

Russian Oil and Gas

Tomorrow is a Distant Memory

- The capital misallocation observed at Rosneft over the past several years shows no signs of abating. This casts doubt on our and others' financial forecasts, which assume a halt to acquisitions, reduction in capital investments and rise in net income and dividends. The company's strategy needs to change markedly for any of these things to materialize.
- Strong European sales, modest growth in gas prices and Gazprom Neft's improved profitability in refined products will all serve to boost Gazprom's numbers this year and next. We raise the stock to an opportunistic BUY but remain skeptical of its long-term value.
- Lukoil might make a decision on its treasury shares, which represent a sixth of its share capital, before its strategy day in early 2018. Coupled with strong cash flow generation and a rising dividend, this could reinvigorate the stock. Gazprom Neft, meanwhile, will likely reinstate interim dividends and should swing back to positive free cash flow in 2018. Lukoil, Gazprom Neft and Novatek are our top calls for the next 12 months.
- Tatneft's share price has risen 25% since the news of the dividend hike in late April. The stock is now approaching its fair value, and we downgrade it to a HOLD. Our strategy team, however, expects accelerated inflows into Russian equities as the discount rate shrinks. Tatneft's shares could outperform on this, given its heavy weighting in the MSCI index relative to its free float.
- Recent changes in the shareholder structure and the expected decline in capex increase the chances that Transneft will hike dividends next year, which leads us to raise the stock to a HOLD. The valuation, however, still looks rich to us.
- We intend to remove Bashneft from Under Review after the company's dividend policy becomes clearer, possibly in November.
- The Urals price will likely average about \$52/bbl this year. We leave our 2017E and longer-term assumption at \$50/bbl for easier comparison across years, meaning earnings should slightly exceed our 2017E forecasts.

Stocks under our coverage

	P/E		EV/EBITDA		Target price, \$		Rec	Current price, \$
	2017E	2018E	2017E	2018E	New	Previous		
Gazprom	5.6	3.7	3.2	2.7	2.75	2.75	BUY (from HOLD)	2.20
Lukoil	6.5	6.0	3.4	3.1	65.00	65.00	BUY	52.50
Novatek	18.3	15.6	11.0	11.2	155	155	BUY	117
Gazprom Neft	4.7	4.1	3.9	3.8	5.50	5.50	BUY	4.00
Surgutneftegaz commons/prefs	4.3	5.6	neg	neg	0.50	0.50	HOLD/BUY	0.52
Tatneft	7.8	7.5	4.9	4.5	8.00	8.00	HOLD (from BUY)	7.40
Rosneft	13.6	9.8	7.0	6.1	5.00	6.00	SELL (from HOLD)	5.70
Transneft	6.9	6.8	4.1	4.0	2,750	2,500	HOLD (from SELL)	3,250
KazMunaiGas EP	4.6	6.2	neg	neg	10.00	10.00	HOLD	9.65
Bashneft	5.5	3.6	3.4	2.7	UR	UR	UR	37.00

Note: Prices as of October 17, 2017. Our target price for Surgutneftegaz is simply the market price, as the investment cases for both share classes are not based on fundamentals (see our July 2016 report for more).

Source: Sberbank CIB Investment Research

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Report Summary

The persistent lure of unlikely promises is the theme that unites this report.

The capital misallocation observed at Rosneft in recent years shows no signs of abating. This casts doubt on the relevance of the market's financial forecasts, which assume no future acquisitions and a reduction in capital investments.

The problem is that Rosneft's organic growth will be too slow to satisfy its CEO's ambitions. Crude output from the current assets will grow at 1.8% per year, a respectable rate compared to the rest of the sector but still leaving output just 10% higher in five years' time. Tax incentives will mean that upstream profitability expands faster than volumes, but most of the tax benefits will expire in the foreseeable future. Gas output will grow much faster than crude oil production, but Rosneft's gas is much less profitable than its oil, and the expansion of this business will contribute less than \$1 bln to EBITDA growth. Guidance on the downstream program is confusing and uncertain.

Meanwhile, Rosneft's brownfield cash costs have grown steadily over the past few years and are now no better than the sector average. The company has also made \$22 bln of acquisitions since incorporating TNK-BP in 2013 and invested over \$8 bln in Venezuela, expanding its debt load in the process. The company's strange approach to accounting means that shareholders will this year receive less than two thirds of the dividends to which they are entitled.

A bullish or even a neutral stance on Rosneft must assume that all these factors will reverse: that Rosneft will cut costs, take a pause on acquisitions, quit supporting Venezuela, clean up its income statement, generate lots of cash flow and use it to deleverage and reward shareholders. However, the CEO, who unilaterally sets the strategy at Rosneft, shows no visible inclination to change his ways.

Improvement in capital allocation – most importantly, deleveraging – remains the key risk to our long-term bearish case on the company. On the other hand, Rosneft is no longer significantly overweighted in the MSCI index relative to its free float, which reduces the risk of staying underweight in its shares.

Line D, the planned fourth gas pipeline from Central Asia to China with the capacity to bring an extra 30 bcm of gas, may or may not be under construction. Nobody can tell. The pipeline is supposed to deviate from the first three links, taking a detour through Tajikistan and Kyrgyzstan. The delay could be due to problems developing phase 2 of the Galkynysh field in Turkmenistan, or finding gas in Tajikistan, or the simple fact that building the link is more expensive than importing gas as LNG. China might also be waiting for Turkmenistan to offer the gas at a discount in order to incentivize the construction. The cancellation of Line D would boost the chances of a Chinese major taking a substantial stake in Novatek's Arctic LNG-2 project. That project is due to deliver, in roughly the same time frame, about the same volume as Line D would.

After six years, we return to the offshore Arctic, only to find that not much has been happening there. Are the sanctions at fault? We discover that the main problem is that most of the deposits in the region are gas, and gas has become much less profitable to develop since Gazprom and Total abandoned their Stokman project back in 2011. However, the Russian government believes that a combination of tax incentives, ample oil resources and clearing up the Northern Sea Route could lure back investors. So far, only Rosneft is taking the bait. This will cost its shareholders billions of dollars.

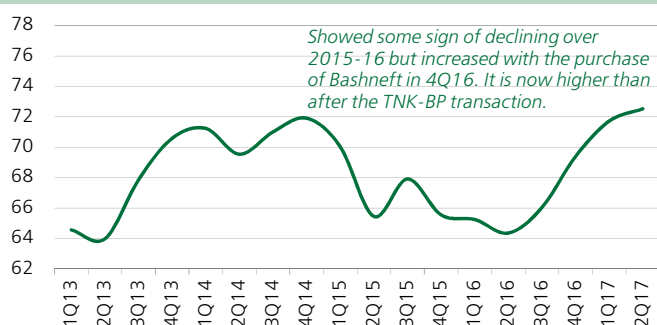
Rosneft: We Need to Talk About Igor

Ensnared in one's financial model and dutifully plugging in the company's operating guidance, it is easy to become positive on Rosneft's stock. On paper, things seem to be shaping up nicely: tax-preferential oil production and gas output are rising, and there will be a modest improvement in the downstream. Free cash flow is set to surge and accounting items bringing down the net income should lapse, which in theory should lead to deleveraging and a dividend that will yield around 9% by 2020. Rosneft appears poised to churn up lots of cash flow in the future and share it with investors.

But much of this was set to happen back in 2013, after Rosneft had consolidated TNK-BP. Investors assumed the company would step back, deleverage and digest the new business – especially once the oil price collapsed in late 2014 and the company came under US and European sanctions. Instead, Rosneft has spent a net of \$22 bln on acquisitions since then, with no clear focus. Just over the past 12 months, it has made purchases in the Russian upstream and downstream, Indian refining, Egyptian gas, a downstream swap in Germany and significant investments into Venezuela.

Meanwhile, its debt has grown and its cost control has deteriorated. Capital expenditures this year will be the highest in the company's history.

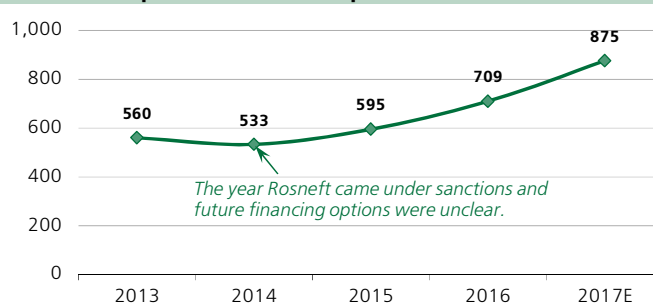
Rosneft's net debt since 2013, \$ bln



Note: Includes prepayments received.

Source: Company, Sberbank CIB Investment Research

Rosneft's capex since the incorporation of TNK-BP, R bln



Source: Company, Sberbank CIB Investment Research

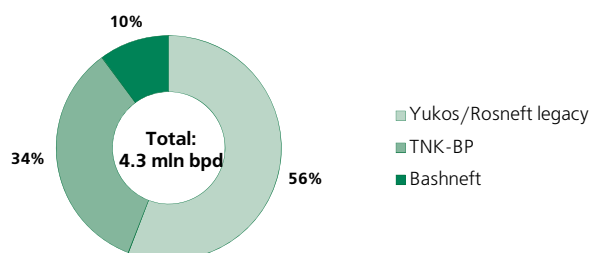
We conclude that beyond 2019 organic growth will be too little to move the needle for the company. Under normal circumstances, the post-investment cycle would provide an opportunity to concentrate on free cash flow generation and deleveraging. But will this happen? This is where we must venture out from under the shelter of our model and try to come to grips with Rosneft's plans. We believe that without addressing the longer-term strategy, a durable view on the stock is impossible. And that means talking about the man in charge.

