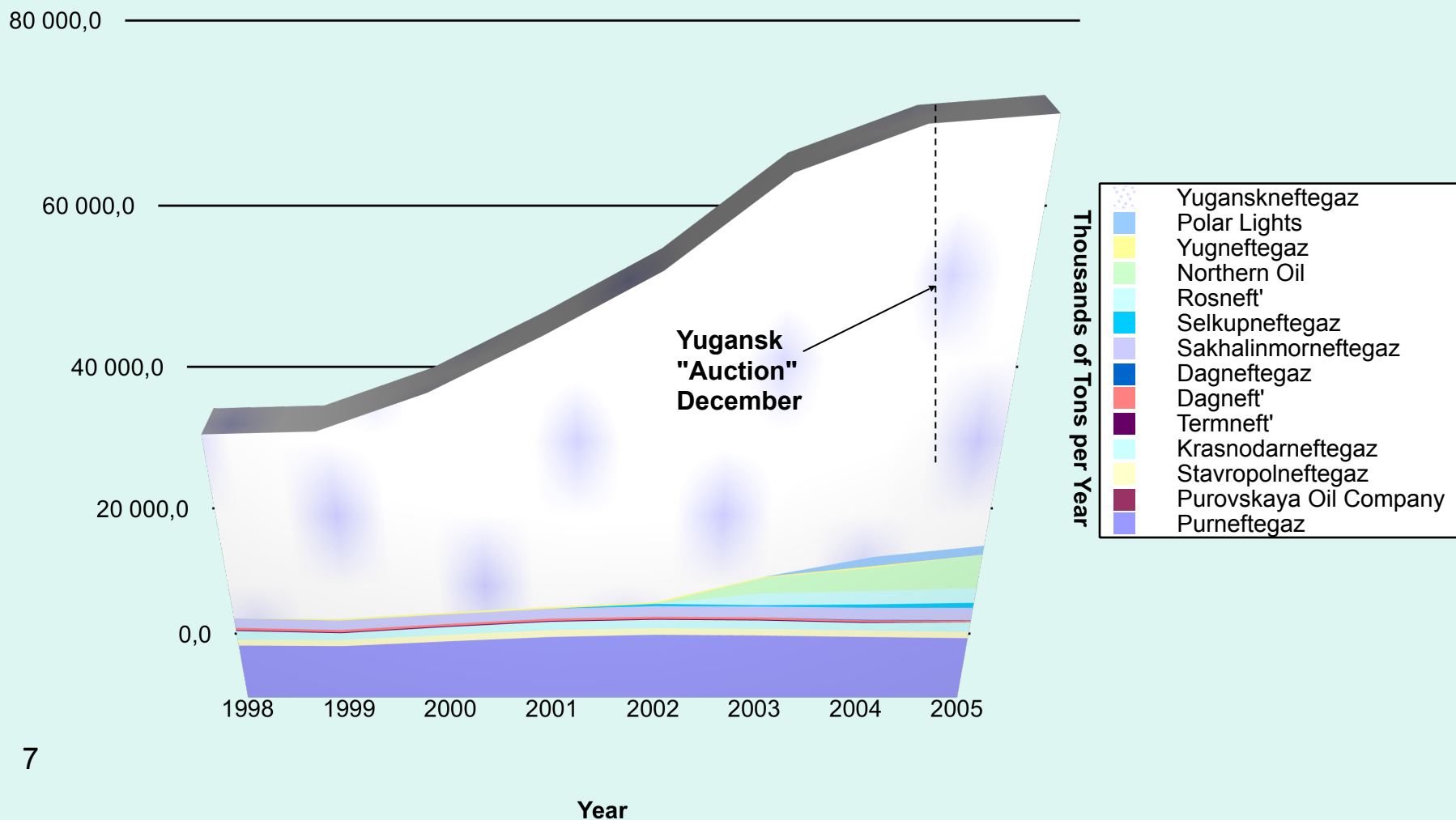


Mikhail Khodorkovsky in 1997, shortly after he took control of Yukos



Khodorkovsky in prison, around 2009

# The Main Beneficiary of the End of Yukos was the State-Owned Rosneft



# Sergey Bogdanchikov: An Underrecognized Historical Role



Credit: Дмитрий Азаров / Коммерсант, AP

- 17 years on Sakhalin Island, straight out of engineering school
- By 1993, heads Sakhalin offshore subsidiary
- In 1996, promoted VP of Rosneft for Far East
- Worked closely with Sakhalin-1 partner Exxon
- Much direct experience with PSAs in action
- An experienced upstream professional
- Hired new team (from Sibneft and Yukos)
- But by 2008 loses out to board chairman Igor Sechin



# But The Real Winners Were Putin, the Russian State—and Igor Sechin

- Putin's personal assistant since 1992 (the only staffer who has been with him in every major job since then)
- Major figure in attack on MBK and Yukos; often described in the West as “the head of the *siloviki*”
- July 2004: Named Chairman of the Board of Rosneft
- In 2008, Sechin becomes deputy prime minister for energy and industry under prime minister Vladimir Putin
- In 2012 Sechin is named CEO of Rosneft and chairman of the parent holding company Rosneftegaz



