

State of the Industry: Russian Oil's Present & Future

Vadim Makhov, Chairman of the Board, OMZ

Mikhail Margelov, Vice President, OMZ

Tom Reed, Chief Executive Officer, JKX

Thane Gustafson, Senior Director & Advisor, Russian & Caspian Energy, IHS

Maxim Nechaev, Director, Consulting, Russian & Caspian Energy

Matthew Sagers, Managing Director, Russian & Caspian Energy, IHS (Chair)





FEBRUARY 2016

GEOPOLITICAL ISSUES OF OIL TRANSPORTATION

Mikhail V. Margelov, Vice-president, Transneft, JSC

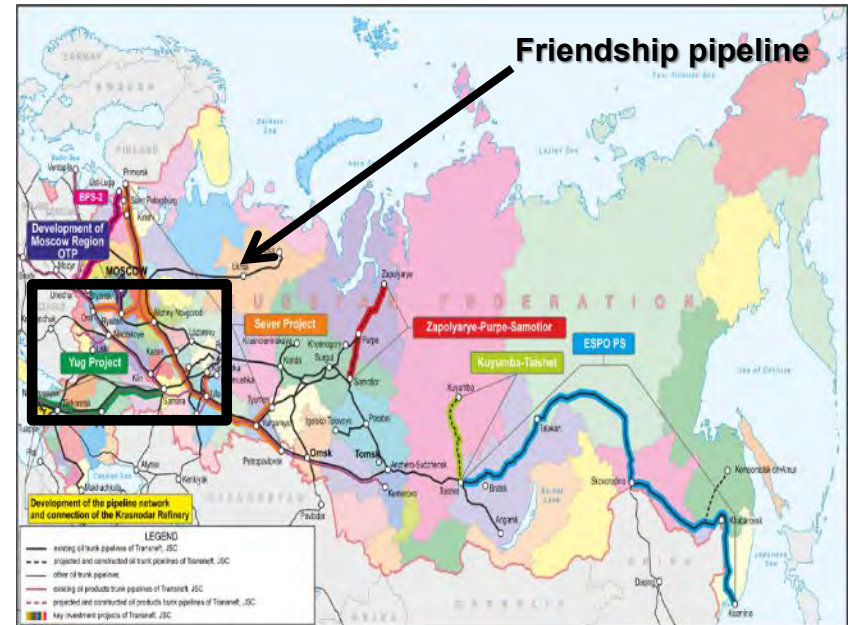
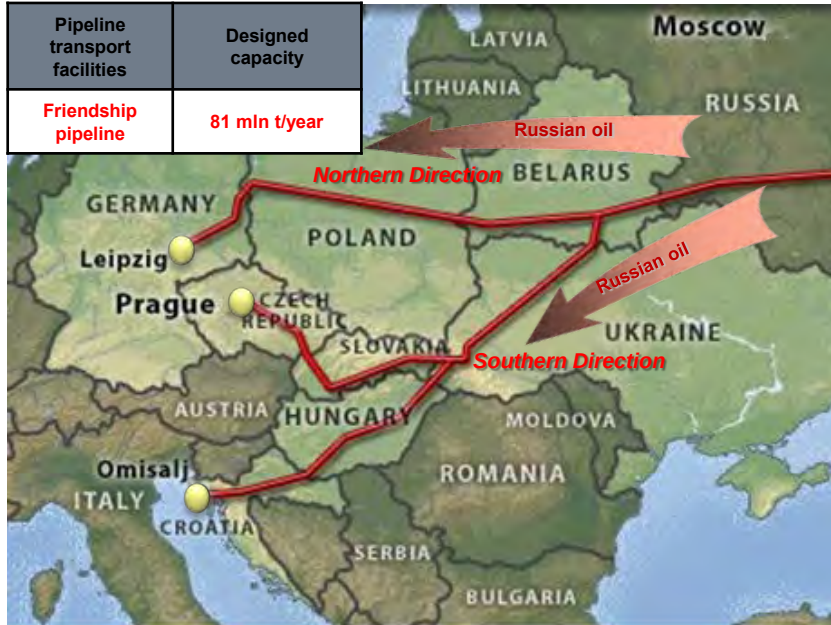
Geopolitics



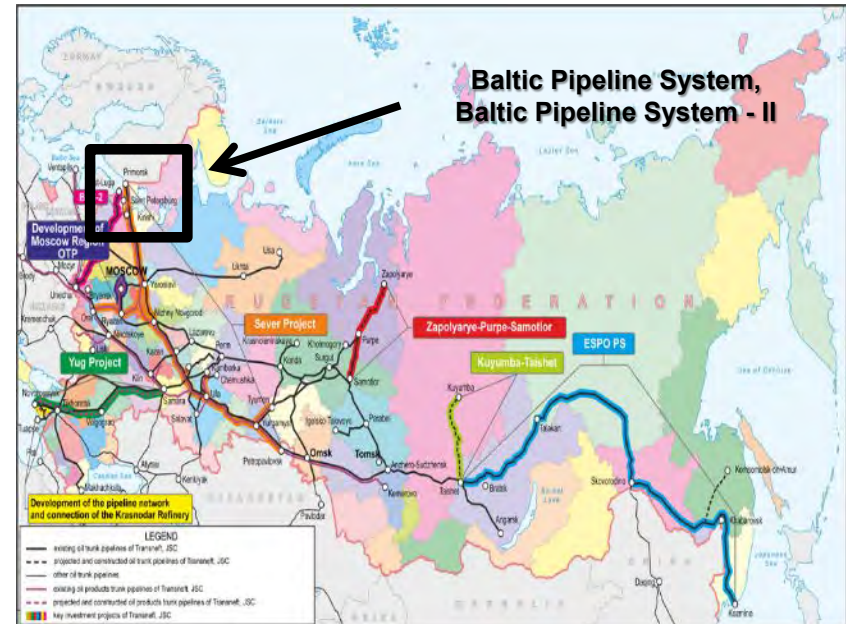
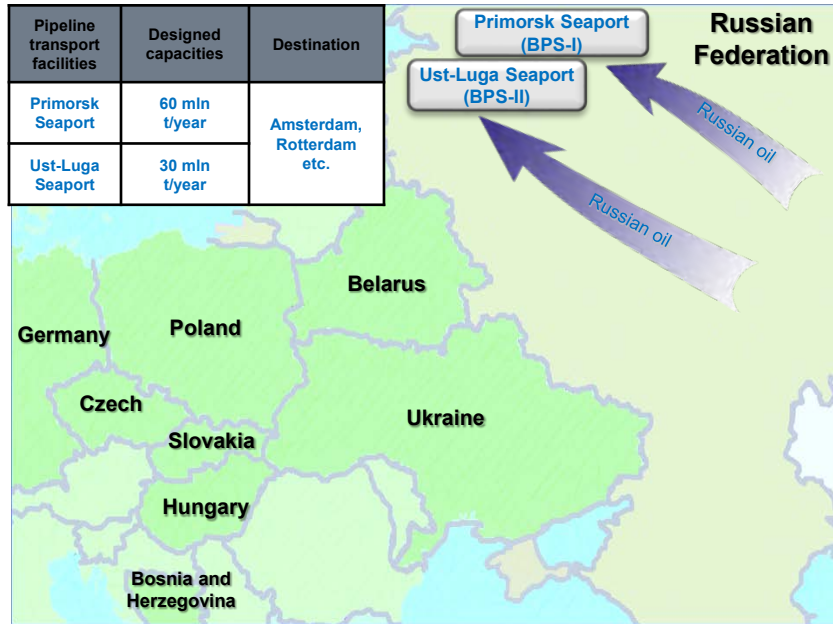
Transneft, JSC



Russian oil export: European direction - Friendship pipeline



European direction: Baltic Pipeline System, Baltic Pipeline System - II



Eastern direction of Russian oil export: Eastern Siberia – Pacific Ocean pipeline system



International Association of oil transporters

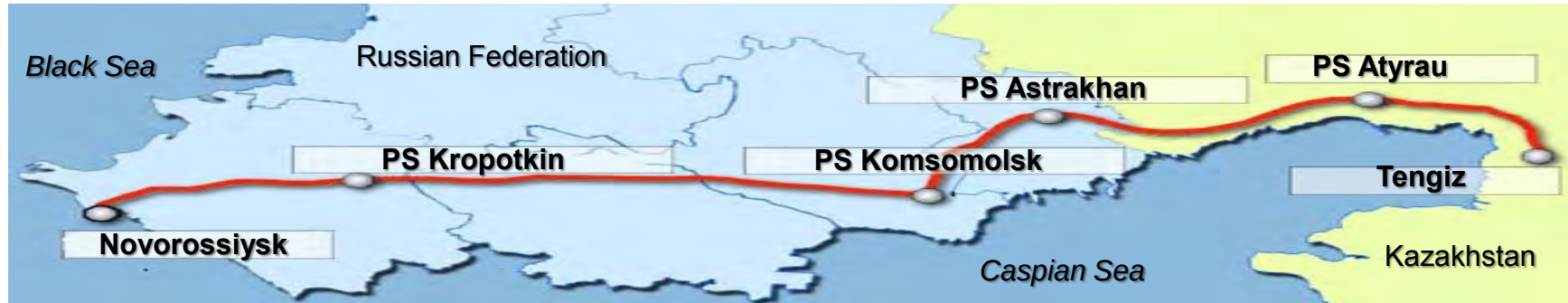


International Association of oil transporters



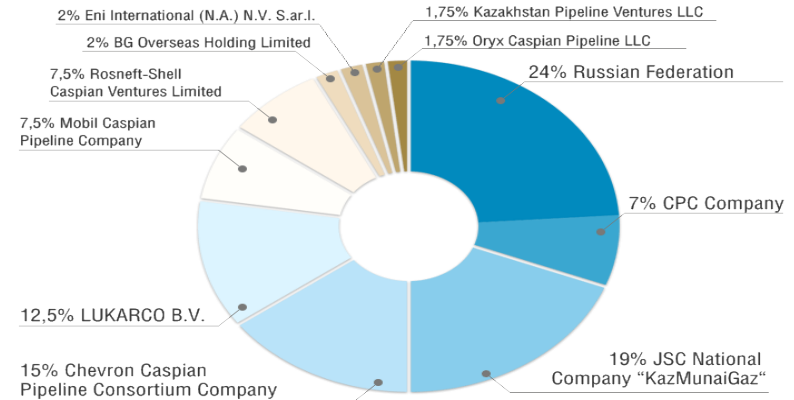
Total length of IAOT members' trunk pipelines is more than 50 thousand miles

Caspian pipeline consortium



The largest international oil transportation project with participation of Russia, Kazakhstan and world's leading oil companies

Was established for construction and operation of the trunk oil pipeline more than 930 miles long



Transneft, JSC

Thank you for your attention!