From extensive discussions, we have come to the conclusion that Rosneft CEO Igor Sechin almost single-handedly sets the company's strategy. Such unilateral decision-making is unique in our coverage. And as we discuss in more detail below, we believe that eschewing further expansion to trim down the debt will not suit Rosneft's CEO. Assuming he remains in charge, the company will continue to pursue volume growth. In doing so, its heft will push it further out of Russia and perhaps further out of oil. This will only disappoint its shareholders.

Modest organic growth any way you slice it

Rosneft has presented three main sources of organic growth over the next several years: crude oil greenfield expansion, the gas business and downstream improvements.

Rosneft's 2017E consolidated liquids output in Russia



Source: Sberbank CIB Investment Research

The company's attributable production accounts for almost 40% of Russia's output. It is no wonder, then, that it also boasts the longest list of greenfields in the country. This includes three of the four so-called "old generation" greenfield projects, launched around 2008 – Vankor, Verkhnechonsk and the Uvat group of fields. Vankor's production is in decline, so Rosneft has begun talking about the "Vankor cluster," including Suzun, Tagul and Lodochnoye fields. Production at Uvat and Verkhnechonsk is being sustained, though also in a "cluster" manner, by gradually bringing online new satellite fields.

Rosneft's greenfields

Project	Region	Launch year	Peak output, kbpd	Peak year
"Old generation"				
Vankor	East Siberia	2009	442	2014
Uvat group	West Siberia	2009	233	2016
Verkhnechonsk	East Siberia	2009	174	2015
"New generation"				
Erginskoye + Kondaneft (Rosneft guidance)	West Siberia	2018	150	2022
Russkoye	East Siberia	2018	130	2023
Srednebotuobinskoye (Taas-Yuryakh)	East Siberia	2013	110	2020
Messoyakha (50% share)*	East Siberia	2016	110	2024
Tagul	East Siberia	2018	100	2022
Yurubcheno-Tokhomskoye	East Siberia	2017	100	2021
Trebs & Titov	Timano-Pechora	2013	95	2019
Rospan (mostly condensate)	West Siberia	2006	95	2020
Suzun	East Siberia	2016	90	2017
Kuyumba (50% share)*	East Siberia	2018	75	2022
Burneftegaz	West Siberia	2013	47	2016
Lodochnoye	East Siberia	2021	40	2024
Labagan	Timano-Pechora	2015	30	2019
Naul	Timano-Pechora	2017	30	2019
Peak output by region			2,051	
East Siberia			1,371	
West Siberia			525	
Timano-Pechora			155	

* Rosneft holds a 50% share in the Messoyakha and Kuyumba projects (the latter via its stake in Slavneft); peak output shown per Rosneft's share.

Source: Company, Sberbank CIB Investment Research

Rosneft's attributable liquids output in Russia should grow at just under a 2% clip over the next five years. This rate is front-loaded and tapers off to zero by 2022.

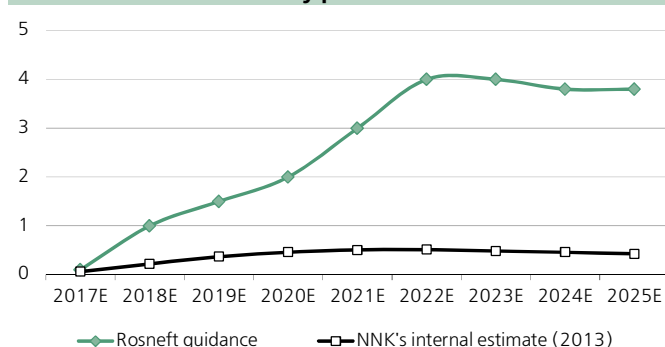
Rosneft's liquids output growth in Russia, 2017–22E, kbpd

* Suzun, Tagul and Lodochnoye.

** including all brownfield production (Rosneft, TNK-BP and Bashneft); Vankor, Uvat and Verkhnechonsk; and 50% stakes in Slavneft, Tomskneft and Udmurtneft.

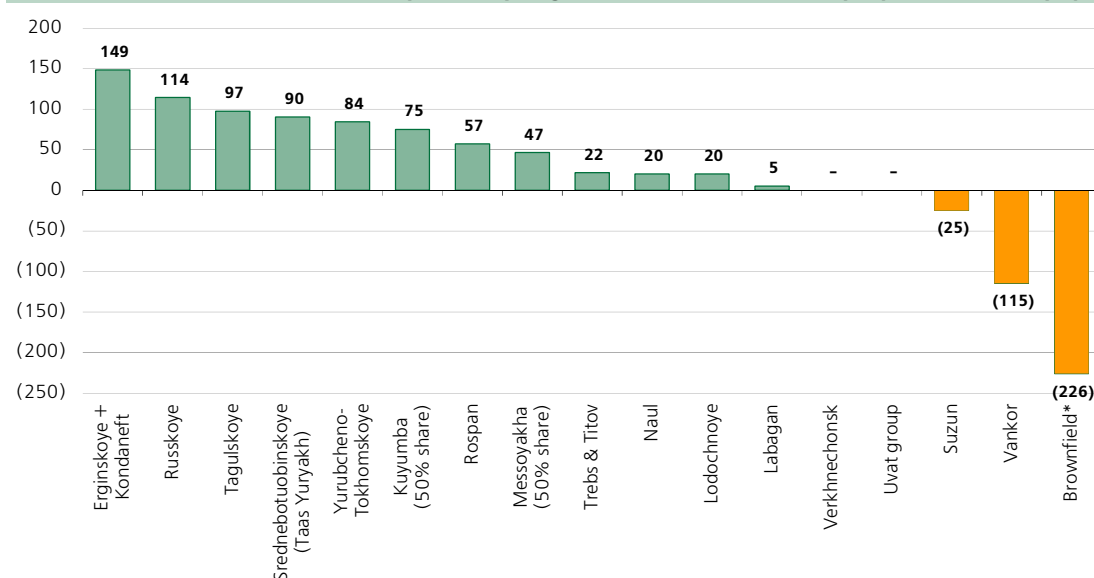
Source: Company, Sberbank CIB Investment Research

Interestingly, the biggest single contribution to consolidated output is supposed to come from two projects purchased just this year: Kondaneft and Erginskoye, which neighbor each other and are satellites of the giant Priobskoye field. There is some doubt, however, about Rosneft's guidance for the 4 mln tonne (80 kbpd) peak from Kondaneft. The development of the project's four fields is focused on the difficult Tyumen layers, which are characterized by deep and diffuse pay zones of relatively low thickness. Rosneft bought the assets for R40 bln (\$0.7 bln) from Independent Petroleum Company (Russian abbreviation: NNK), which is run by Rosneft's former president Eduard Khudainatov. Back in late 2013, with the oil price above \$100/bbl, estimates presented to NNK's management indicated that the plateau at Kondaneft could only reach 0.5 mln tonnes (10 kbpd) and that the development of the fields would not make back the investment. The fields enjoy a modest MET discount (back in 2012, when we first wrote about Tyumen layers, we estimated that they would need a full MET waiver to have any hope of being profitable).

Which is Kondaneft's likely production curve?

Source: Rosneft, NNK, Sberbank CIB Investment Research

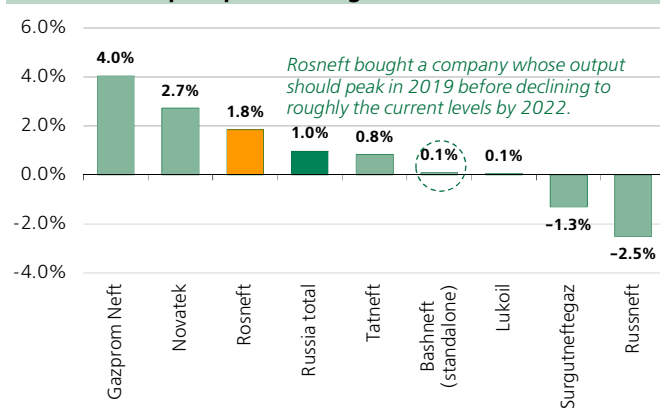
This likewise casts some doubt on the projected output of Erginskoye, which has a similar geology to Kondaneft and is estimated to peak at 3.5 mln tonnes (70 kbpd).

Sources of Rosneft's attributable liquids output growth, 2017E-2022E, kbpd (total: +416 kbpd)

* including all brownfield production (Rosneft, TNK-BP and Bashneft) and 50% stakes in Slavneft, Tomskneft and Udmurtneft.

Source: Company, Bashneft, press reports, Sberbank CIB Investment Research

If we take the company's projections for Kondanef and Erginskoye at face value, the almost 2% annual growth would mean that Rosneft's liquids production would rise at double the pace that we expect for Russia as a whole. However, it would still mean less than 10% more barrels by 2022 than this year.

Attributable liquids production growth, 2017E-2022E CAGR

Source: Sberbank CIB Investment Research

Another way to look at this growth is to measure the varying profitability from the fields. We first addressed this approach in our October 2016 report on Lukoil. Russian greenfields (and, occasionally, certain older fields) enjoy tax concessions of various kinds: regional and offshore MET rebates, preferential MET treatment for depleted acreage and heavy oil, and in a few cases a reduced export duty. The difference in taxation accounts for most of the difference in profitability between new and older fields.