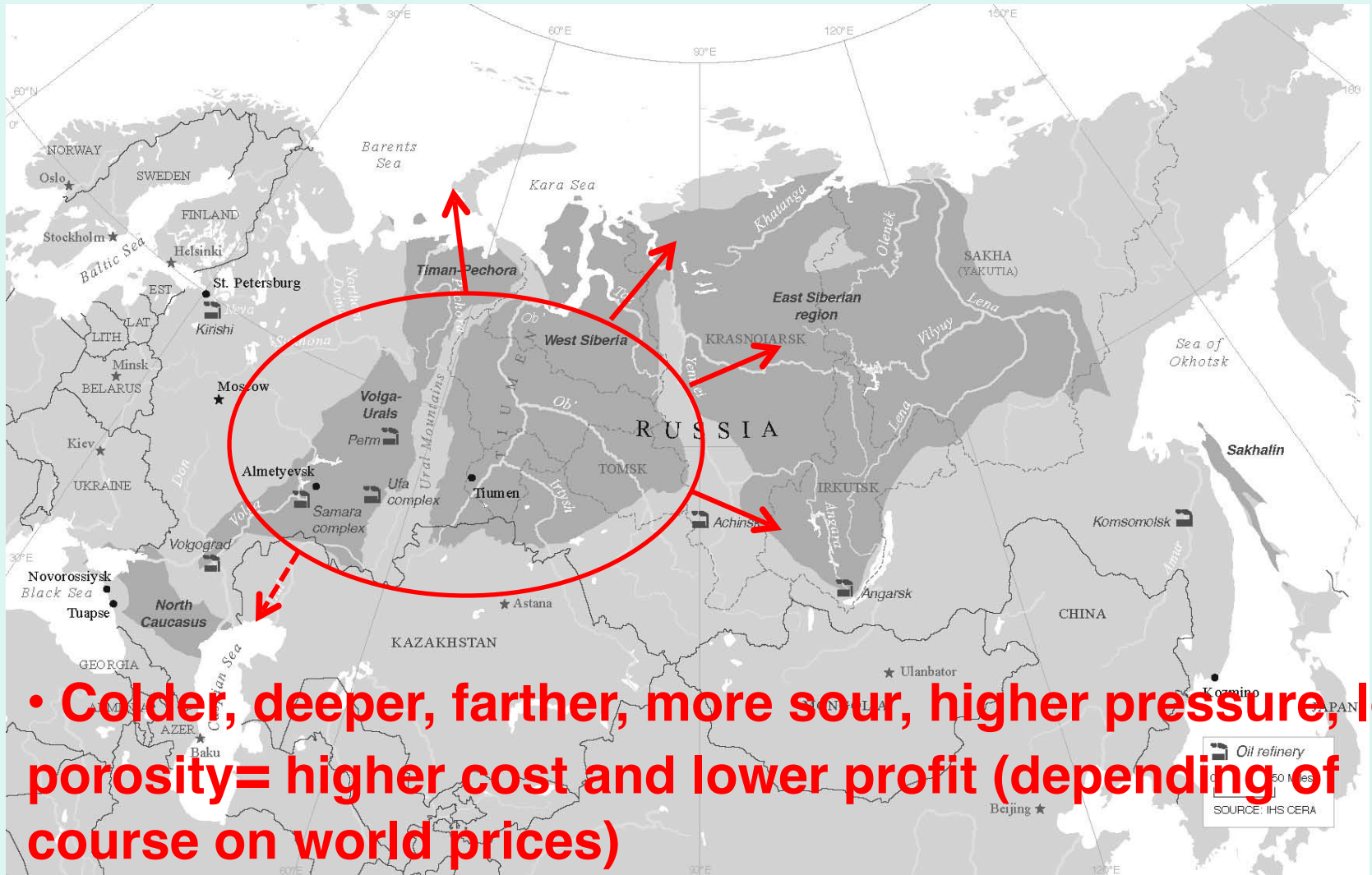
Igor Sechin in 2008

# Five Key Challenges Facing the Russian Oil Industry

- **Near Term:** The threat of a drop in production, as the Soviet-era legacy runs down
- **In the Background:** The likelihood of a lasting decline in revenues to the Russian Government, with destabilizing consequences
- **The Impact of US/EU Sanctions:** Initially small, but what if they last?
- **Deus ex Machina?** Will the “tight-oil revolution” give the Russian oil industry a boom to match the US?
- **The Ultimate Challenge:** “Peak Oil Demand” owing to impact of electrification of transportation