Transneft, JSC

+7 (495) 950-81-78

www.transneft.ru

State of the Industry:

Russian oil's present and future

Matthew J. Sagers, Thane Gustafson, John C. Webb, Maxim Nechaev

23 February 2016



Key themes

- General resilience of Russian production to challenges of 2015
- Evolution of international sanctions and their impact on Russia's oil sector
- Implications of the tax maneuver and industry's search for alternative financing mechanisms

Main factors in resilience of Russian oil production

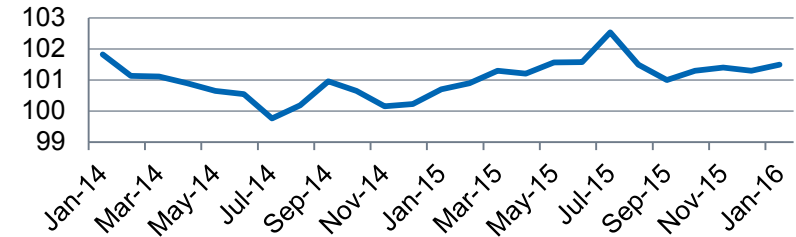
Matthew J. Sagers, Managing Director, Russian and Caspian Energy Advisory Service and Eurasian Transportation Forum, IHS, +1 202 857 5178, matt.sagers@ihs.com



Slight upward tick in oil production continued in 2015, supported by resurgent development drilling

- **Oil output up 1.4% in 2015, to 534.0 million metric tons (MMt) (10.73 MMb/d)**
- **Main growth ingredients include**
 - Ongoing condensate boom: Estimated 17.6% jump in condensate output in 2015, to 30.0 MMt (707,000 b/d)
 - New field development: East Siberian growth slowing, but remains key factor along with other frontier regions
 - “Brownfield” redevelopment, especially in Volga-Urals
- **Development drilling rebounded in 2015**
 - Development drilling volumes fell by 7% in 2014: first annual drop since 2009
 - Number of meters drilled surged by 11.3% in 2015 overall (and by over 20% during several individual months, year on year)

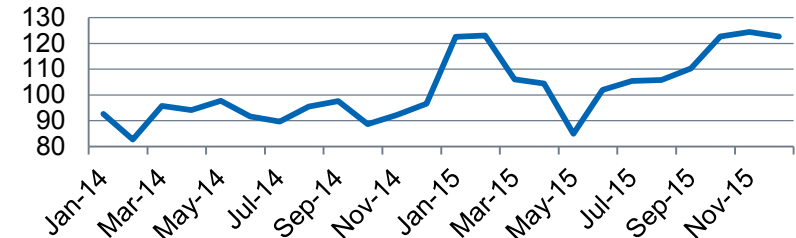
Index of monthly Russian crude oil production
(month of previous year = 100)



Source: IHS Energy

© 2016 IHS

Index of monthly Russian development drilling
(month of previous year = 100)



Source: IHS Energy

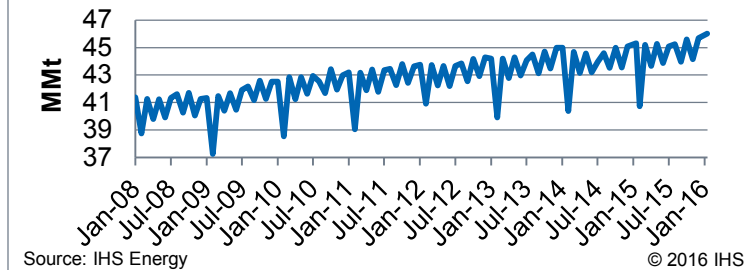
© 2016 IHS

But gradually slowing trend in Russian oil production seen month on month signals fragility of growth

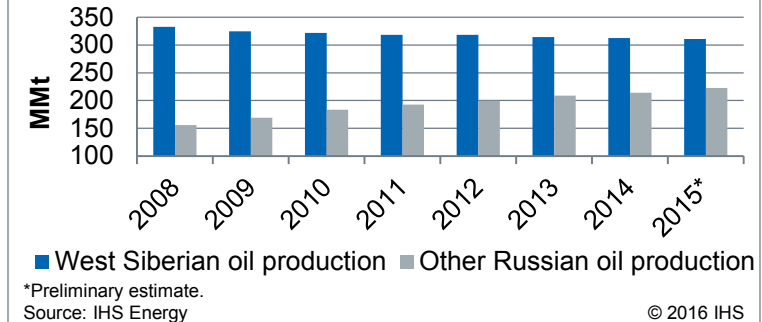


- **Reduced cash flows from lower prices and inability to borrow ultimately leads to lower capital expenditures (capex), including less development drilling, new field development**
 - Size and diversity of Russian oil patch provide flexibility to minimize impact on near-term production for companies: shifting investment to projects with shorter gestation periods
 - So near-term impact virtually negligible, although longer term may be more of a problem
- **Moderating and offsetting West Siberian decline remain key challenges**
 - Yamal-Nenets condensate boom cushions West Siberian decline, but oil production in Khanty-Mansiysk, accounting for about 45% of Russian total, down by 2.9% in 2015 (versus 1.6% decline for 2014 overall)

Monthly Russian oil production

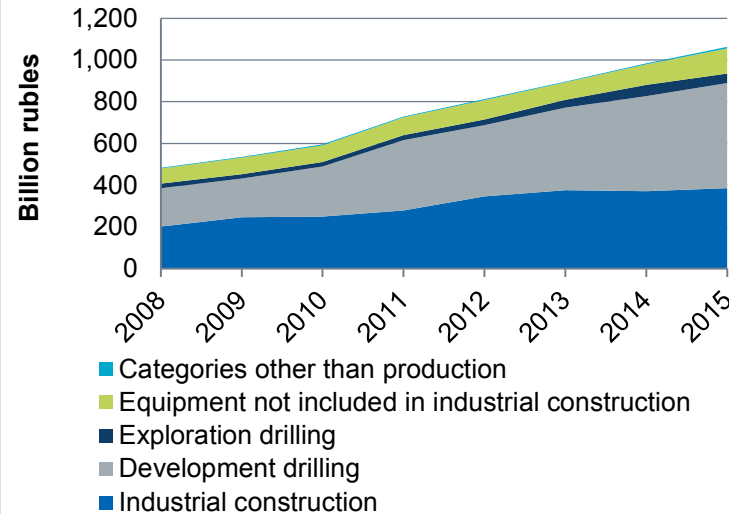


West Siberian versus other Russian oil production



Upstream oil capex by Russian majors continues to rise in ruble terms, but declines in dollar terms in 2014–15 owing to devaluation

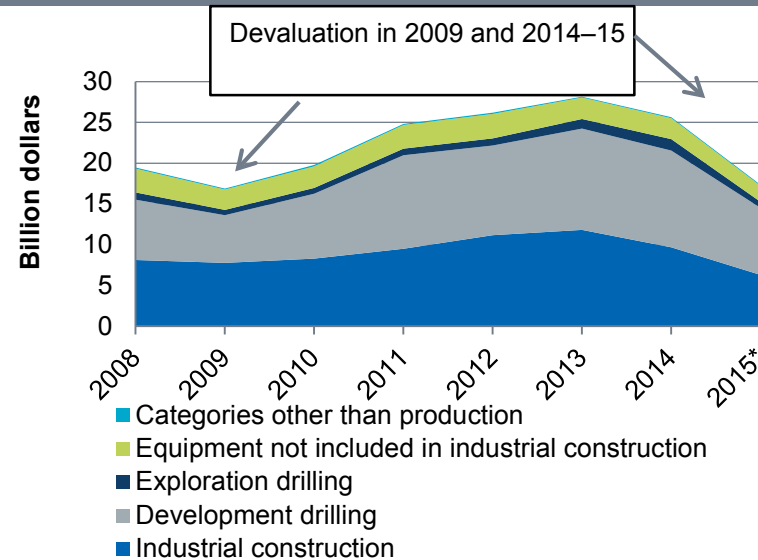
Composition of capital investment in oil extraction in Russia for Russian oil majors (rubles)



Source: IHS Energy

© 2016 IHS

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



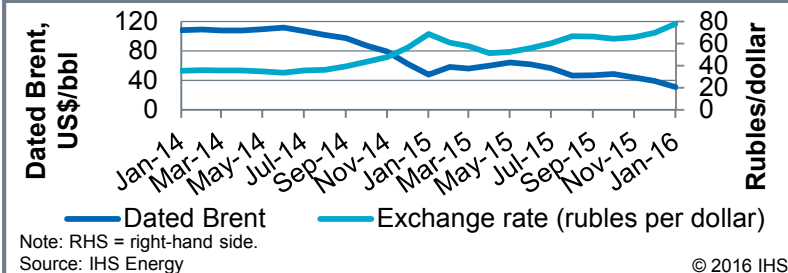
Source: IHS Energy

© 2016 IHS

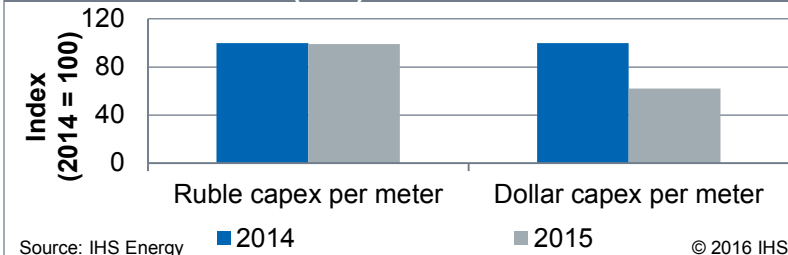
For Russian oil industry, decline in oil price largely offset by dual impacts of ruble depreciation, tax regime structure

- **Ruble depreciation cushioned oil companies: most of their production costs paid in rubles, while export revenues earned in dollars**
 - Ruble value closely tied to oil revenues and oil prices
- **Development drilling cost dynamic illustrative**
 - Average capex per meter almost flat in ruble terms in 2015, but declined by estimated 38% in dollar terms
- **Oil sector tax structure also mitigated impact of price decline on industry**
 - Key Russian oil taxes—upstream mineral resources extraction tax (MRET) and export duty—tied to export price of Urals Blend: Russian budget captured ~85% of each incremental revenue dollar when prices rose
 - So when oil prices fell, most of reduction in revenue absorbed by federal budget rather than companies

World oil price and ruble-dollar exchange rate, 2014–16



Change in Russian oil majors' per unit development drilling costs in rubles and dollars, 2015 versus 2014 (est.)