Comparative profitability of Rosneft's liquids, \$/bbl (starting in 2018)

	Revenues	MET	Export duty	Lifting cost	Transport cost	EBITDA	Profit tax***	OCF	OCF brownfield ratio	Tax burden****	% of output*****
Standard Russian brownfield	50.0	17.6	11.5	4.3	4.9	11.7	2.3	9.3		63%	
Srednebotuobinskoye (Taas Yuryakh)	53.8	7.4	-	3.2	5.9	37.3	7.5	29.8	2.5	28%	2%
Kuyumba (50%)*	53.8	7.4	-	3.2	5.9	37.3	7.5	29.8	2.5	28%	1%
Messoyakha (50%)*	51.9	7.4	-	3.2	5.1	36.1	7.2	28.9	2.4	28%	1%
Labagan/Naul	50.8	7.4	11.5	3.2	1.9	26.8	5.4	21.4	1.8	48%	1%
Trebs & Titov	50.8	7.4	11.5	5.1	0.4	26.4	5.3	21.1	1.8	48%	1%
Yurubcheno-Tokhomskoye	53.8	7.4	11.5	3.2	5.9	25.8	5.2	20.6	1.7	45%	2%
Rospan**	50.0	8.0	11.5	0.5	4.4	25.5	5.1	20.4	1.7	49%	2%
Suzun	51.9	7.4	11.5	3.2	5.1	24.6	4.9	19.7	1.6	46%	2%
Tagul	51.9	7.4	11.5	3.2	5.1	24.6	4.9	19.7	1.6	46%	1%
Russkoye	51.9	7.4	11.5	6.5	5.1	21.4	4.3	17.1	1.4	45%	2%
Lodochnoye	51.9	15.6	11.5	3.2	4.4	17.1	3.4	13.7	1.1	59%	0%
Bashneft's brownfield (attributable to Rosneft)	50.0	13.5	11.5	5.7	3.4	15.8	3.2	12.7	1.1	56%	4%
Uvat group	53.8	17.6	11.5	3.2	5.9	15.5	3.1	12.4	1.0	60%	5%
Erginskoye + Kondaneft	50.0	15.6	11.5	3.2	4.4	15.3	3.1	12.2	1.0	60%	2%
Rosneft's legacy brownfield ex-Samotlor	50.0	15.5	11.5	3.6	4.4	15.0	3.0	12.0	1.0	60%	63%
Verkhnechonsk	53.8	17.6	11.5	4.3	5.9	14.5	2.9	11.6	1.0	60%	4%
Burneftegaz	50.0	17.6	11.5	3.2	4.4	13.2	2.6	10.6	0.9	64%	1%
Samotlor	50.0	13.8	11.5	7.2	4.4	13.1	2.6	10.5	0.9	56%	8%

Note: East Siberian fields enjoy better pricing than fields in West Siberia but also have higher transport costs; some fields have mixed export destinations. Srednebotuobinskoye, Kuyumba and Messoyakha enjoy what amounts to a full export duty waiver for the first several years of production.

* not consolidated in financials; assume to be monetized via dividends

** Rospan's condensate will mostly be injected into the Urals crude oil pipeline stream, therefore garnering no pricing premium

*** profit tax estimates assume no regional discounts

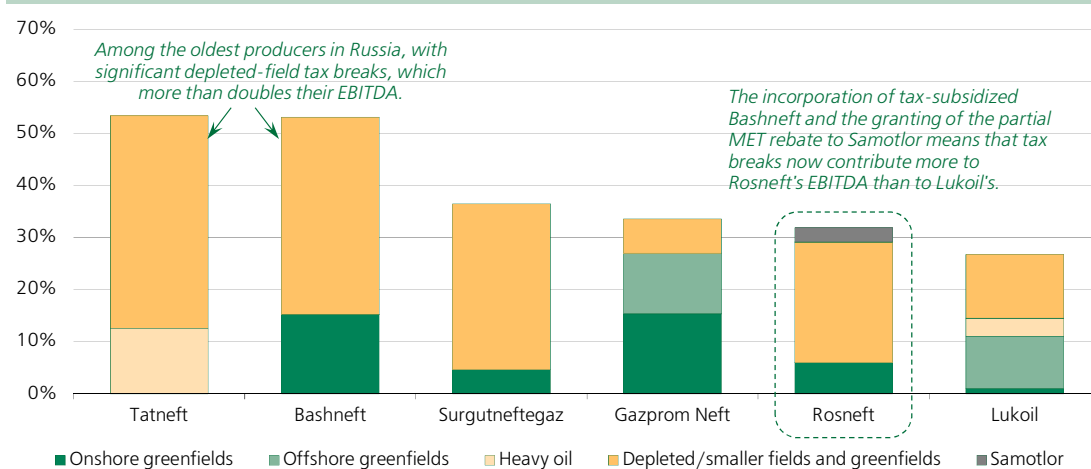
**** tax burden as a percent of revenues

***** percentage of Rosneft's attributable output over 2018-22

Source: Company, press reports, Sberbank CIB Investment Research

Rosneft naturally enjoys more tax concessions, in absolute terms, than any other company in Russia. We estimate that their total value will approach \$7 bln by 2019. But relative to its size, Rosneft until recently enjoyed the lowest boost from tax breaks among the large integrated players. With the acquisition of Bashneft (whose upstream is heavily subsidized) and the recent deal with the Finance Ministry for a 10-year rebate on the Samotlor field worth R35 bln (\$0.6 bln) per year, this has changed somewhat.

Boost to EBITDA from various tax concessions, 2018E



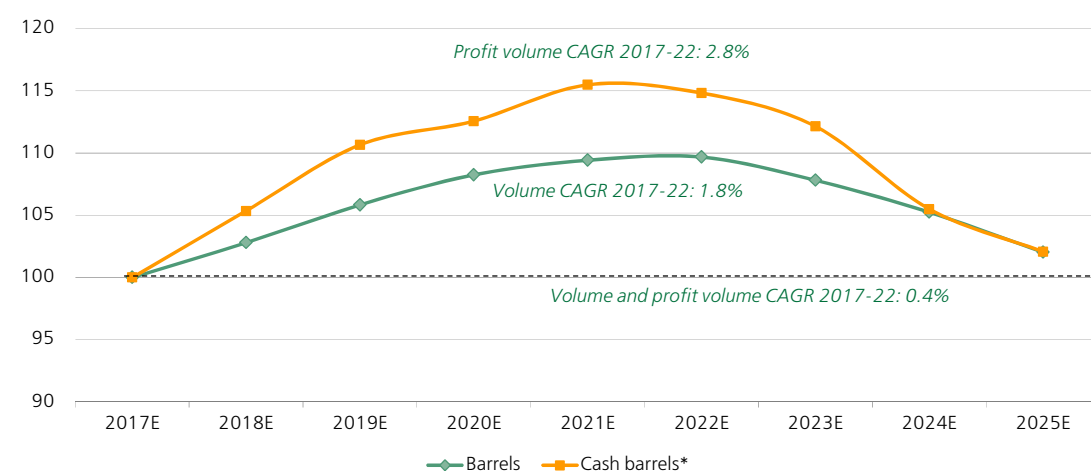
Source: Sberbank CIB Investment Research

Still, the really profitable fields – those generating twice or more the operating cash flow per barrel as Rosneft's brownfield – will account for just 4-6% of Rosneft's attributable output over the next five years. For Lukoil, by comparison, that proportion is about 16%. Moreover, the juiciest tax breaks will expire as early as 2019-20 (for Taas-Yuryakh and Trebs & Titov), or in 2022-24 (Kuyumba, Messoyakha, Yurubcheno-Tokhomskoye and Suzun). Finally, Rosneft will share two of the most profitable assets – Kuyumba and Messoyakha, which enjoy rare export duty holidays – with Gazprom Neft, and will not consolidate them in its financials. (Kuyumba is actually owned by

Slavneft, though this may change by the time it comes online.) By contrast, Lukoil will consolidate all of its profitable greenfields apart from its 25% stake in the Trebs & Titov project.

Growth from new fields and acquisitions could be restated in brownfield-equivalent terms – what we termed “cash barrels” in our report on Lukoil. While Rosneft’s crude oil production in barrel terms will grow at 1.8% CAGR over the next five years, in “cash barrel” terms it will rise at a 2.8% rate. By 2025, there will be almost no difference between the two measures, unless some of the current tax breaks are extended.

Rosneft’s barrels and “cash barrels” growth



* brownfield-equivalent production in terms of operating cash flows

Note: Index: 2017= 100.

Source: Sberbank CIB Investment Research

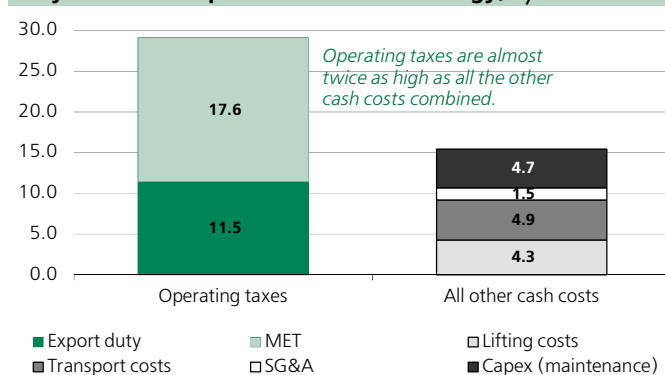
We estimate that Rosneft’s consolidated volume growth will contribute 15 mtpa (300 kbpd), just half the 30 mtpa (600 kbpd) organic liquids production growth that Rosneft is guiding by 2022. Another 6 mln tonnes (120 kbpd) will come from Rosneft’s claim on non-consolidated Messoyakha and Kuyumba output. Perhaps in its guidance the company means to compare the number to pre-Bashneft 2016, but in that case the growth is not organic and is back-dated. Or perhaps it expects rising output from its Venezuelan joint ventures, where its share of output was 2.7 mln tonnes in 2016 and is on track to rise by about 30% this year. The latter is unlikely, but if that’s what Rosneft means then the growth would be irrelevant, as Venezuela is more likely to continue to draw cash from Rosneft, not the other way around. (We discuss this further on.)

The myth of Rosneft’s efficiency

When the management presents its five-year strategy in early 2018, it will likely concentrate not so much on output growth as on cost-cutting efforts. In particular, it wants to cut the period of well construction, improve the productivity of well crews and drilling rig utilization (capex) and reduce the cost of running a well by 10% (opex).