# **First Challenge: A Decline in Production After 2015?**

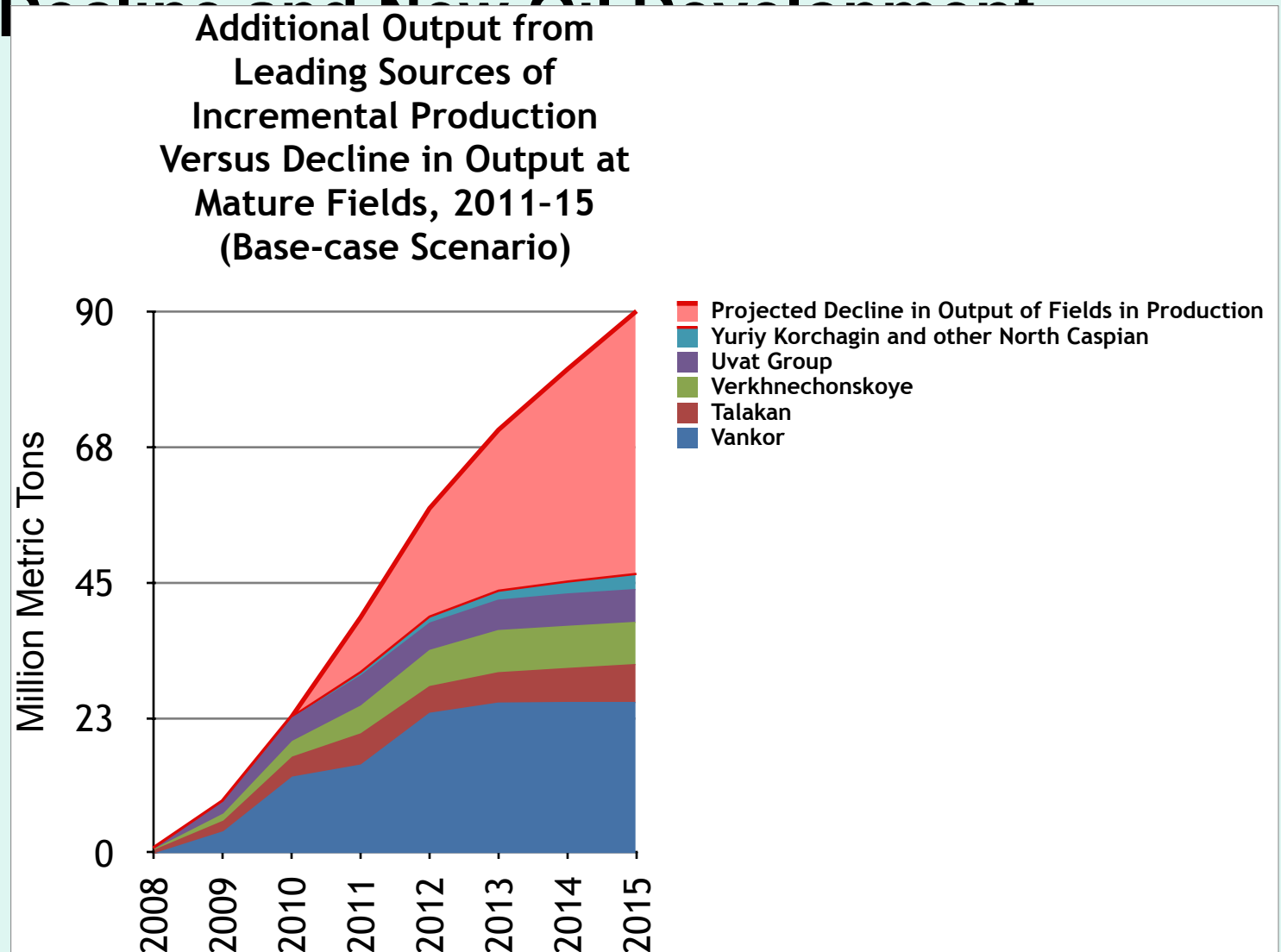
# The Next Generation: Moving Out of the “Comfort Zone”