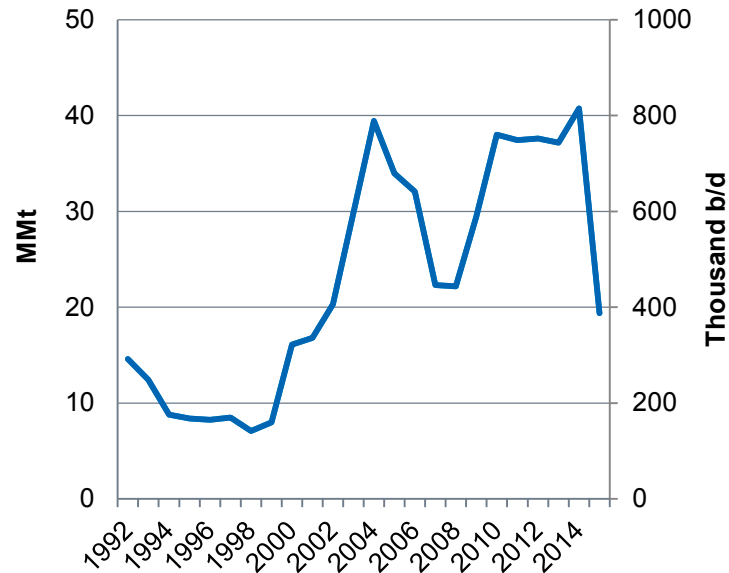


Decline in incremental production from new fields, as companies shift spending to less capital-intensive upstream projects



- **Particularly sharp drop in new field activity in 2015**
 - Production from fields brought on stream in last five years fell by 52.4%, to only 19.4 MMt (about 390,000 b/d)
 - Development drilling at new fields down by 31.2%, to 1.1 million meters
 - Number of new well completions at new fields fell 24.2%, to 405
- **Volume of “new oil” has fallen to level last seen in early 2000s**
- **But number of new well completions at all Russian oil fields up 3.2% in 2015, to 6,065, indicating expansion of infill drilling at brownfields**

New Russian oil production (oil from fields put in operation during previous five years)



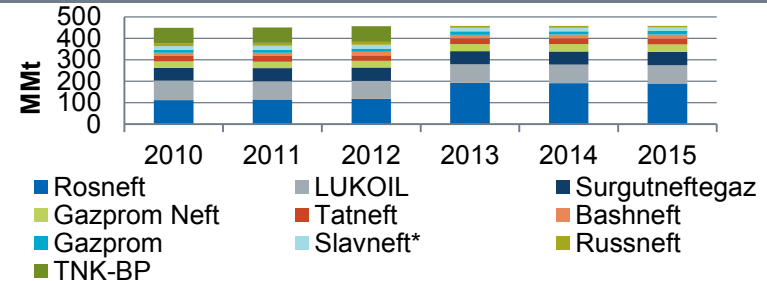
Source: IHS Energy

© 2016 IHS

Diverse trends among different Russian oil majors offsetting, resulting in flatlining of their aggregate production in 2015

- **Bashneft chief source of organic production growth among larger Russian oil majors**
 - Gazprom, Gazprom Neft, Tatneft, and Surgutneftegaz also boost liquids output in 2015
- **Largest producers, Rosneft and LUKOIL, both register declines, as key West Siberian subsidiaries continue to register significant drops**
 - Rosneft's Yuganskneftegaz subsidiary reduces output despite new development drilling program
- **In contrast, “other producers” category increased cumulative production by nearly 11%**
 - Includes some joint ventures and production-sharing agreement (PSA) projects involving Russian majors (e.g., Arktikgaz and Sakhalin-1), but largely Russian independents (e.g., Irkutsk Oil Company)

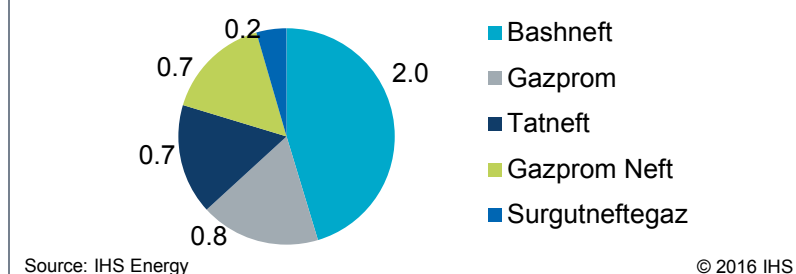
Oil production of Russian majors, 2010–15 (MMt)



Note: *Jointly owned by Rosneft and Gazprom Neft.
Source: IHS Energy

© 2016 IHS

Sources of Russian oil production growth among Russian majors in 2015 (MMt)



Source: IHS Energy

© 2016 IHS

Variety of factors underlie impressive Bashneft results

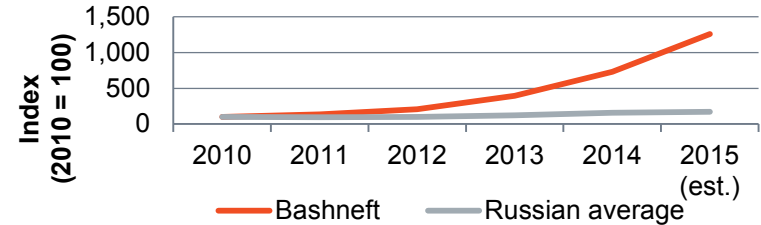
• Newer oil fields main driver recently

- 11.6% production jump in 2014 and further 2015 surge of 11.0%
- Growth last year primarily from greenfield plays in West Siberian and Timan-Pechora basins; some incremental output from core Bashneft brownfield acreage in Volga-Urals Basin as well

• Intensified hydraulic fracturing and horizontal drilling

- Company more than doubled number of hydraulic fracturing operations in 2014; preliminary 2015 data indicate another major increase
- Horizontal drilling as share of developmental drilling around 65% (versus Russian average of 33%)

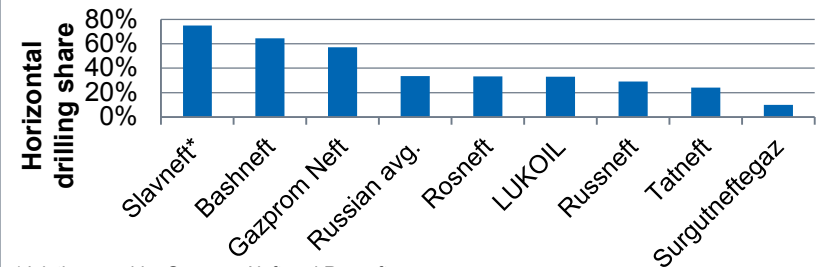
Index of growth in number of hydraulic fracturing operations, 2010–15



Source: IHS Energy

© 2016 IHS

Horizontal drilling as share of all development drilling among Russian oil majors in 2015



*Jointly owned by Gazprom Neft and Rosneft.

Source: IHS Energy

© 2016 IHS

With both tight oil and Arctic shelf programs scaled back and delayed owing to international sanctions, new oil streams insufficient to offset mature basin fall longer term in IHS Energy base case



- **Current outlook is for Russian oil output to grow slightly until 2020 but then slowly contract during 2021–40, to 501 MMt (6% lower than 2015 total)**

- Average annual decline rate of 0.2%

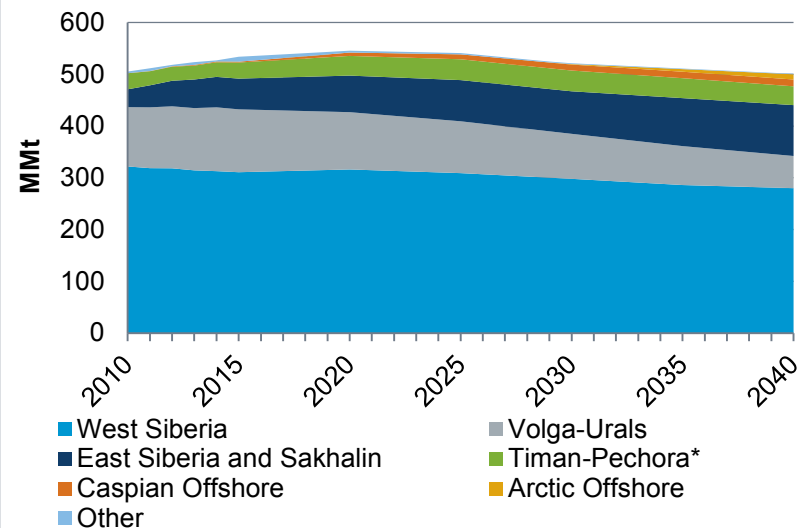
- **Older basins in decline**

- West Siberian output falls by 10% during 2016–40, or 0.4% per year on average but still accounts for 280 MMt in 2040, or 56% of Russian total

- **New East Siberian oil among key factors longer term**

- Combined East Siberian and Sakhalin total jumps 66%, to 98 MMt, by 2040
- Expected Arctic shelf oil discoveries yield 10 MMt in 2040

Russian oil production by region: Base case scenario to 2040



Note: *Includes offshore in the near-shore areas of the Pechora Sea.