It is important to note that for Rosneft, as indeed for its peers in Russia, lifting costs and maintenance capex are eclipsed by operating taxation. We have just discussed the effect that differences in taxation can have on the profitability.

Why taxes are important in Russian energy, \$/bbl



Note: Average cost of an oil producer assuming crude oil export only, at a \$50/bbl oil price. Tax data is for 2018.

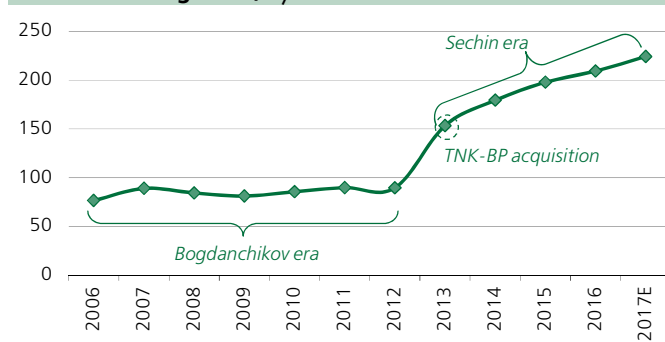
Source: Sberbank CIB Investment Research

Even halving the lifting costs – a Herculean effort – would add less than \$1.2/bbl to Rosneft's profits. Reducing brownfield capex could add a bit more.

However, the track record is not that great in either area.

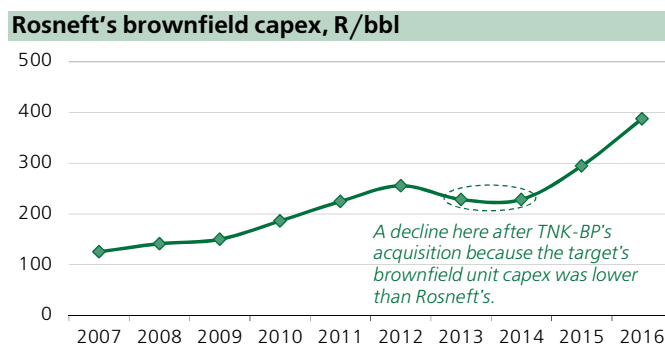
Rosneft's per-barrel lifting costs were historically low because the company acquired a prime asset, Yuganskneftegaz, during the Yukos bankruptcy proceedings. However, costs in rubles have more than doubled since 2012. While this is presumably attributable to its purchase of TNK-BP's lower-quality assets, it is notable that lifting costs have kept on rising even after the 2013 consolidation of TNK-BP, growing by almost 50% in the four years. Were it not for the depreciation of the ruble, they would have been over \$7/bbl today – not that far below its global peers' \$8-13/bbl. (We refer to the growth in ruble costs because almost all lifting and maintenance capex costs are in rubles.)

Rosneft's lifting costs, R/bbl



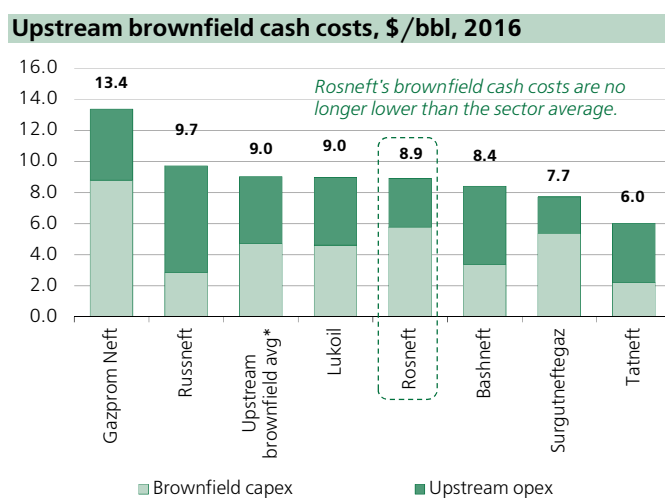
Source: Company

Unit brownfield capex at first declined after the TNK-BP acquisition because TNK-BP's investments per barrel were lower. However, it has since risen by 70% – despite (or perhaps because of) Rosneft's much-touted consolidation of some 60% of its drilling in-house by 2016. The company now fully controls a third of all the estimated rigs operating in Russia.



Source: Company, Sberbank CIB Investment Research

Indeed, by now Rosneft's combined cash costs of running its fields are pretty much in line with the sector in general. Whatever lingering advantage the company has in lifting costs is wiped out by its high brownfield capex.



* simple average at six brownfield majors (ex-Rosneft) in 2016

Source: Companies; Sberbank CIB Investment Research

Rosneft has been touting its top-down efficiency effort, complete with Stalinesque tales about employees being confronted with charges of malfeasance at management meetings and marched straight into police custody. The numbers tell a different story. But even without the numbers, the myth is becoming harder to sustain. This May, Rosneft published a tender announcement on its website that was in the spirit of the good old Gazprom. We reproduce parts of it below.

Purchasing tender by RN-Aerocraft (Rosneft subsidiary)

Item	Cost per item, \$	Total	Total cost, \$
Caviar dish	1,456	2	2,913
Vodka shot glass	194	18	3,491
Whiskey shot glass	205	18	3,692
Cognac glass	227	18	4,095
Ice tongs	637	2	1,273
Napkin holder	572	4	2,286
Comforter blanket	2,184	12	26,206
Table cloth	245	16	3,924
Table napkin	114	48	5,465
Table fork	196	18	3,535
Table knife	221	18	3,982
Teaspoon	261	18	4,693
Table spoon	196	18	3,535

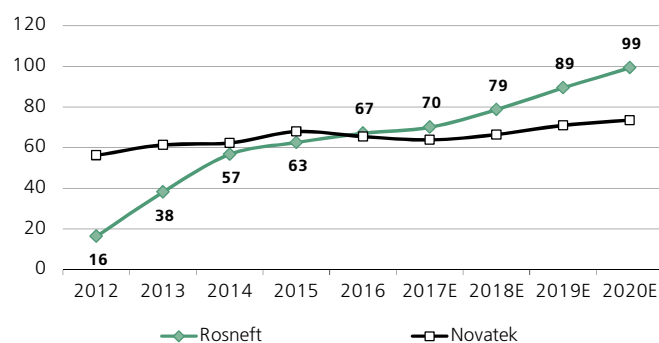
Note: RN-Aerocraft provides air services for Rosneft's upstream operations and for its management. The tender was awarded to a single contractor and approved unanimously by the purchasing committee on May 15, 2017. Rosneft withdrew it after it became public.

Source: Minutes of company purchasing tender number MTP-9296/49-05.

Wrong gas

Rosneft is also putting quite an emphasis on its gas business. It claims to be the second largest gas producer in Russia, with 67 bcm of attributable output in 2016 (including its 49% stake in Gazprom-run Purgaz unit), versus Novatek's 66 bcm. The management sees output growing by circa 50% to 100 bcm by 2020, which would be equivalent to a quarter of Gazprom's production by then. Gas makes up more than 20% of Rosneft's hydrocarbon production score when measured on a barrel-equivalent basis, and this should rise to 27% by 2020.

Gross gas output projections, bcm

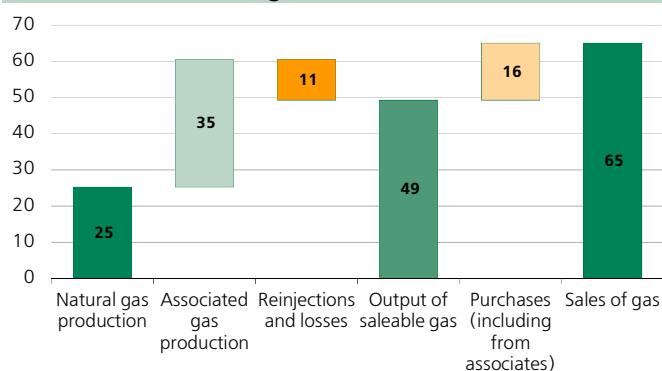


Note: Including gross production of both natural and associated gas and attributable output of associates.

Source: Companies, CDU TEK, Sberbank CIB Investment Research

However, these figures should be put in some context. Numbers sourced from MD&A suggest that in 2016, Rosneft failed to sell more than 11 bcm of the gas that it produced. The production total includes reinjections at Vankor and Chayvo, own use and volumes lost during the processing of associated (petroleum) gas. Saleable gas production was only 49 bcm on a consolidated basis (ex-Purgaz), and Rosneft had to purchase almost 16 bcm to meet the obligations under the contracts it had signed a few years earlier. In comparison, Novatek markets almost all the gas that it produces.

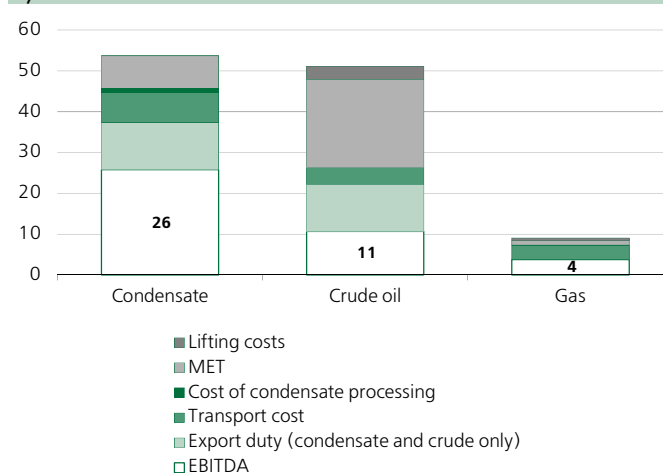
Rosneft's consolidated gas balance in 2016, bcm



Source: Company, Sberbank CIB Investment Research

A more important caveat has to do with the economics of Rosneft's gas. Apart from its crown jewel, the Rospan unit (an inheritance of the TNK-BP purchase), and some condensate output at Vankor, almost all of Rosneft's natural gas production consists of dry gas from the Cenomanian layers. Dry gas, the market price of which is set in reference to the regulated tariffs on Gazprom, has become much less profitable after the ruble's depreciation in 2014-15. On a barrels-equivalent basis, it is only a third as profitable as crude oil production. So adding it to the total hydrocarbon score may be proper volumetric accounting but it is misleading economics.