# Overall Oil Production: a Race Between Old Oil

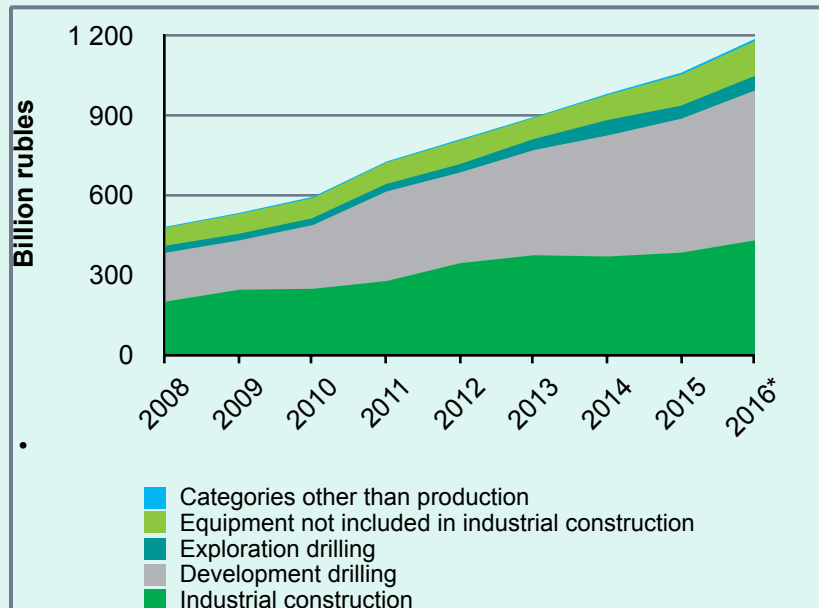
## Decline and New Oil Development



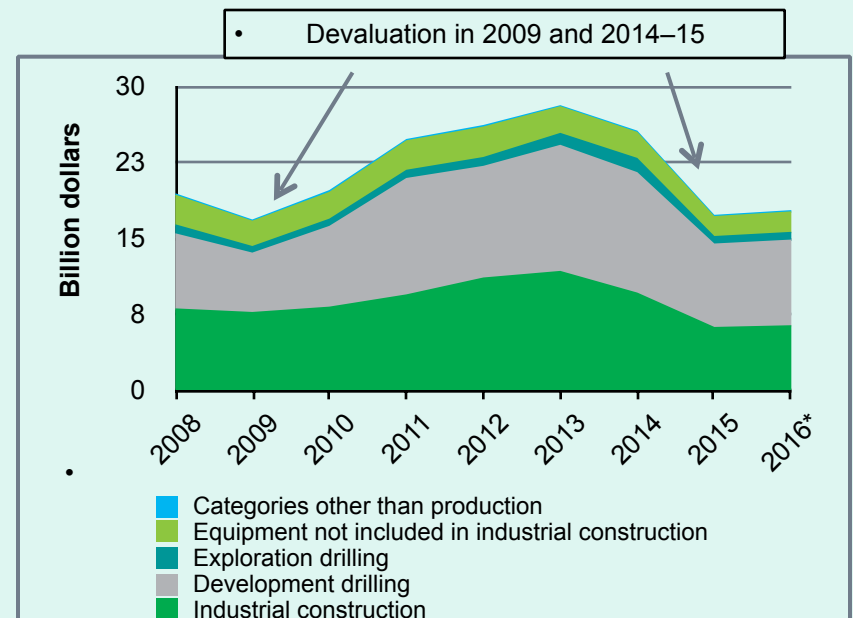
Source: IHS CERA, Ministry of Energy, company reports.

# Then Came the Price Crash. But for the oil companies, the decline in oil price was largely offset by ruble depreciation

•Composition of capital investment in oil extraction in Russia for Russian oil majors (rubles)



•Composition of capital investment in oil extraction in Russia for Russian oil majors (dollars)



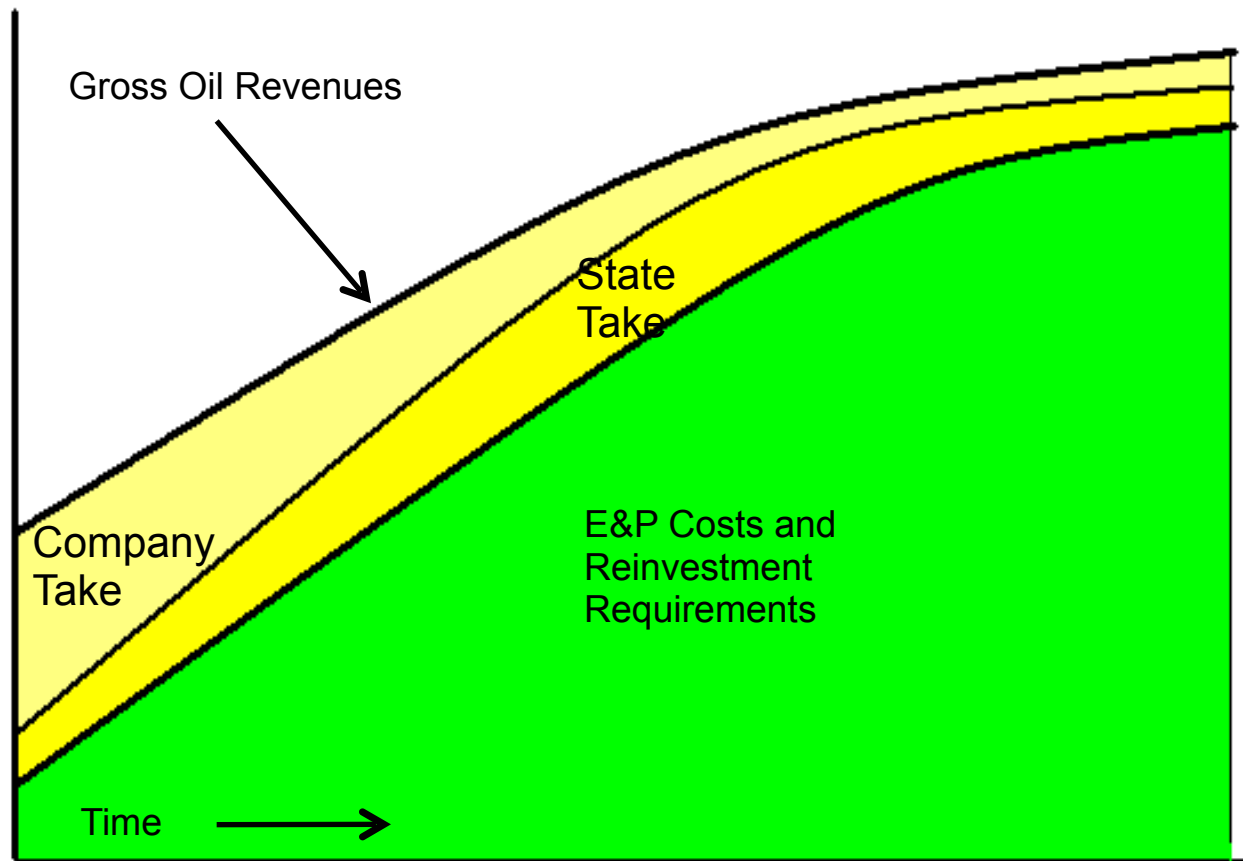
•Note: \*Preliminary estimate for 2016.  
•Source: IHS Markit