Source: IHS Energy

© 2016 IHS

Despite renewed dialogue with OPEC, production freeze uncertain, and Russia still unlikely to cut oil production deliberately



- **Russian government raises possibility of production freeze or cuts to support price**
 - At February 16 Doha meeting Russian energy minister agrees with Saudi, Qatari, and Venezuelan counterparts to freeze 2016 production at January level if other producers (e.g., Iran) join initiative
 - Transneft might be designated as implementer of any “cuts” via reduction in pipeline exports of crude
 - But this would not necessarily lessen production or even exports: Oil could simply move to refining to be exported as products, and crude exports could shift from pipeline to rail
- **Russia-OPEC collaboration remains problematic in practice**
 - Poor implementation of previous planned Russian cuts (in both 1998 and 2002)
 - Government reluctant to sacrifice budgetary revenue from oil taxes as production drops; no guarantee of prompting price rise sufficient to compensate for lost tax receipts
 - International financial sanctions starting in 2014 another complicating factor
 - Constraints on international borrowing force companies to rely directly on cash flow from oil sales to finance operations, so any cut in production immediately puts overall operations at greater risk

Evolution of international sanctions and their impact on Russia's oil sector

Thane Gustafson, Senior Director and Advisor, Russian and Caspian Energy, IHS, +1 301 640 6999,
thane.gustafson@ihs.com



US and EU sanctions targeting Russian entities enacted in 2014



Primary sanctions impacting Russian oil industry

	United States	European Union
I. Financial sector sanctions (scope and main companies targeted)	Prohibition on new debt with maturity of over 30 days (Directive 1); 90 days in the case of energy companies under Directive 2 Gazprom Neft, Novatek, Rosneft, Transneft, and entities owned 50% or more by them (separate, tougher sanctions regime for designated banks, including some banks with history of lending to oil industry)	Prohibition on new debt and other designated financial instruments with maturity of over 30 days Gazprom Neft, Rosneft, Transneft, and non-EU subsidiaries owned 50% or more by them
II. Energy sector sanctions (scope and main companies targeted)	Restrictions on the export of a wide range of items that can be used in deepwater, Arctic offshore, or shale projects that have the potential to produce oil in Russia Gazprom, Gazprom Neft, LUKOIL, Rosneft, and Surgutneftegaz	Ban on the provision of designated goods, technology, and services for new (i.e., contracted after 12 September 2014) deepwater oil exploration and production, Arctic oil exploration and production, and shale oil projects in Russia EU measures do not list specific oil companies

Source: IHS Energy

© 2016 IHS

Why US sanctions remain a deterrent—even for non-US companies

- **US sanctions apply to everyone in the United States, including foreign entities or individuals acting in the United States**
 - And all imports and exports to/from United States
- **US sanctions apply to all US companies wherever they are active**
- **And also to all non-US companies that do business in the United States**
- **And to US citizens working for non-US companies**
 - Including sanctioned Russian companies
- **EU sanctions broadly similar in their reach, but with two important differences:**
 - EU sanctions expire after one year, unless extended by unanimous vote of the Council
 - EU sanctions allow “grandfathered deals;” US sanctions do not

Unexpectedly broad impact of US and EU financial sanctions

Russian access to international capital markets virtually frozen

- Russian borrowers, unable to roll over loans, seek dollars to repay foreign lenders
- Major factor in ruble decline and in reported “capital flight”

Russian investment plans cut back across entire economy

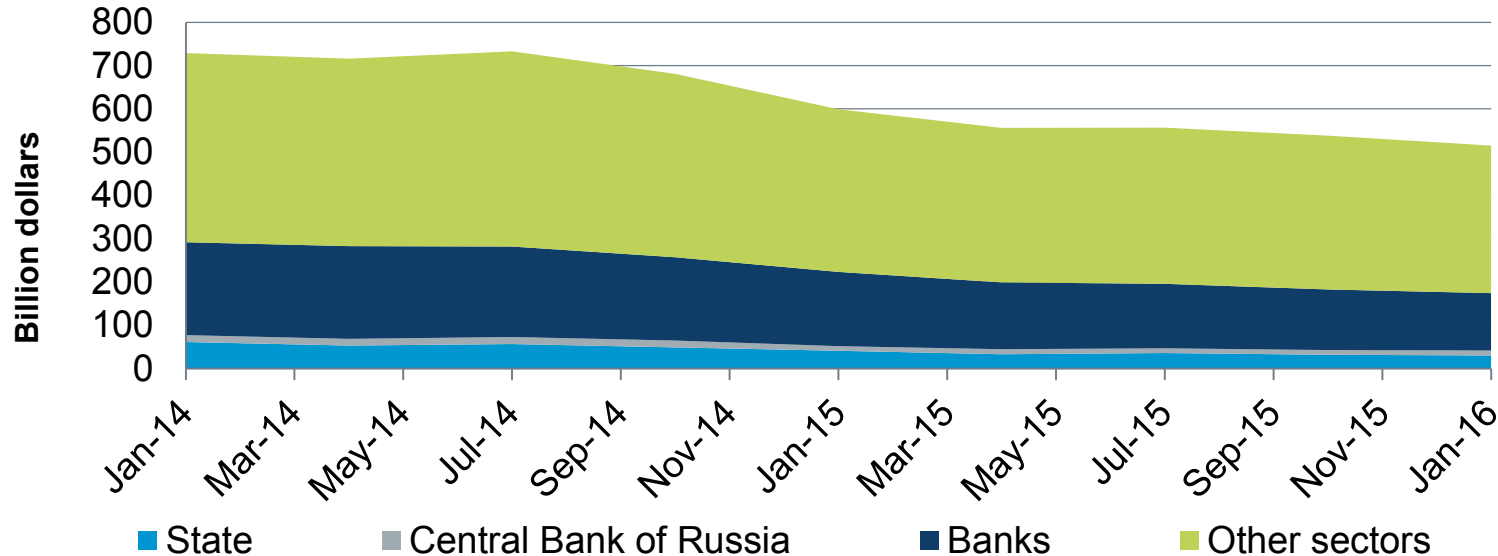
- IPOs and dollar bond offerings have shrunk to nearly nothing
- Oil companies and other exporters able to invest because of foreign exchange income, but not to borrow, except 30-day export finance

Knock-on effects of financial sanctions hit entire economy

- Aggravated ruble devaluation accelerates inflation
- Russian counter-sanctions worsen impact on consumers
- Russian banks refusing to lend to domestic borrowers; impact on mortgage market

Massive outflow of dollars as Russian borrowers pay off their existing loans

Russia's foreign debt, 2014–16



Note: Preliminary estimate for January 2016.

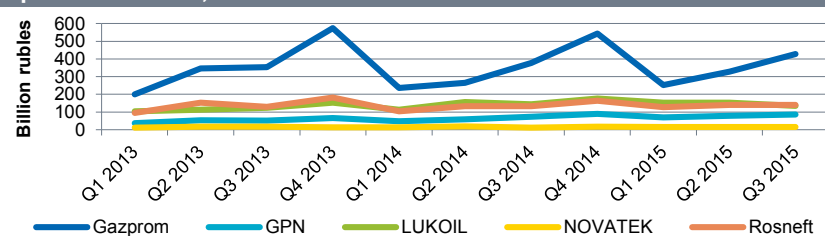
Source: IHS Energy

© 2016 IHS

Sanctioned energy companies nevertheless maintain ruble capex and EBITDA at around presanctions levels, as ruble debt increases

- Capex steady, but more emphasis on investment in existing projects with nearer-term payoffs
- Companies remain in black, and several actually report more robust EBITDA growth since sanctions imposed
- Ruble depreciation effect likely explains much of ruble debt increase: dollar-denominated external debt when expressed in rubles must rise following ruble devaluation

Capital expenditure of selected Russian oil and gas companies by quarter in rubles, 2013–15

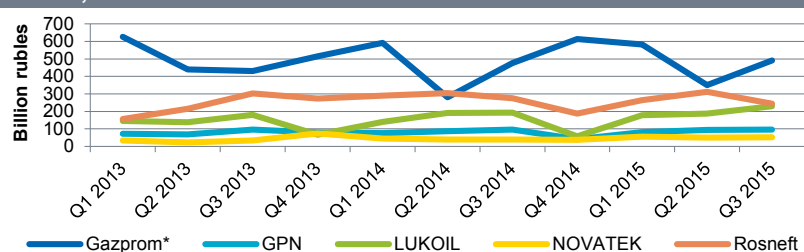


Notes: GPN = Gazprom Neft.

Source: IHS Energy; Gazprom, GPN, LUKOIL, NOVATEK, Rosneft

© 2016 IHS

EBITDA of selected Russian oil and gas companies by quarter in rubles, 2013–15

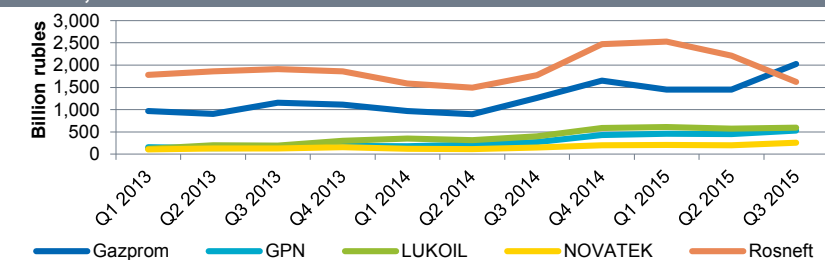


Notes: *Adjusted EBITDA; preliminary results for third quarter 2015.