Comparison of gas, condensate and crude oil economics, \$/boe, 2017

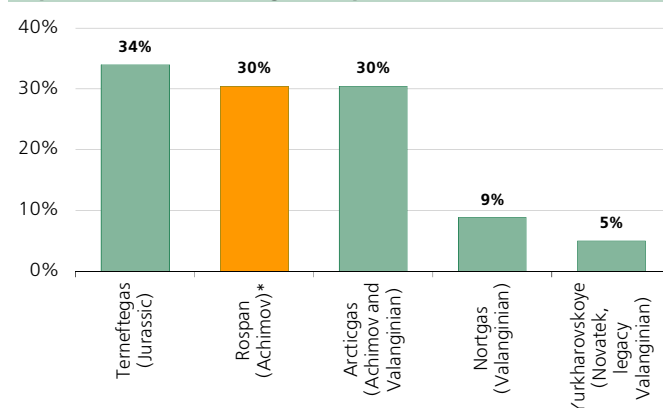


Note: Assuming a \$50/bbl oil price.

Source: Sberbank CIB Investment Research

What has spared Novatek's financials since the collapse of the ruble has, of course, been its condensate business. Rosneft's Rosspan unit, which targets the wet Achimov layers, is one of the most condensate-rich prospects in Russia. Its output is targeted at more than 30% condensate content, similar to SeverEnergiya's and outpaced only by the Jurassic layers at Novatek's small Terneftegaz JV with Total.

Liquids content in wet gas output



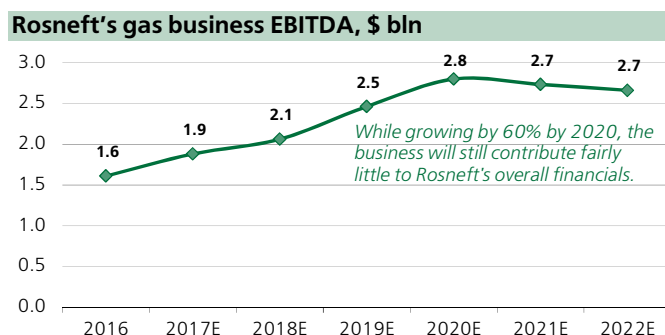
* share of condensate and LPG, guided at peak production in 2023

Note: For other than Rosspan, 2Q17 figures used.

Source: Rosneft, Novatek, Sberbank CIB Investment Research

Alas, almost none of Rosspan's liquids will enjoy premium condensate economics. Rosneft decided about two years ago that the volumes would be injected into Transneft's crude oil pipeline and would thus receive crude oil profits. The intention is to mix the condensate with the viscous crude oil production from the Russkoye field, which would allow that field to come on stream in the first place. But it also means, on our estimates, giving up almost \$600 mln of annual operating profit at the peak.

So while Rosneft's gross gas production may account for 27% of all the volumes by 2020, its share in operating profits will be only about 11%, we estimate, up from 9% last year. In other words, it will add less than \$1 bln to EBITDA between now and then, or about a fifth of the total EBITDA growth (the rest will come from the crude oil business and the downstream).



Note: Excludes Rospan's condensate production (because monetized as crude oil).

Source: Sberbank CIB Investment Research

Rosneft has shelved its LNG program and has been lobbying for access to pipeline gas exports. It would like to ship 10 bcm of gas westwards toward Europe. Eventually, it also aims to supply about 8 bcm from the Lensky Cluster in East Siberia, concentrated around the Verchnechonsk and Taas-Yuryakh fields and situated right in the path of the future Power of Siberia pipeline to China. Gazprom, which has a monopoly on pipeline exports from Russia, is resisting.

Pipeline exports, however, have lost much of their relevance to the economics of the gas sector since the drop in global gas prices. We expect European spot prices to be capped at an average of around \$5/MMBtu (\$180/mcm), and it's unlikely that Rosneft will be able to sell gas at a premium. Moreover, if Gazprom loses its export monopoly, it remains unclear why it should have to be the only one to pay the special surcharge on MET, which has been in effect since 2016. Assuming Rosneft can prevail upon the government to force Gazprom into shipping its competitor's gas abroad, but at the price of higher taxation, it would stand to earn only an additional \$16/mcm for shipments westward, we estimate. For the 10 bcm contract it has with BP, this would come to just \$160 mln accretion, or about 0.5% of its total EBITDA.

Comparison of gas sales profitability, \$/mcm

	Gazprom sales to Europe	Rosneft domestic sales (end customer)
Sales price	170	53
Export duty	51	–
Transport costs	52	19
MET paid	24	8
Production costs	4	4
EBITDA to wellhead	38	22

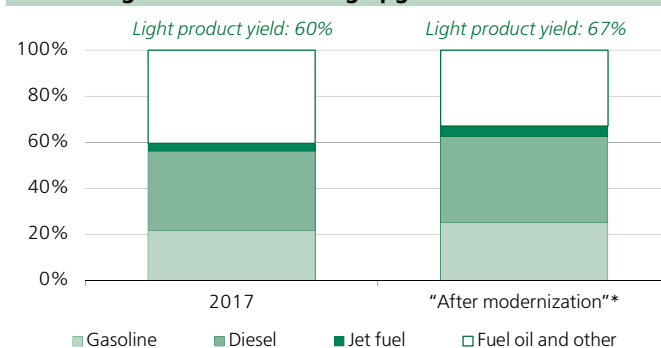
Source: Sberbank CIB Investment Research

If Rosneft were to pay Gazprom's rate of MET on its exported gas, its gain from sales to Europe would be about \$16/mcm – or about \$160 mln on the 10 bcm contract with BP.

The company says it could eventually ship cheaper via the Nord Stream pipeline, but that remains to be seen. As for the shipments eastward, the final cost of the Power of Siberia pipeline is likely to be so high that were Gazprom to set an investment tariff on the route, Rosneft may be better off not producing the Lensky Cluster gas at all. (We believe the China project is value-destructive for Gazprom, too, given the low price in its contracts.)

The third source of organic growth that Rosneft has outlined is the improvement in the refining slate. However, over the past two years the company has significantly scaled back on what it expects to deliver on that front, and has postponed the investment cycle by about three to four years. We currently expect about a \$2.5 bln uplift to EBITDA by 2023 from the addition of hydrotreatment, hydrocracking and coking units at several of Rosneft's refineries, the equivalent of about a \$3/bbl boost to the margin (Rosneft is guiding for a \$5/bbl gain).

Rosneft's guidance for refining upgrade



* believed to be 2023.

Source: Company, Sberbank CIB Investment Research

Rosneft's guided plans as recently as 2015 had called for an expansion in throughput capacity by about 5 mln tonnes at the legacy refineries; this has now been shelved. Curiously, however, the capex estimate has only come down by 20%, with about R400 bln (\$6.5 bln) remaining to be invested over the next four years.

Evolution of Rosneft's guidance on the downstream

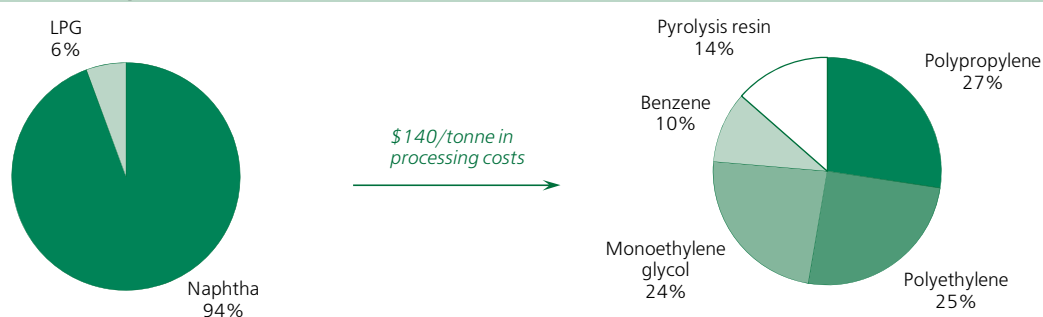
	Rosneft guidance 2015	Rosneft guidance 2017
Date of completion	2019	None given*
Increase in legacy throughput, mln tonnes	4.6	None
Increase in share of light product yield	12%	10%
Upgrade capex, R bln	726	575

* company informally guides that upgrades will be completed by 2023

Source: Company

The broader downstream sector, we believe, presents a threat, not an opportunity, for Rosneft shareholders. The company will aim to bring the share of petrochemicals in its capacity to 20% by 2022-25. This suggests that the construction of the expanded 30 mln tonne Far East Petrochemical Plant (FEPCO) may indeed proceed at some point. Rosneft plans to invest \$30 bln into petrochemicals by 2025.

FEPCO planned input and output



Source: Company, Sberbank CIB Investment Research

We discussed Rosneft's petrochemicals ambitions in some depth in our April 2012 report on the company. Not much has changed since then. The idea has always been to take advantage of the high export duties and therefore lower domestic prices on naphtha (straight-run gasoline), the feedstock product. But even a more reasonable 3.5 mln tonne petchem unit, assuming just \$5 bln in capex, fails to deliver a double-digit return, on our estimates.