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•Source: IHS Markit

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## **Second Challenge: Declining Oil Revenues to the State Budget**





# **Third Challenge: The Long-Term Impact of Sanctions**

# **What Has Been the Impact of Sanctions on Russian Oil Production?**

- **The initial impact of sanctions has been limited**
  - In West Siberia, the Russian oil companies use Russian equipment primarily and need little financing
  - In East Siberia, foreign service providers are not (yet) under sanctions
- **It is only if sanctions are prolonged that they will begin to bite:**
  - Offshore oil and gas development will be affected
  - Unconventional (“tight”) oil will also be affected, if foreign service and equipment providers come under sanctions
- **The strategic importance of Asian partners increases correspondingly**

# Hopes for an Early Rollback of Sanctions Have Faded



- **In principle, it is easy to do:**
  - The sanctions are Executive Orders, not acts of Congress
  - Therefore they can be dropped or “ratcheted down” at a moment’s notice
  - But by how much? Including Crimea?

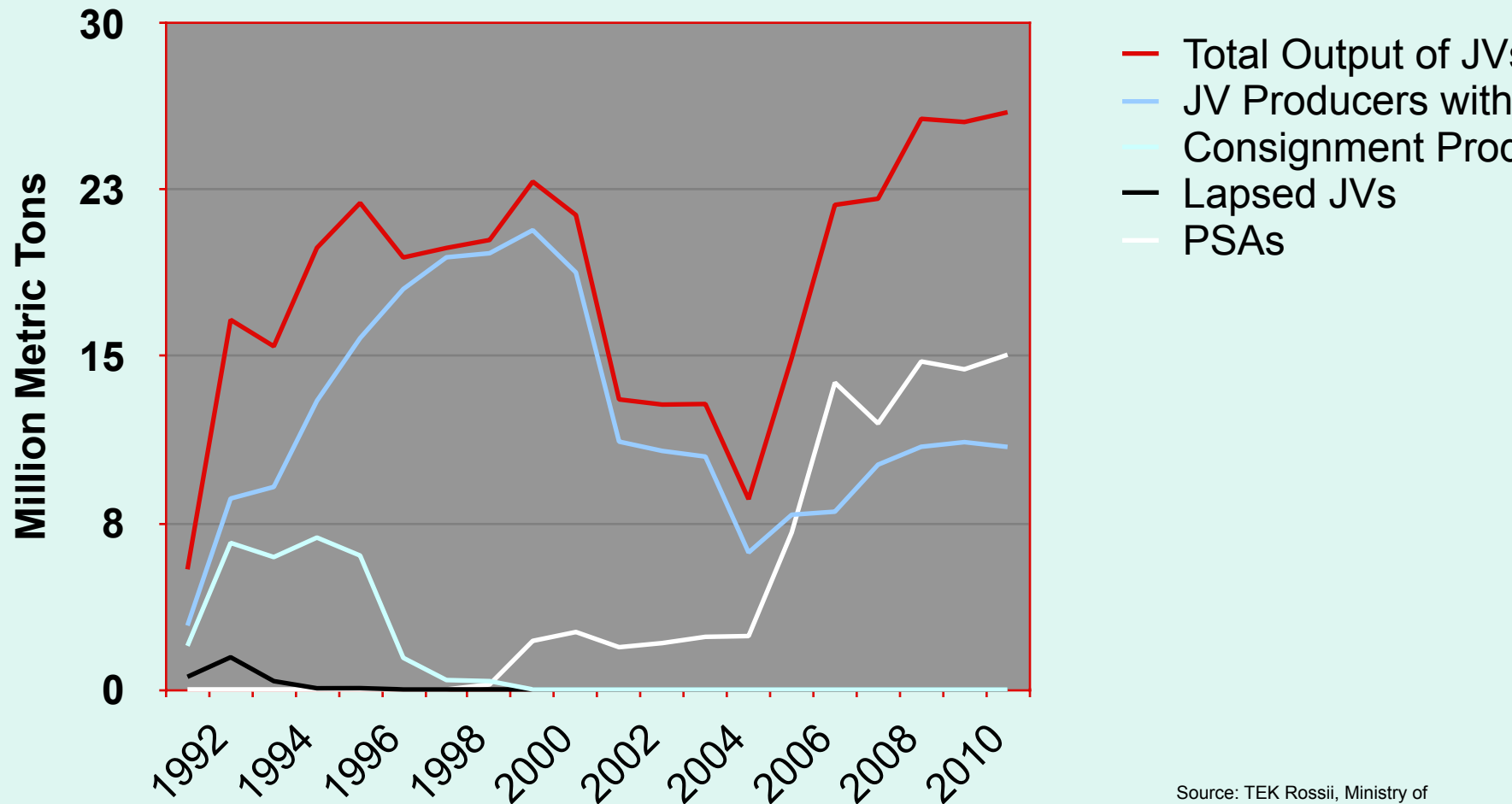
## **But early action was always unlikely:**