Source: IHS Energy; Gazprom, GPN, LUKOIL, NOVATEK, Rosneft

© 2016 IHS

Net debt of selected Russian oil and gas companies by quarter in rubles, 2013–15



Source: IHS Energy; Gazprom, GPN, LUKOIL, NOVATEK, Rosneft

© 2016 IHS

Evolution of sanctions in 2015 and outlook for 2016

- **United States closes sanctions loopholes and targets Gazprom's Sakhalin-3 project in summer 2015**
 - July 2015 imposition of sanctions against 26 individuals and firms and inclusion of 36 subsidiaries of already-sanctioned companies
 - August 2015 inclusion of Gazprom's offshore Sakhalin Yuzhno-Kirinskoye oil and gas field in scope of energy sector sanctions (banning provision of technology for development of field)
 - First instance of specific Russian hydrocarbon upstream project being sanctioned by United States
 - Threatens Gazprom's plans to bring field into production by 2020, given dearth of domestically produced equipment for such offshore activities
- **Western sanctions unlikely to be expanded in 2016 if political situation in eastern Ukraine remains essentially frozen, as it has been in recent months**
- **Western unity will be tested, as EU sanctions lapse but US sanctions do not**

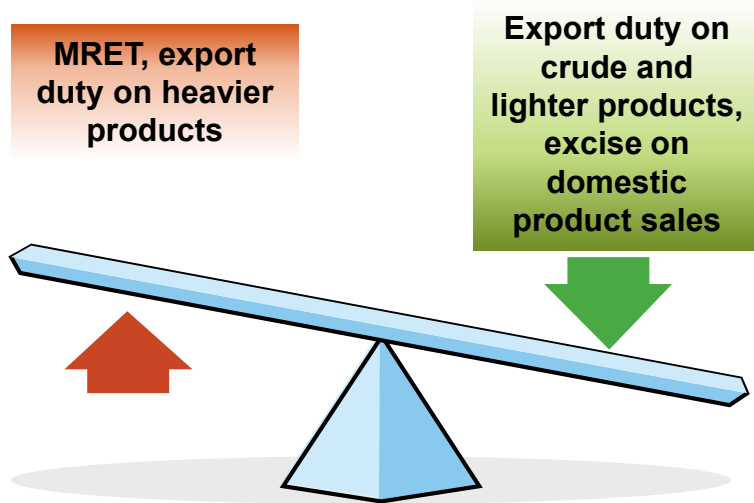
Implications of the tax maneuver, and industry's search for alternative financing mechanisms

John Webb, Director, Russian and Caspian Energy, IHS, +1 202 481 9279, john.webb@ihs.com

Maxim Nechaev, Director, Consulting, Russian and Caspian Energy, IHS, +7 495 937 7724, maxim.nechaev@ihs.com



Tax maneuver initiated in 2015 and scheduled for completion in 2017 relatively neutral for upstream economics; key questions are whether maneuver will be fully implemented and what follows



Government targets:

- Balanced budget
- Rebalance tax burden from upstream to downstream
- Stimulate refinery modernization
- Contain domestic product price inflation

- **Despite its reduction in export taxes on crude, tax maneuver plan provides little (if any) relief for Russian upstream oil production because of offsetting increase in MRET**
 - Margins likely to rise or fall by less than \$1/bbl by 2017 owing to maneuver, with world oil price dynamic key factor in direction of change (as both export duty and MRET formulas tied to oil price)
- **Government postpones crude export duty reduction in 2016 in effort to minimize federal budget deficit amid recession**
 - Marginal export duty for crude stays at 2015 rate of 42% of export price in 2016, in contrast to previous plan to reduce duty to 36%

Rebound of Russian crude oil exports, as new export tax incentives kick in, and decline in refinery throughput

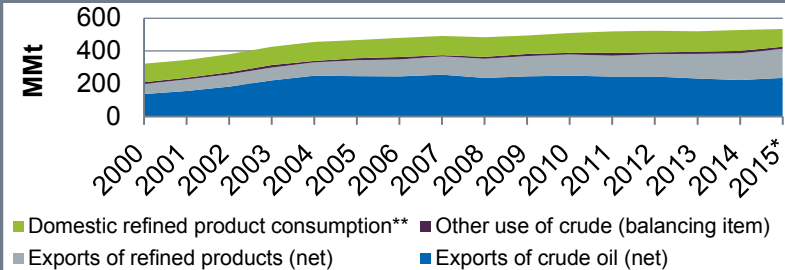
- **2015 reversal of 2013–14 decline in crude exports**

- Crude exports jump by 9.5% overall in 2015
- Rise in volumes via most westward and virtually all eastward routes

- **Contraction, lightening of refinery output**

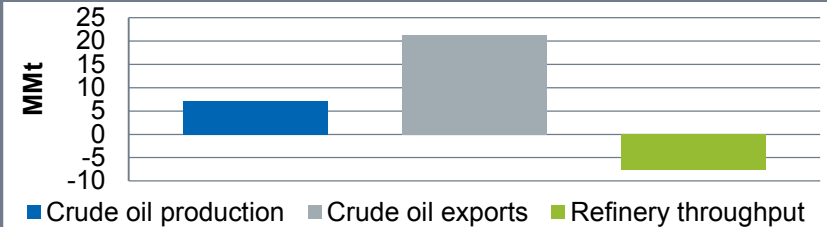
- Refinery throughput declines 2.5% overall in 2015
- Results in drop in heavy product (e.g., fuel oil) output; increase in automobile gasoline output as refining depth increased
- Refined product export surge continues because domestic product consumption declines

Russian oil balance: 2000–15



© 2016 IHS

Increase (decrease) of Russian crude production, crude exports, and refining in 2015, year on year

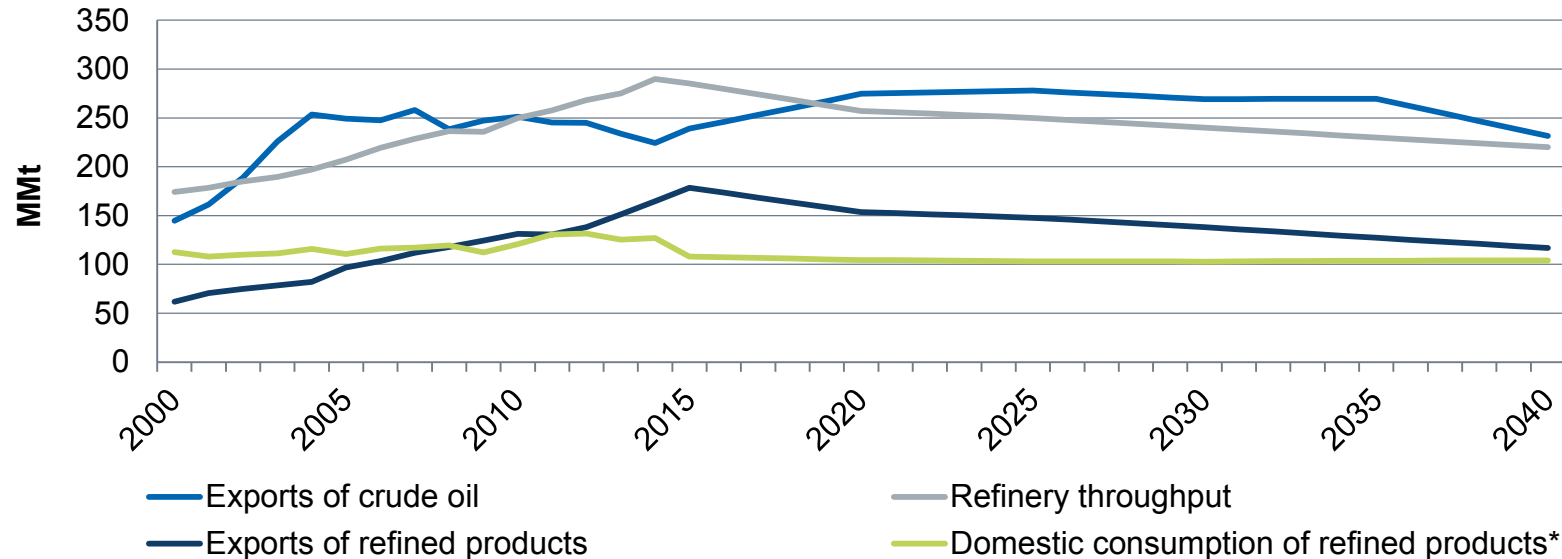


Source: IHS Energy

© 2016 IHS

Tax maneuver plus some refinery modernization expected to drive crude runs down to ~250 MMt by 2025 in base case

Russian crude oil and refined product exports at inflection point: IHS Energy base case scenario to 2040

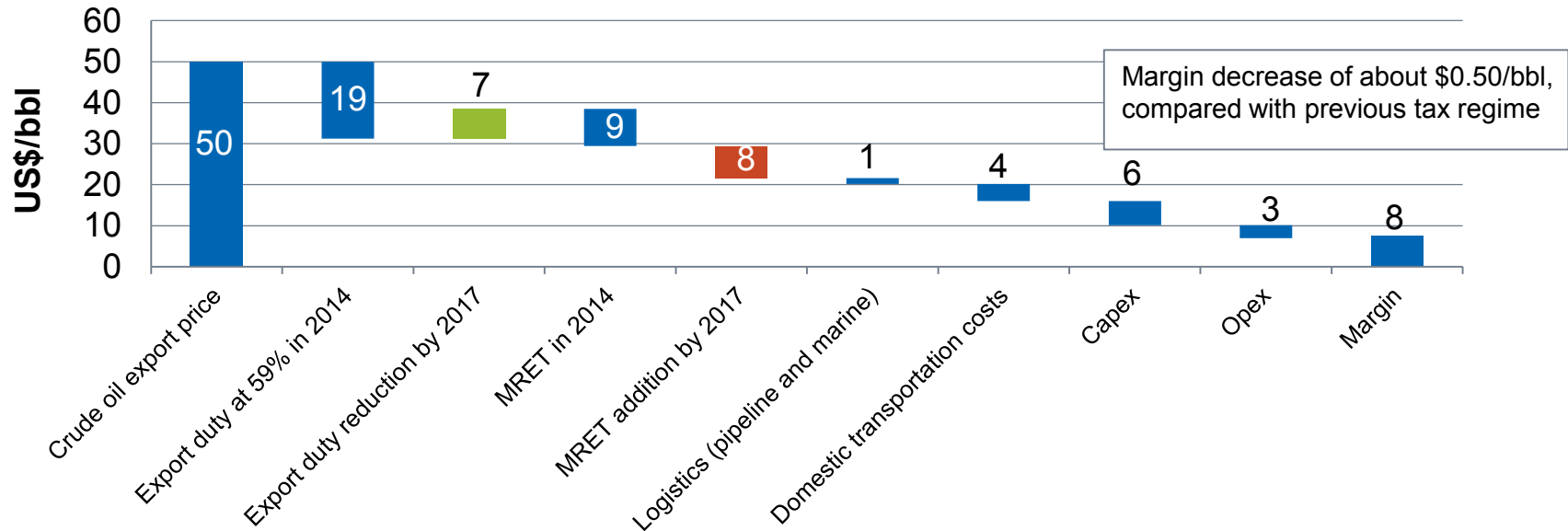


*Apparent consumption.
Source: IHS Energy

© 2016 IHS

Only slight increase or decrease in upstream producer margins expected by 2017 as result of planned tax maneuver

Estimated impact of 2015–17 tax maneuver (as originally planned) on upstream economics in 2017 at world oil price of \$50/bbl