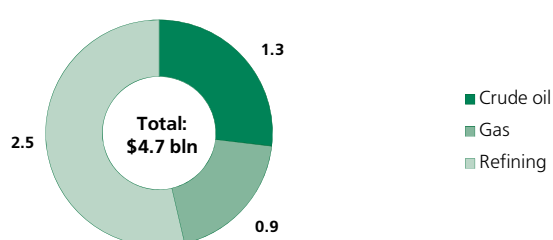
The Economy Ministry came to the same conclusion this June, adding that the project would also require at least \$2 bln of state funding for the infrastructure. Meanwhile, Rosneft's idea to first build an \$11 bln, 12 mln tonne refinery in the Far East in order to supply the naphtha for the petchem plant is surely a joke.

The only saving grace would be if an outside partner takes control of the project and carries the risks. Rosneft and ChemChina signed a framework agreement in September 2016 to set up a JV, but Rosneft would hold a 60% stake and the financing would be proportional. This is not good enough and would fall far short of the best practices in financial engineering and de-risking set by Novatek with its LNG projects.

How to read Rosneft's financials

We expect the three sources of growth (ex-petchem) to contribute \$4-5 bln in EBITDA gains to Rosneft over the next five years, assuming a flat \$50/bbl oil price. Depending on how it is counted, this amounts to a 20% or a 30% boost to this year's operating earnings. The difference has to do with the confusing way in which Rosneft prepares its financials. We must touch upon this before we proceed.

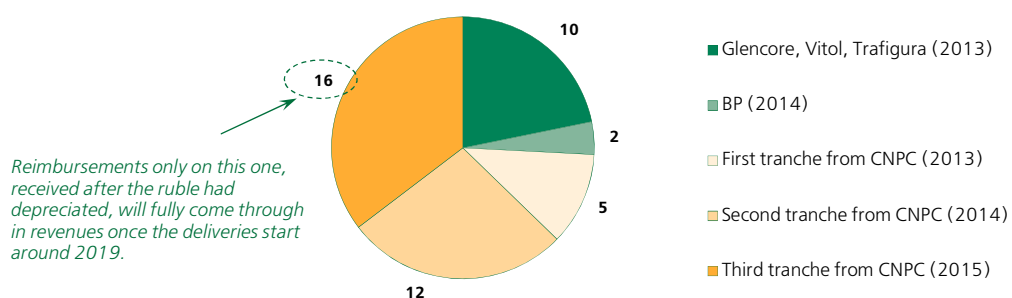
Gain to Rosneft's adjusted EBITDA by sector, 2017-23, \$ bln



Source: Sberbank CIB Investment Research

Over 2013-15, Rosneft received about \$45 bln in prepayments on future crude oil supplies: from BP, Trafigura, Glencore, Vitol and, most importantly, from CNPC. Some \$29 bln of these prepayments were advanced when the ruble was hovering around USD/RUB 30-35. The prepayments are effectively dollar-denominated debt, because Rosneft has to supply enough crude oil volumes to honor the repayment schedule, whatever the oil price may be.

Prepayments received by Rosneft, 2013-15 (total: \$45 bln)



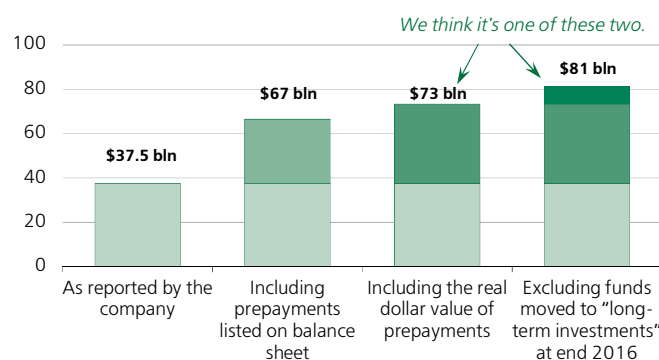
Source: Company

After the ruble had depreciated (to just under USD/RUB 40) at the end of 3Q14, Rosneft booked a R95 bln (\$2.6 bln) forex loss, bringing its net income for the quarter down to zero. As a consequence, Rosneft's chief accountant was let go. The new accountants, apparently with the consent of the external auditor Ernst and Young, made two choices that helped Rosneft stabilize its net income as the ruble entered free fall by 4Q14. The first was to "freeze" the prepayments on the balance sheet in rubles, using the old exchange rate; the second was, essentially, to amortize the forex loss on the conventional debt over a five-year span.

The flip side of these choices was to make Rosneft's financial statements more difficult to decipher, and even somewhat misleading, requiring the following adjustments:

- **Net debt.** The company claims its net debt was \$37.5 bln at end 2Q17. This sum excludes all the prepayments. If the prepayments are added using the reported balance sheet and the current exchange rate, the net debt would seem to be \$67 bln, also an underestimate. The true net debt – treating some \$35 bln of the remaining prepayments at their actual dollar value – is \$73 bln. The cash balance includes almost \$8 bln of funds moved by the accountants to the “long-term investments” line from 4Q16 onwards. It is unclear how liquid this sum actually is, which means that the actual net debt could be higher than \$73 bln. In comparison, net debt stood at \$64.5 bln at end 1Q13, after Rosneft had incorporated TNK-BP.

What is Rosneft's net debt? It depends.... (\$ bln)

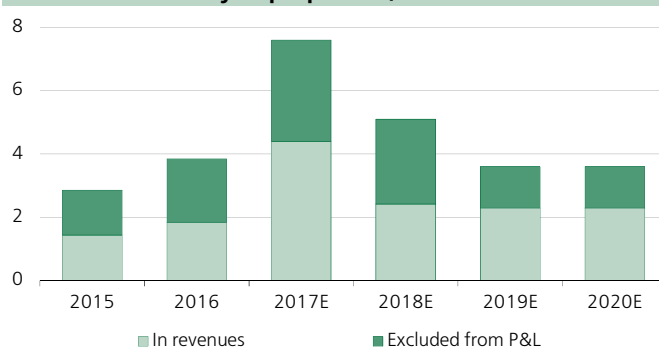


Note: All numbers as of end 2Q17.

Source: Company, Sberbank CIB Investment Research

- **P&L items.** Oil supplied under the earlier prepayment agreements is accrued as revenue at the old (weaker ruble) exchange rate, too. On an accrual basis, this understates the value of the delivered oil, introducing a forex loss right into the top line. For instance, this year is the peak of deliveries under the prepayments as reimbursement under the first two China tranches kicks in. However, out of about \$7.5 bln in deliveries, only about \$4.5 bln will come through in revenues. By next year, the ratio should become roughly equal, and from 2019 onwards the company will be repaying \$3.5 bln per year, of which about two thirds will come through to revenues – a portion of reimbursements of earlier prepayments made at the old exchange rate, and roughly the entirety of the last one.

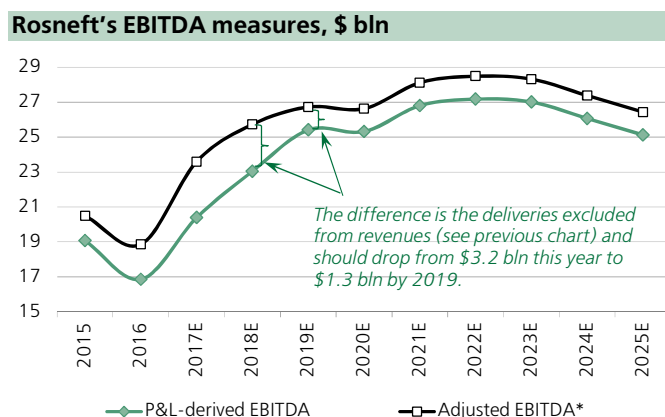
Schedule of delivery of prepaid oil, \$ bln



Note: Assumes no rollover of prepayments.

Source: Sberbank CIB Investment Research

Given all the junk found below the operating line of Russian energy companies, as well as unusually low depreciation expense, investors have historically singled out EBITDA, a non-GAAP measure, as their preferred P&L indicator. If you treat prepayments as debt, as we do, and if EBITDA is used as a rough measure of pre-tax sustainable operating cash flows, then the part of the deliveries that does not appear in revenues (circa \$3.2 bln in 2017) should be added back. The company's adjusted EBITDA in 2017E would therefore come to about \$23.5 bln, and its net debt-to-EBITDA ratio would be just over 3.0.

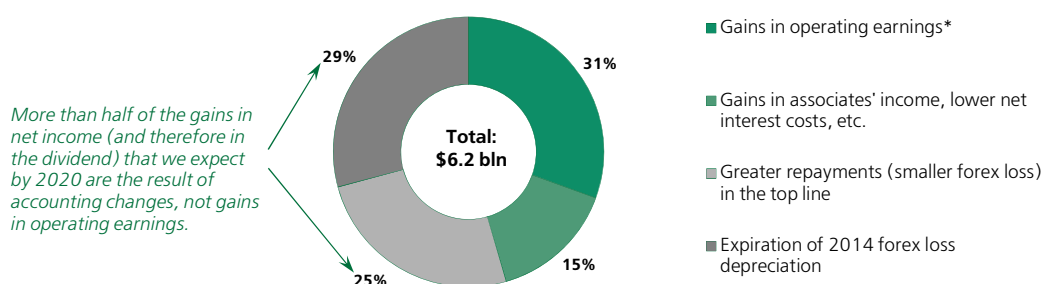


* adjusted for the value of deliveries under prepayment agreements not included in the top line

Source: Company, Sberbank CIB Investment Research

The difference in the two measures of about \$3.2 bln this year should drop to \$1.3 bln by 2019, when some earlier prepayments will have been repaid and the most recent one will kick in. Meanwhile, the “amortized” forex loss of about \$2.2 bln per year should also go away by 2019, giving a major combined boost of over \$3 bln (post tax) to Rosneft’s net income – in theory. This would go a long way toward more than doubling our projected net income to \$10 bln by 2020, therefore doubling the dividend too, to an almost 9% yield to the current share price.