- Trump’s appointments showed no strong desire for quick rollback
- Most of the Washington foreign-policy establishment was against a rollback
- The recent souring of US-Russian relations now makes any rollback practically impossible

## **Congressional action could be the main game-changer ahead**

- A bill making sanctions law is already moving through both houses of Congress
- This could tie the president’s hands

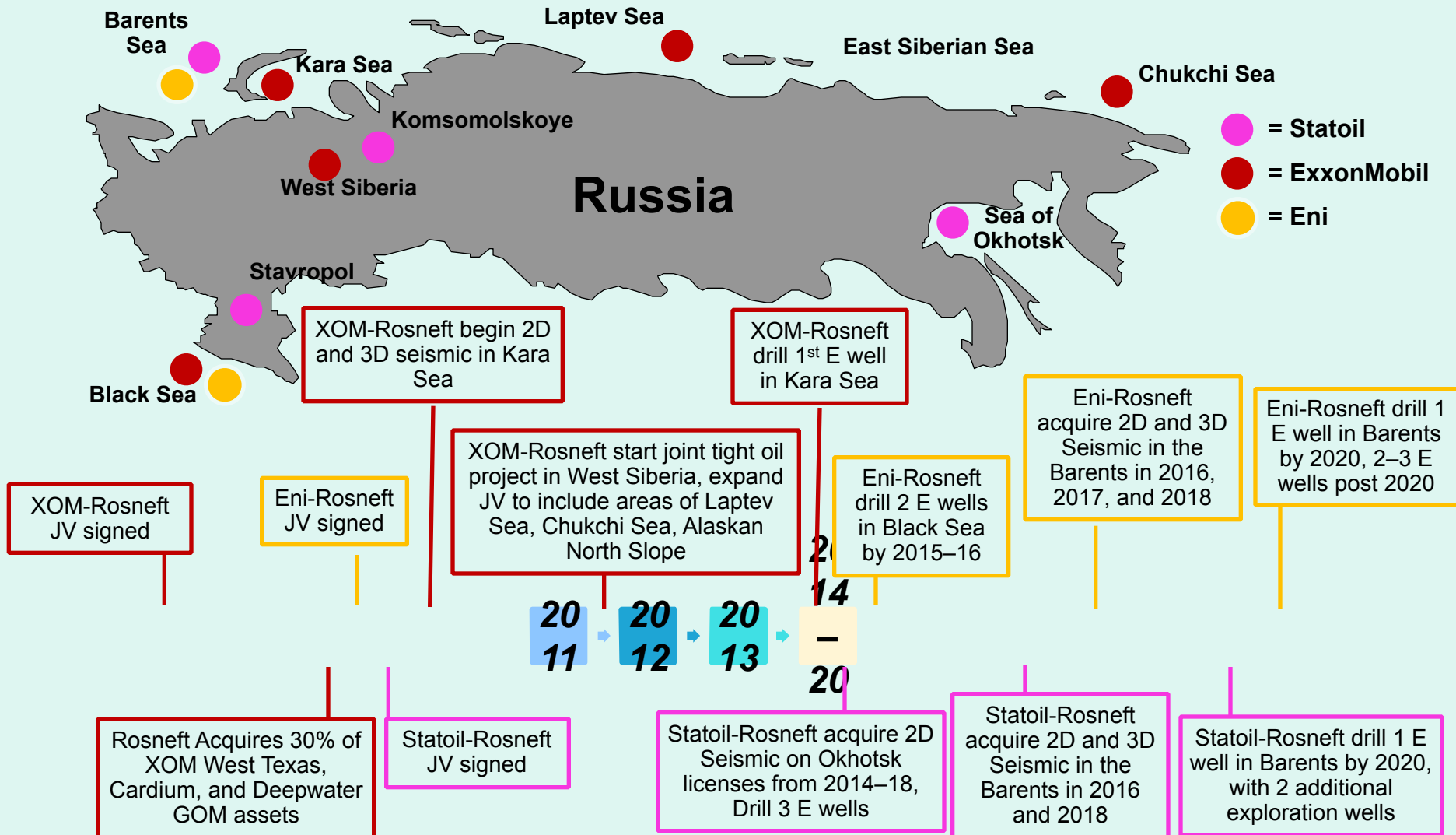
## In particular, what Implications for Foreign Players? So Far, their Direct Role Has Been Limited



Source: TEK Rossii, Ministry of Energy/Ministry of Fuels  
Note: Includes all oil-producing enterprises with large foreign ownership.