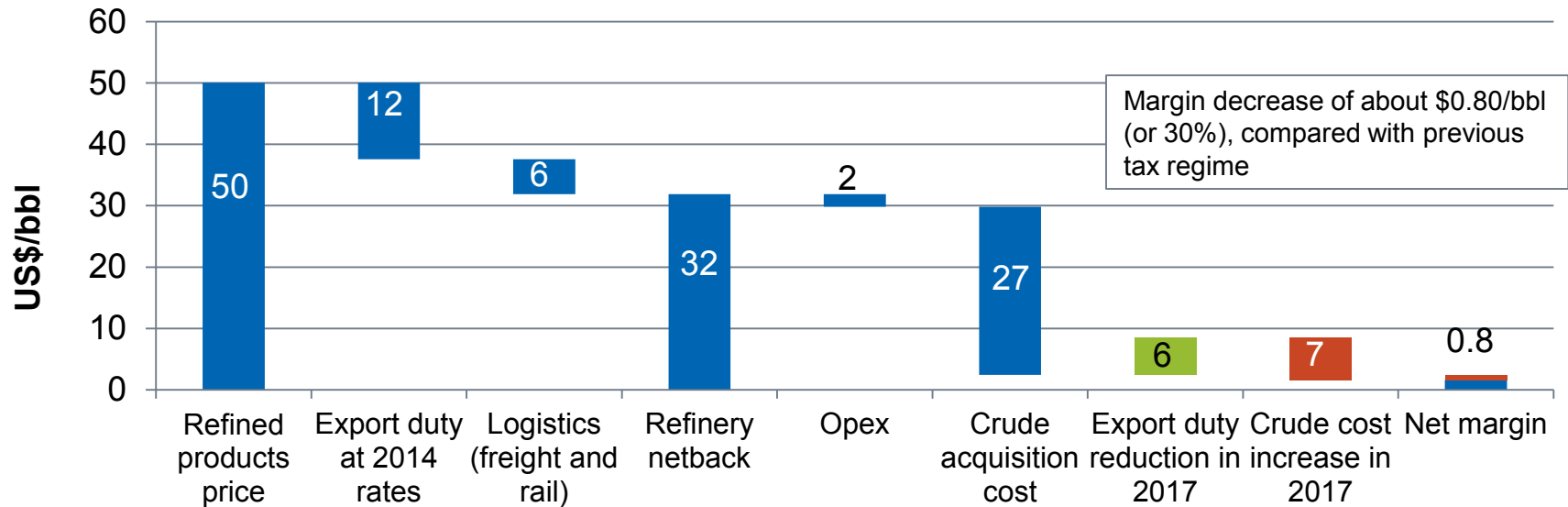
Note: Opex = operating expenses.

Source: IHS Energy

© 2016 IHS

Refining margin is expected to fall 30% by 2017 as result of planned tax maneuver

Estimated impact of 2015–17 tax maneuver (as originally planned) on refining margin at world oil price of \$50/bbl



Source: IHS Energy

© 2016 IHS

Until Russia shifts to profit-based tax system, complex and fluid system of ad hoc tax breaks may remain critical to prevent sharp oil production decline



- Twofold problem of Russian tax regime for producers is high level of fiscal burden and disconnect from project profitability
- Even after maneuver, regular tax regime leaves many prospective “brownfield” redevelopments as well as “greenfield” projects “out of the money”
- Energy Ministry and oil companies lobbying for profit-based taxation pilot projects
- In meantime, centers of Russian oil production growth likely to remain concentrated in regions and project categories qualifying for various tax breaks (which involve administrative challenges of their own)

Examples of oil categories that currently qualify or may be eligible for fiscal exemptions

Oil category	Export duty relief	MRET relief
Greenfield projects in selected onshore and offshore areas (e.g., East Siberia)	✓	✓
High-viscosity oil	✓	✓
Shale oil formations		✓
Highly depleted fields (>80% depleted)		✓
Smaller fields (<5 MMt of reserves)		✓

Source: IHS Energy

© 2016 IHS

New patchwork of Russian oil industry finance emerges, but substitutes for global capital markets are “second best” options

Primary financing alternatives of Russian oil companies and selected examples, 2014–16

Greater use by companies of free cash flow

- Industrywide trend

Russia's National Welfare Fund

- NOVATEK
- Sibur
- Gazprombank

Oil export prepayment deals

- Rosneft contracts with oil traders (Trafigura, Vitol, Glencore)
- Rosneft-CNPC contract

More borrowing from Russian banks

Industrywide trend

Asset sales

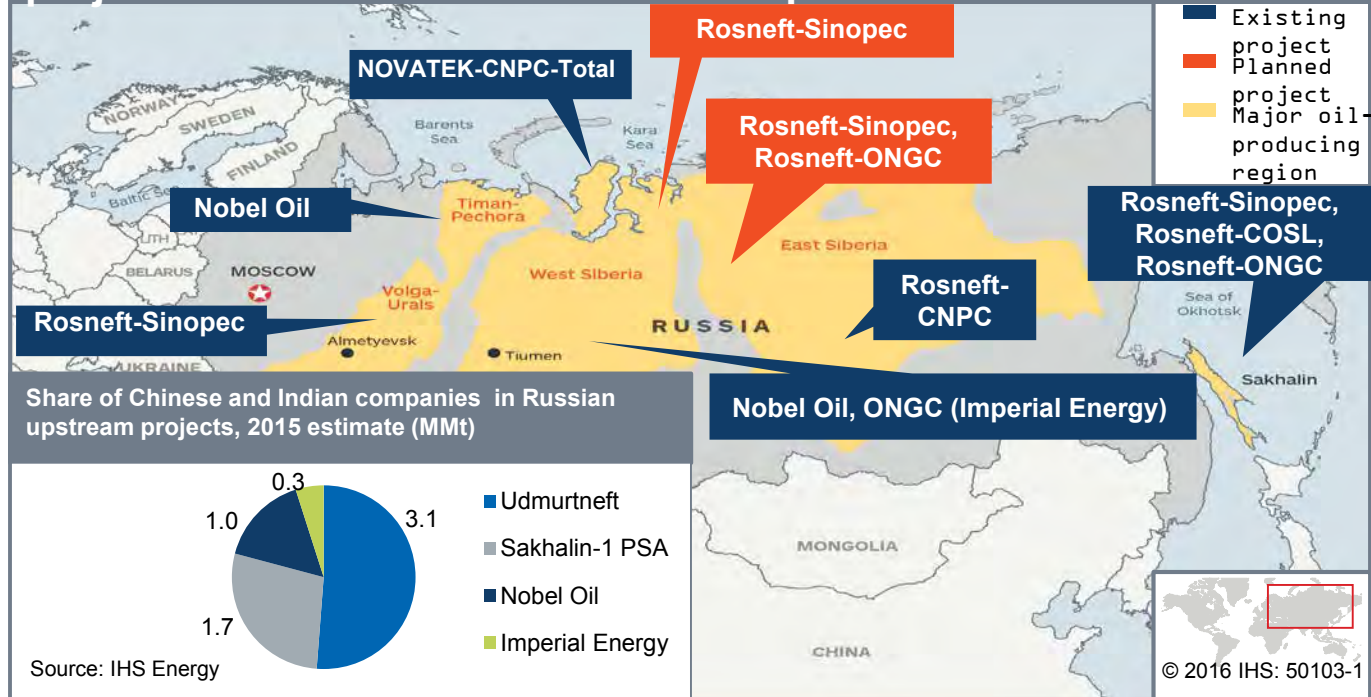
- Rosneft deals for sale of East Siberian subsidiary stakes to Sinopec, ONGC, BP
- Sibur sale of equity to Sinopec

Notes: ONGC = Oil and Natural Gas Corporation Limited. CNPC – China National Petroleum Corporation.
Source: IHS Energy

© 2016 IHS: 60103-16

Chinese and Indian upstream assets in Russia after latest sales still represent small share of total Russian oil production

Location of primary joint upstream crude oil and condensate projects of Russian and Chinese companies



Chinese and Indian companies' Russian upstream exposure varies widely, but mostly conventional onshore, while limited experience in emerging sanctioned categories remains constraint

- **Only few projects in Russia currently actually producing, involving Chinese or Indian investment**
 - Main existing production entity, Sinopec-Rosneft joint venture in Volga-Urals (Udmurt Republic), involves typical “brownfield” challenges
- **No joint “tight” oil projects so far**
 - But Imperial Energy (ONGC) still plans Bazhenov shale development in Tomsk (West Siberia) even following withdrawal of US partner
- **Offshore partnerships: sub-Arctic acreage**
 - Only producing offshore Russian project involving Chinese or Indian company remains Sakhalin-1 PSA

	Onshore Russia	Offshore Russia
Sinopec		
CNPC		
Nobel Oil		
COSL		
ONGC		



Project with commercial production



Agreement or project not yet producing commercially

Note: COSL = China Oilfield Services Limited.

Source: IHS Energy

© 2016 IHS

IHS Customer Care:

Americas: +1 800 IHS CARE (+1 800 447 2273); CustomerCare@ihs.com

Europe, Middle East, and Africa: +44 (0) 1344 328 300; Customer.Support@ihs.com

Asia and the Pacific Rim: +604 291 3600; SupportAPAC@ihs.com

COPYRIGHT NOTICE AND DISCLAIMER

© 2016 IHS. All rights reserved. No portion of this presentation may be reproduced, reused, or otherwise distributed in any form without prior written consent of IHS. Content reproduced or redistributed with IHS permission must display IHS legal notices and attributions of authorship. The information contained herein is from sources considered reliable, but its accuracy and completeness are not warranted, nor are the opinions and analyses which that are based upon it, and to the extent permitted by law, IHS shall not be liable for any errors or omissions or any loss, damage, or expense incurred by reliance on information or any statement contained herein. In particular, please note that no representation or warranty is given as to the achievement or reasonableness of, and no reliance should be placed on, any projections, forecasts, estimates, or assumptions, and, due to various risks and uncertainties, actual events and results may differ materially from forecasts and statements of belief noted herein. This presentation is not to be construed as legal or financial advice, and use of or reliance on any information in this publication is entirely at your own risk. IHS and the IHS logo are trademarks of IHS.