Composition of Rosneft's net income growth to 2020



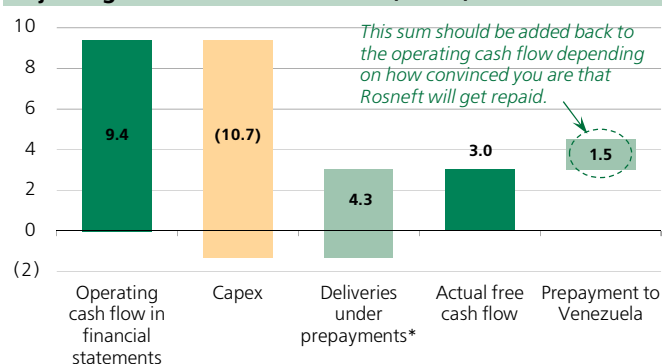
Note: Assuming a flat oil price of \$50/bbl.

* ex-minority interest and growth in depreciation

Source: Sberbank CIB Investment Research

But will this happen in practice? A company that has “managed” its P&L so extensively thus far may continue to do so in the future, even if no obvious means for that are yet apparent. We discuss that later in this report.

■ **Free cash flow.** The same thinking holds for the estimate of the company’s free cash flow. Because Rosneft does not treat prepayments as debt but simply as deliveries already paid for, it excludes the full dollar price of the delivered oil from its operating cash flow. (Were prepayments treated as debt, their dollar value would be restored to the operating cash flow and then removed from financing cash flow – kind of an accrual accounting trick, but a more fair representation of what is really going on.) Adjusting for this gives the “real” value of free cash flow. However, we do treat prepayments to PDVSA (\$2.5 bln over 2016-1H17) as a reduction from operating cash flow because these are credits advanced to a CCC-rated entity.

Adjusting Rosneft's free cash flow, \$ bln, 2016

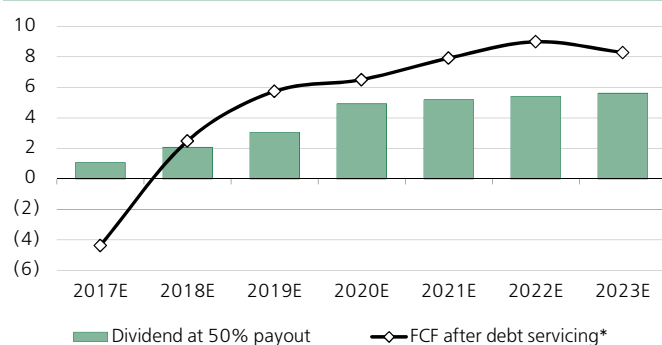
* and other trading adjustments

Source: Company, Sberbank CIB Investment Research

Faith-based forecasting

There are more tricks lurking in Rosneft's financial statements. For instance, the company treats the interest that it pays on the conventional debt (\$2.6 bln last year) as financing cash flow, while the interest it receives on cash as operating cash flow.

But putting that aside, we see free cash flow – adjusted to add back prepayments – expanding from about \$5-6 bln this year to nearly \$12 bln by 2020 and \$14 bln at the peak in 2022. After servicing prepayments and other debt, this should allow the company to comfortably cover its dividend, which at the recently raised 50% payout level should more than double to about \$5 bln by 2020 (a nearly 9% yield). As we've seen, more than half of the expansion in the bottom line will be due to the expiration of artificially created accounting issues.

Rosneft's free cash flow should comfortably cover the rising dividend, \$ bln

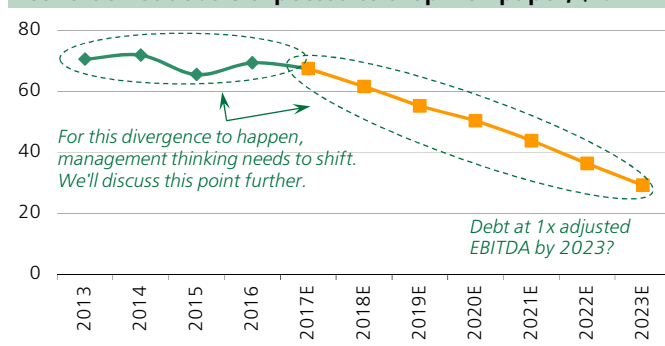
* FCF after the reimbursements of prepayments and net interest expense

Note: Dividend expressed for the period in which it is paid.

Source: Sberbank CIB Investment Research

Assuming no more acquisitions or other calls on its cash, Rosneft could start deleveraging by next year. Its net debt-to-adjusted EBITDA ratio could fall to just 1.0 by 2023.

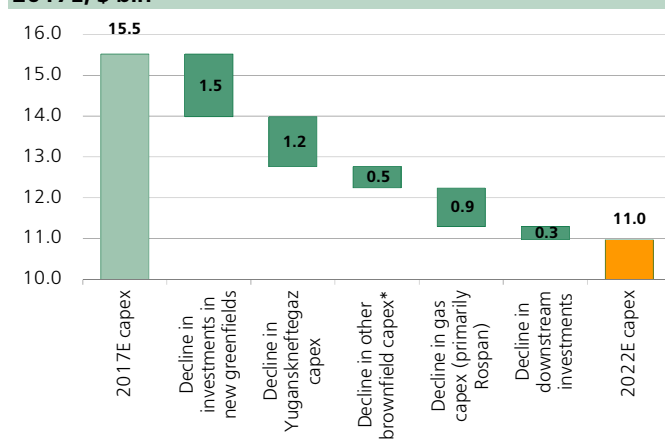
Rosneft's net debt is expected to drop – on paper, \$ bln



Source: Company, Sberbank CIB Investment Research

Importantly, however, this assumes a reduction of capital expenditures on the current assets by over \$4 bln. There is no way around it. If we want to arrive at a fair value that's anywhere near the current share price, we *must* assume a decline in capex in the future. Rosneft's debt burden is so high that even as much as \$10 bln per year in terminal free cash flow, discounted by 10%, would leave less than \$30 bln in value to equity at this time, or half the current market cap.

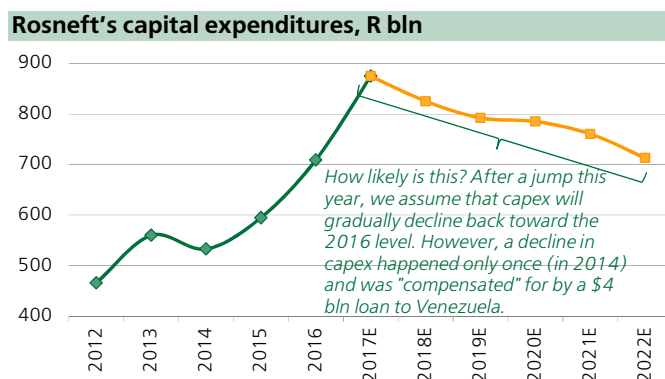
Sources for the decline in Rosneft's capex, 2022E vs 2017E, \$ bln



* mostly Uvat and Verkhnechonsk

Source: Sberbank CIB Investment Research

As it happens, though, Rosneft has cut capex in real (ruble) terms only once, by 5% in 2014, the year it was placed under US and European sanctions and the future of its financing was rather uncertain. (That year, however, Rosneft still managed to lend \$4 bln to Venezuela, and we do not expect repayment.) As we have seen, brownfield maintenance capex has been rising, and so our assumptions that Yuganskneftegaz would see a massive drop in capex after this year's ramp-up are probably too optimistic.



Source: Company, Sberbank CIB Investment Research

This brings us to the crucial part of our discussion. Why has Rosneft not been able to reduce its net debt so far and what does that say about the relevance of our financial projections?

All over the canvas

"Every good deal, every masterpiece, requires some effort," Sechin says of the Essar acquisition. When challenged on whether the debt-laden [Rosneft] bears comparison to a Michelangelo, he replies: "It is more like an Henri Matisse."

Interview with Financial Times, June 2017

Rosneft's CEO does not welcome publicity. As a result, there are few resources that delve deeply into his way of thinking. The better ones available, all in Russian, tend to reach two conclusions, which are always substantially based on talking to unnamed sources. The first is that Sechin believes in consolidation of capital under state control. For instance, the expansion of InterRAO UES, where he is the chairman of the board and CEO, is seen as an intentional reversal of the breakup of RAO UES over 2006-08.

The second conclusion put forward by publicly available studies of Sechin is that he has trouble either grasping or appreciating economic principles. However, it is difficult to find much in his *public* statements that would support this. His 1998 dissertation on investments in energy transport systems has been quoted as praising the Soviet nuclear and space programs for delivering results "at any cost." But the actual text does not so much laud such an approach as argues that profit-minded project management is a new notion to Russia. The dissertation – assuming Sechin actually wrote it himself – shows a firm grasp of basic concepts like the time value of money, net present value, rate of return and payback period.

Deeds would be a better illustration of Sechin's thinking than words. While certainly hinting at a statist approach, his deeds suggest a more prosaic yearning, common to many CEOs, for quick expansion using someone else's money (be that of shareholders or borrowed funds).

Below is the list of Rosneft's major acquisitions since 2011. There is no apparent common trend here, except perhaps towards vertical integration (OFS business, refining, retail). The disjointed assets coerced into cohabitation and lack of a unifying perspective – this is no work of Matisse.