# Rosneft-IOC Arctic shelf JVs: Exploration phase



# Russian oil companies are soldiering on with Arctic exploration and shale oil development, using domestic technologies and contractors

## ROSNEFT

- Igor Sechin recently presided over start of exploratory drilling at Tsentralno-Olginskaya prospect on Laptev Sea coast (with Vladimir Putin on video hook-up)
- Most northerly well in Russia, is a long-reach horizontal using Russian contractors and equipment, as well as Halliburton and Weatherford as subcontractors
- Tsentralno-Olginskaya not classified as “deepwater”

## GAZPROM NEFT

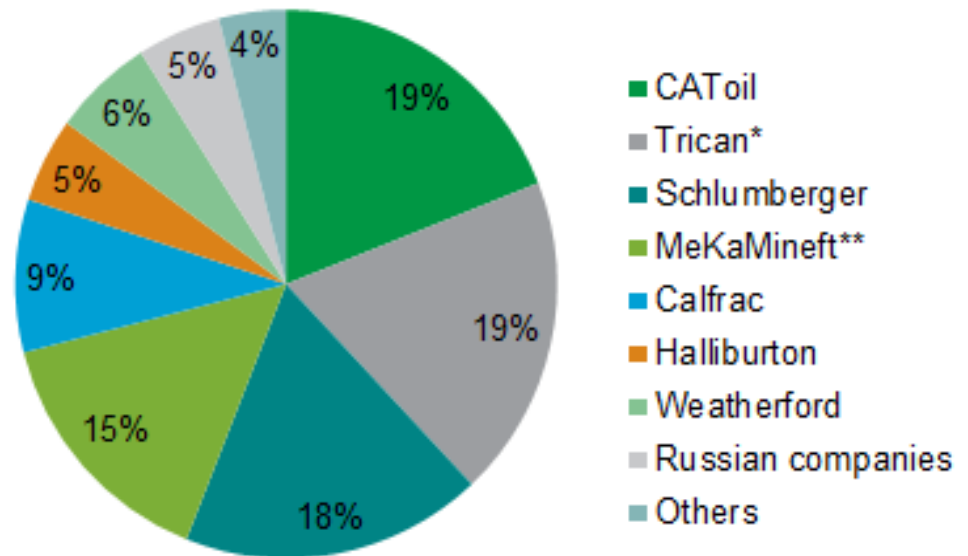
- In West Siberia, Gazprom Neft completed a horizontal well in Bazhenov shale, using homegrown equipment and contractors



# Import Substitution is a Lengthy Process, Although it Will Benefit Russia in the Long Term

- Several key areas of oilfield technology remain heavily dependent on imported equipment
- Some foreign operators have left; some have sold out to Russian oil companies
- Others have formed Russian companies themselves
- One perennial problem is weak demand for advanced technology from the oil companies themselves

Structure of Russia's market for hydraulic fracturing services (share of market by company, in %)



\*From 2005, Rosneft's RN-GRP subsidiary.

\*\*Joint venture of Megionneft and Mikko Finance & Trading (Belgium).