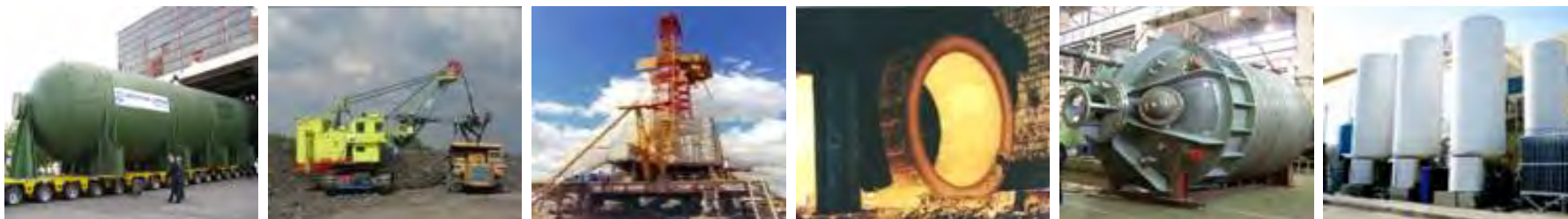




OMZ – innovative & reliable solutions for Oil & Gas market

**Vadim Makhov, Ph.D.
Chairman of the Board**

23 February 2016



Nuclear and petro-chemical equipment



Cryogenic equipment



Mining equipment



Specialty steels and rolls



Key products

- Pressure vessels for petro-chemical, nuclear and conventional power

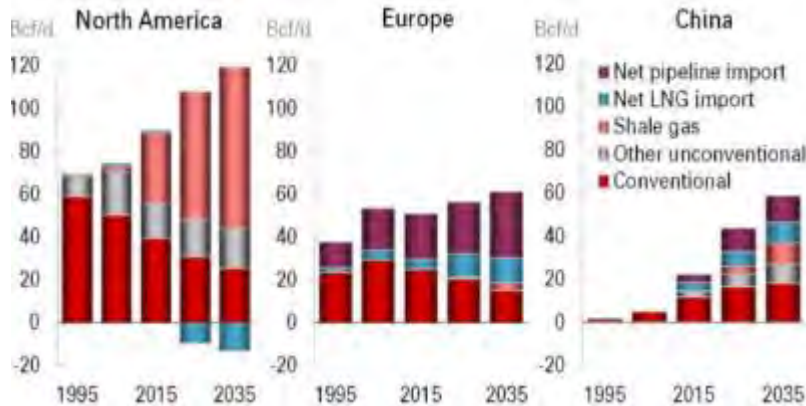
- Air separation plants
- On-site projects
- LNG
- Rare gases
- Mixed gas

- Mining electrical excavators
- Crushing and grinding equipment

- Forgings / bars, thick sheets, castings
- The backing and working rolls
- Heavy rolls

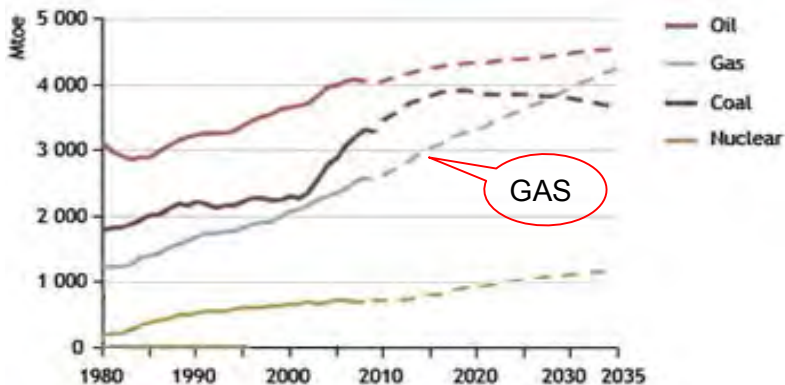
Global Gas Market

Forecasted sources of gas supply by region



Source: BP Energy Outlook 2035

Energy demand by source



Source: International Energy Agency

Industry Context

Globally:

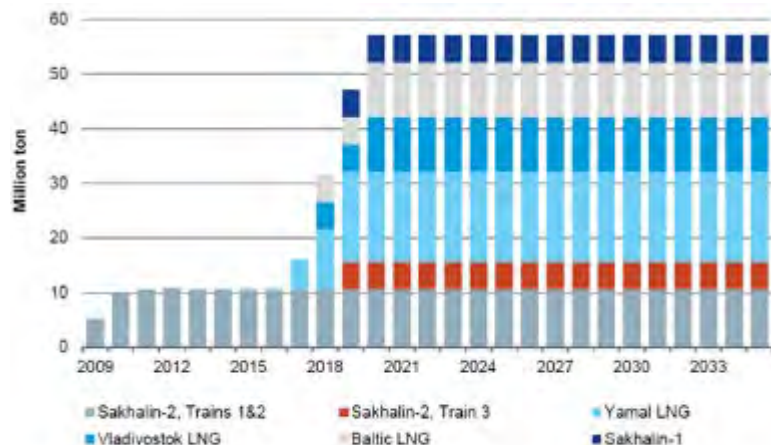
- Gas market demonstrates fast growth;
- LNG demand is growing even faster;
- American shale gas still has limited but growing impact on the world (e.g. Chevron in Argentina, Shell in China etc.);
- Gas role is emerging in transportation (e.g. LNG for maritime, rail and trucks);
- The role of the Asia-Pacific market in the medium term will continue to grow through the LNG projects.

Russia & CIS:

- Russia shows intensive development of new upstream/ mid-stream projects (e.g. LNG, pipelines);
- Production will rise and almost all increase will come from independent producers.

Growing opportunities globally and locally for natural gas new fields, pipelines and LNG

Russian existing & planned LNG projects



Industry Context

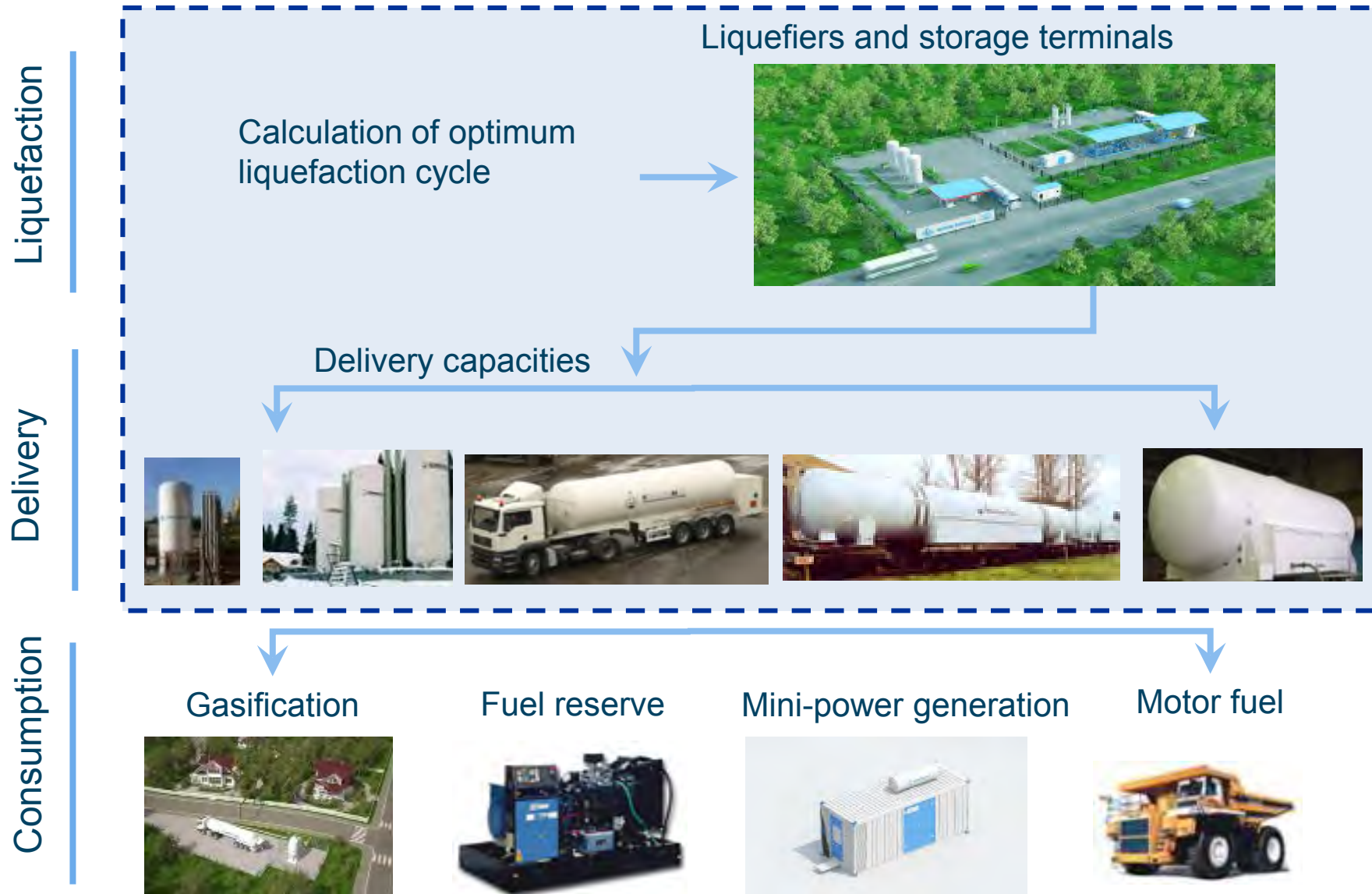
LNG is a high priority:

- Aim is to put Russian LNG into market as quickly as possible, using whatever reserves, technology, and logistics are ready at hand.
- Russian LNG projected costs are apparently competitive with other next generation LNG projects globally, at least in terms of cost of supply.

Russia's plans of 50+ mmt additional liquefaction capacity by early 2020s:

- Sakhalin 1 – 5MMt
- Sakhalin 2 – 10MMt
- Sakhalin 2 №3 Train – 5MMt
- Vladivostok LNG – 15MMt
- Yamal LNG – 16.5MMt
- Baltic LNG – 10MMt
- Pechora LNG – 3MMt





OMZ has vast and successful track record on global LNG market



No	Company	Region	Equipment	Year
1	CHONGQING ENDURANCE INDUSTRY STOCK CO., LTD (Naide)	China	Set of equipment. Liquefaction unit OP-1,5	2006
2	CHONGQING ENDURANCE INDUSTRY STOCK CO., LTD (Naide)	China	Liquefaction unit OP-1,5	2007
3	CHONGQING ENDURANCE INDUSTRY STOCK CO., LTD (Naide)	China	Liquefaction unit OP-1,5	2008
4	Sichuan Suoyo Gas Co. Ltd	China	Liquefaction unit OP-1,5	2009
5	CHONGQING ENDURANCE INDUSTRY STOCK CO., LTD (Naide)	China	Liquefaction unit OP-1,0	2009
6	CHONGQING ENDURANCE INDUSTRY STOCK CO., LTD (Naide)	China	Liquefaction unit OP-2,5 2 Nos.	2010
7	NATURAL GAS COMPANY HUABANG CO., LTD, China	China	Liquefaction unit OP-1,5 2 Nos.	2010
8	Cryogas	Kaliningrad. Russia.	Set of equipment USPG-7,0. Liquefaction units. Tanks RCG -250/0,6-4 Nos., RCV 63/0,7-4 Nos.	2014
9	Cryogas-Pskov	Pskov, Russia	Tanks RCV-63,/0,7 4 Nos. Valves unit 4 шт. Drying unit	2014
10	Chongqing Qianyan Oil And Gas Project Designing Co., Ltd.	China	Liquefaction unit OP-3,0 2 Nos.	2015
11	Chengdu Wuhuan EAJV Technology Co., Ltd.	Nigeria	Liquefaction unit OP-3,0 4 Nos.	2016*

OMZ projects

Delivery of the six reactors for the hydrocracking – Rosneft-Tuapse



- ✓ Record reactor weight 1 300 tonnes
- ✓ Licensor: Chevron Lummus Global



Dehydration plant Bagtyyarlyk



- ✓ EPC project for Turkmengaz
- ✓ ~21,75 B cbm of gas capacity



Fuel Gas System Station for Krasnodarskaya GCS



- ✓ EPC project for Gazprom
- ✓ ~25 B cbm of gas capacity



Supply of reactors for Samara Group refineries for Rosneft



- ✓ Project for Rosneft
- ✓ Licensor: Axens



Sosnogorsk Gas Processing Plant



- ✓ EPC project for Gazprom
- ✓ ~3B cbm of gas capacity



Air separation on-site project for Seversky Trybny Zavod



- Purity of the products:
- ✓ Oxygen – 99,5% and higher
 - ✓ Nitrogen – content of oxygen 5 ppm and less



OMZ is Russia's leading connectivity platform and reliable technology integrator

Efficient use of R&D, production capabilities and engineering competences:

- Modern production facilities;
- Competence in wide range of Oil & Gas and petrochemical equipment production;
- Products meet the requirements of international standards;
- Focus on R&D and innovations.

Customer oriented approach:

- Comprehensive consideration of customer's interests;
- Prompt reaction on customers' needs throughout the project and continuous after-sale support;
- Numerous positive references from leading Russian and International companies.



- Demand on Oil will grow but Gas demand will grow even faster (especially LNG);
- Russia already is and will stay significant player on the global energy market in the future;
- The growth of Asia-Pacific market may be limited by the pipeline capacity and LNG could be the solution;
- OMZ has reliable solutions for global Oil & Gas market and has got reputation of trusted supplier.

Contact details:

Vadim Makhov, Ph.D.

COB, OMZ

Personal Assistant: Ms. Maria Kosheleva

Tel.: +7 (495) 662 10 40

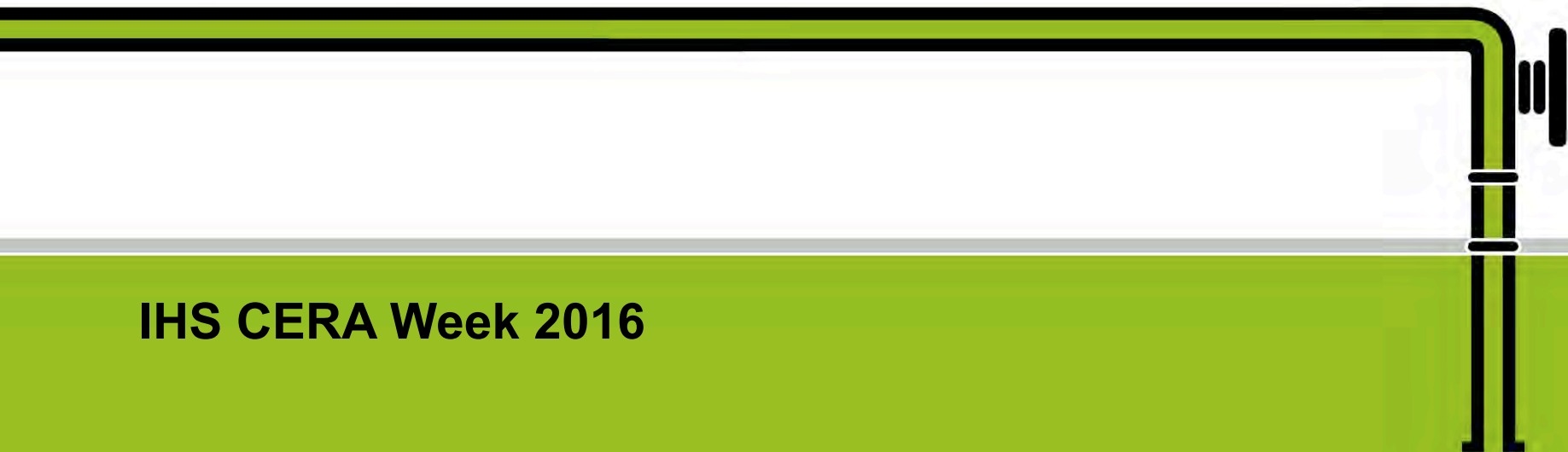
E-mail: maria.kosheleva@omzglobal.com



Thomas Reed

CEO, JKX Oil&Gas

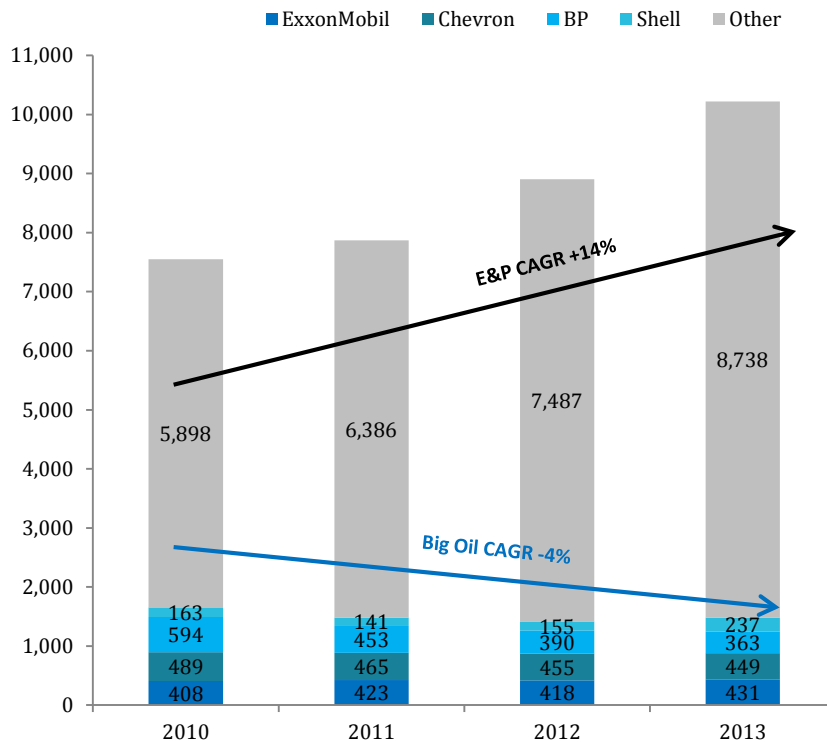
IHS CERA Week 2016



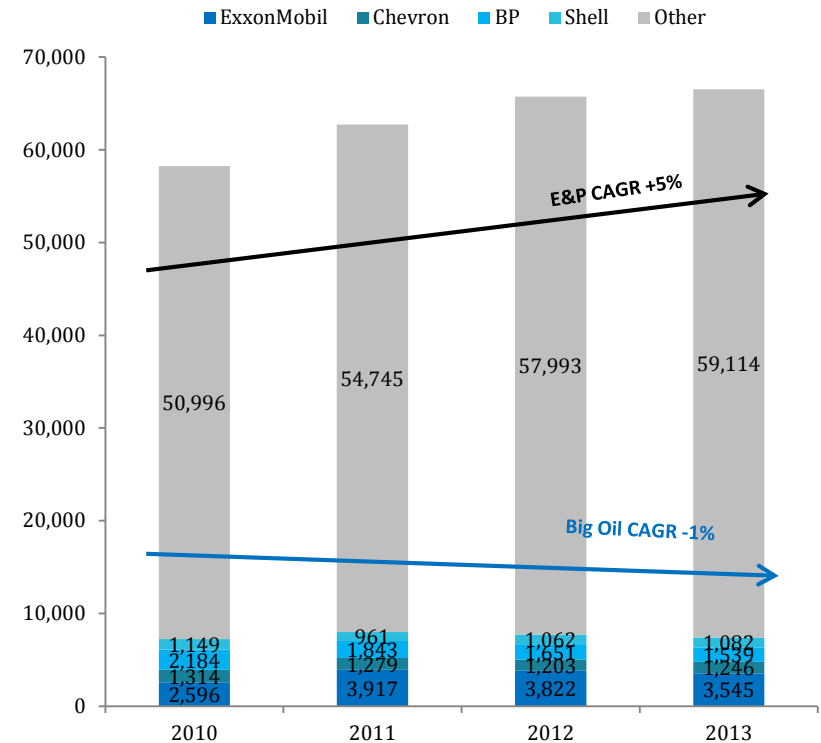
Unconventional assets are best monetized by independent E&Ps



US Oil & Liquids Production, '000 bopd⁽²⁾



US Natural Gas Production, mm cf/d⁽²⁾



As of FYE 2014, independent oil companies had added over 5mbopd to US oil production while major's US production had declined by approximately 500kbopd.

(1) 2013 BP Statistical Review; (2) Source: Companies materials, BP Statistical Review, EIA