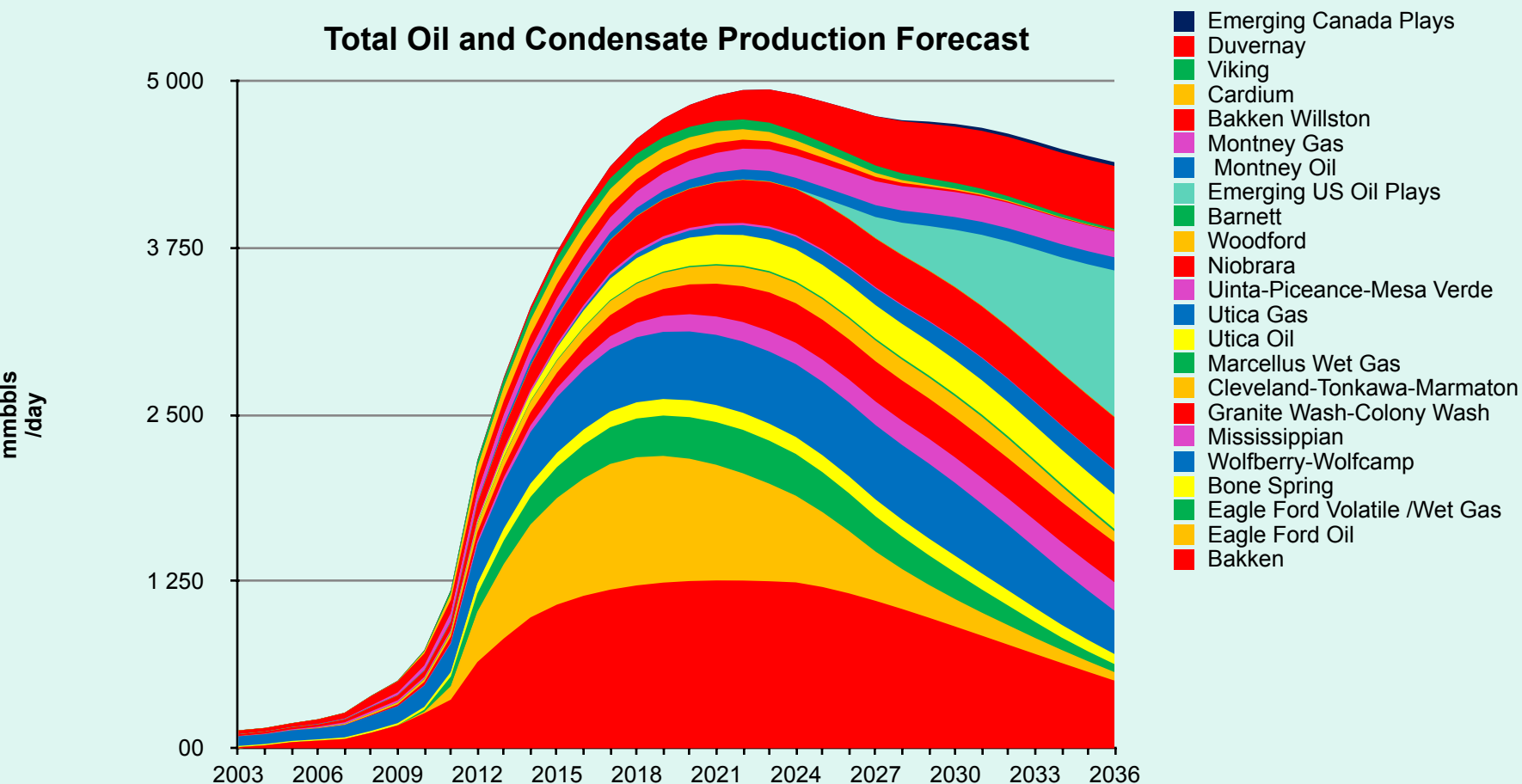
Source: IHS Markit, data from Russian Fracturing Company  
(as reported by Neftegazovaya Vertikal)

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# **Fourth Challenge: The Tight-Oil Revolution**



# 5 mbd of Oil and Condensate Will Likely be Added to North American Production by 2022—With Possibly More to Come



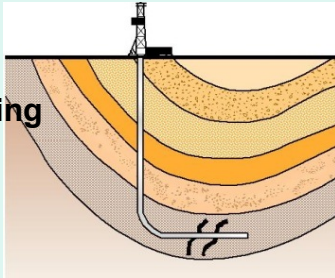
# Key Points from the North American Experience to Date

- **It's not just about "shale oil":**
  - Tight-oil techniques have spread from shale to a wide range of lower-quality conventional plays
- **It's more than about geology and technology:**
  - "Cracking the code" requires approaches carefully tailored to each field, an artful combination of technologies, much trial and error, and strict cost control
- **The key questions are above the ground:**
  - Availability of small or medium-sized independents with innovative cultures and focus on controlling costs
  - Availability of numerous service companies competing with one another and sharing lore
  - Availability of developed infrastructure, especially roads and water
  - Supportive regulatory structure and private mineral rights
    - Speed of permitting and flexibility of production plans
    - Despite tightening environmental regulations, especially in the U.S. Northeast

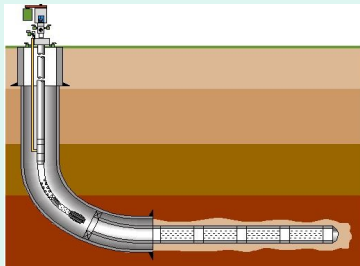
# The Three Basic Techniques in Tight Oil Have Been in Russia for a Decade

## FIRST GENERATION: 2000–05 Russian service contractors

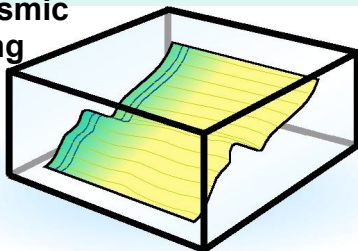
Simple hydrofracturing



Horizontal drilling

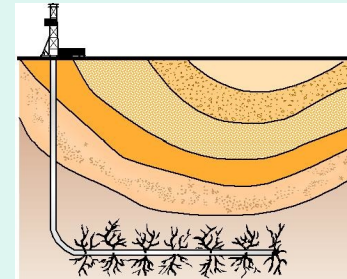


3-D seismic mapping



## NEXT GENERATION: 2010–? Foreign or Russian?

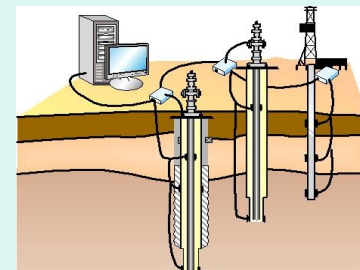
Multistage hydrofracturing



Long-reach Horizontals



Micro-seismic field support



# **The Ultimate Challenge: “Peak Oil Demand”**





**Спасибо за  
Внимание!**

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