Rosneft's acquisitions, 2011–17E

	Asset	Kind	\$ mln
2017	Essar Oil (49% stake)	Refining (India)	3,700
	Zohr	Gas (offshore Egypt)	2,075
	Bashneft minorities buyout	VIOC (Russia)	828
	Kondaneft	Upstream (Russia)	699
	LLC Drilling Service Technology	OFS (Russia)	157
	Other	Unknown	271
2016	Bashneft (50.07% stake from government)	VIOC (Russia)	5,233
	Targin	OFS (Russia)	65
	Leasing company	Real estate (Russia)	40
	Other	Unknown	474
2015	Schwedt refinery (16.7% stake)	Refining (Germany)	353
	Novokuibyshevsk Petchem Co	Petrochemicals (Russia)	300
	Trican Well Service	OFS (Russia)	150
	Petrol Market	Petrol stations (Armenia)	40
	Other	Unknown	459
2014	TNK-BP minorities buyout	VIOC (Russia)	4,825
	Weatherford's Russia+Venezuela business	OFS (Russia and Venezuela)	500
	Orenburg Drilling Company	OFS (Russia)	247
	Petrocas	Petrol stations (Georgia)	144
	Bishkek Oil Company	Petrol stations (Kyrgyzstan)	39
2013	TNK-BP International (cash)	VIOC (Russia)	44,380
	TNK-BP International (shares to BP)	VIOC (Russia)	10,557
	TNK-BP International (debt assumed)	VIOC (Russia)	1,802
	Taas-Yuryakh (additional 65% stake)	Upstream (Russia)	3,139
	ITERA (additional 49% stake)	Gas (Russia)	3,002
	Arctic Russia B.V. (SeverEnergiya) (40% stake)	Gas (Russia)	1,799
	Saras (13.7%+7.29% stakes)*	Refining (Italy)	358
	TNK-Sheremetyevo	Jet fueling (Russia)	300
	Other	Unknown	372
2012	Vnukovo fueling (50% stake)	Jet fueling (Russia)	515
	Taas-Yuryakh (35% stake)	Upstream (Russia)	431
	ITERA (51% stake)	Gas (Russia)	219
	Research and Development Center LLC	R&D (Russia)	133
	Arcticshelfneftegaz (50% stake)	Upstream (Russia)	99
	Polar Terminal LLC	Shipping (Russia)	32
	Other	Unknown	101
2011	Ruhr Oel (50% stake acquired from PdVSA)	Refining (Germany)	1,960
	Other	Unknown	438
Total 2011–17 (gross of disposals)			90,238
Total 2011–17 (net of disposals)**			88,002
Total ex-TNK-BP			28,674

* Saras has since been disposed of at roughly the same price as purchased

** disposals mostly consist of a 2014 sale of a 49% stake in a petrochemicals unit to Sibur for \$1.6 bln

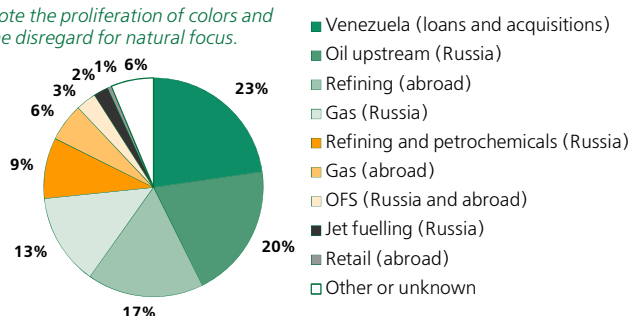
Note: Excludes investments in Venezuela (mostly loans and prepayments) and E&P license purchases.

Source: Company

It is often observed that Rosneft under Sechin aims to be a major global integrated player like Exxon. For instance, Rosneft's 2013 annual report touted the emergence of a "Global Energy Company." If that really is the strategy, then you should sell the shares now, because once this becomes apparent, nobody will pay the current double-digit P/Es for a bunch of disjointed assets scattered around the world and run out of Moscow by a political appointee. (Even running *Russian* assets like that is hard enough to sell to the market). Then again, maybe you did sell them back in 2013 and are glad you did. The assumption behind the entire forward-looking financial discussion thus far is that global expansion would not be Rosneft's strategy.

But is it art? Rosneft's acquisitions by kind, 2011–17E, \$ bln (ex-TNK-BP)

Note the proliferation of colors and the disregard for natural focus.



Note: Bashneft acquisition treated as 50/50 upstream oil/refining.

Source: Company, Sberbank CIB Investment Research

What is the track record of Rosneft's acquisition activity? Let's look at some of the recent purchases.

- We have estimated that Rosneft has agreed to pay at least twice as much as Essar Oil is worth (see the detailed discussion in our note "Rosneft: Hindi Russi Bhai Bhai," October 2016). We believe the company may have also agreed to ultimately backstop the other partners, UCP and Trafigura, on their own 49% stake.
- Rosneft's purchase of the stake in Zohr from Eni valued the project at \$5.3 bln, in line with WoodMac's net present value estimates – but these assume the full production of 25 bcm per year at the peak starting as soon as 2020, for a field discovered less than two years ago. In other words, Rosneft paid the full best-case value for this asset, thus fully de-risking Eni on this stake with no upside to itself.
- We have already discussed the risks associated with Kondaneft production, and the likely overvaluation of that asset.
- Even Bashneft cost the company over \$1 bln more than our fair value indicated at the time.

Rosneft's biggest acquisition, TNK-BP, was of course acquired at peak oil prices for a combined \$61.5 bln, comparable to Rosneft's entire market cap today. We discussed Russian oil companies' poor record of timing their capital allocations in some depth in our August 2015 report, "Time Torn Off Unused".

This is not a stellar record. On the other hand, Rosneft's sales of large minority stakes in the Russian upstream projects have come at decent enough valuations. We estimate the assumed oil price implicit in these deals has been \$60-70/bbl.

Rosneft's Russian upstream disposals, 2015–17, \$ bln

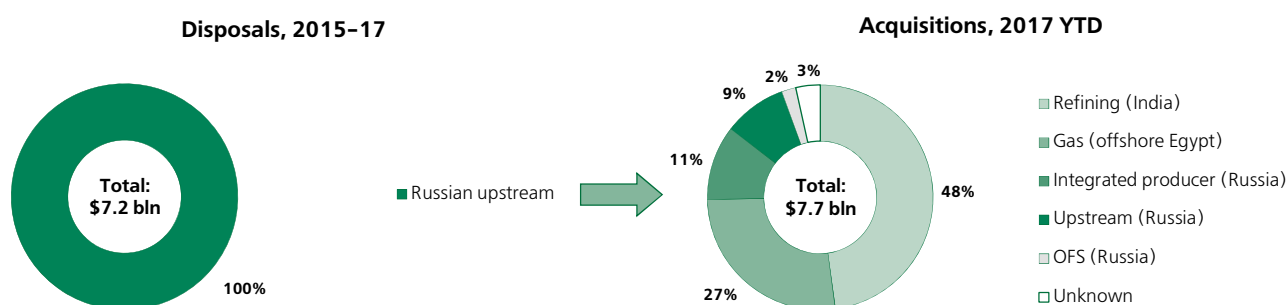
Completed	Asset	Stake sold	Buyers	Price, \$ bln	Output, kbpd		kbpd of output growth/ (decline) disposed of
					2016	2020E	
May-October 2016	Vankor	49.9%	ONGC, other Indian firms	4,226	415	333	(41)
June 2017	Verkhnechonsk	20.0%	Beijing Enterprises Group	1,100	174	159	(3)
June 2015-October 2016	Taas-Yuryakh	49.9%	BP, Indian consortium	1,870	22	112	45
Total				7,196			1

Note: Excludes the small Polar Lights stake sale (\$98 mln).

Source: Company, press reports, Sberbank CIB Investment Research

Nevertheless, we find it hard to grasp the logic of these sales, even as an exercise to raise money. The disposals have collectively funded this year's acquisitions. However, they have all come from the Russian oil upstream, where Rosneft enjoys a comparative advantage versus international peers (though as we've seen, not anymore against Russian companies). The acquisitions, on the other hand, have been literally all over the place.

Unfocused: Rosneft's upstream disposals have funded this year's acquisitions



Source: Company, Sberbank CIB Investment Research

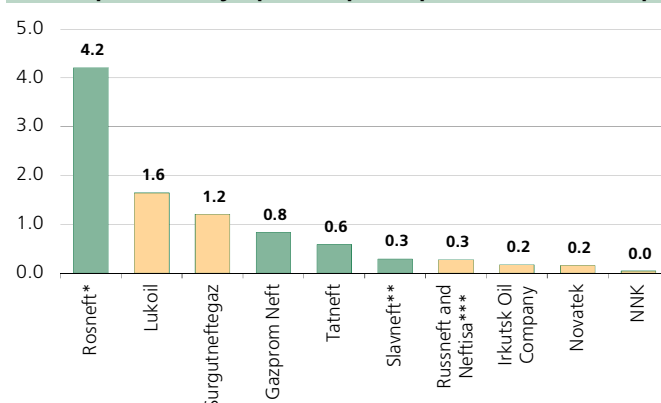
"For the benefit of Russia"

Can we identify what future acquisitions Rosneft might make?

The Borat-sounding title of Rosneft's latest annual report, "For the benefit of Russia," suggests that the main priority going forward will not be the pursuit of shareholder value, either. The priority remains the pursuit of some abstract national benefit. The way the management has identified this is consolidation of capital under state ownership. While this does not necessarily imply accumulating assets "at any price," the general tangent is towards non-organic growth.

A popular Russian parlor game is to predict whom among its peers Rosneft might gobble up next. In the upstream, we see only a handful of potential purchases of any material size. None of these is likely to be cheap, unless the assets happen to be acquired in a bankruptcy auction, similar to Yuganskneftegaz back in December 2004 (even that ended up costing Rosneft almost \$10 bln). Lukoil, Surgutneftegaz, Russneft, fast-growing Irkutsk Oil Company and heavily indebted Independent Petroleum Company (NNK) are the only remaining private majors in the country.

Russian producers by liquids output, September 2017, mln bpd



Note: Green denotes state-owned, orange denotes privately-owned. Production given on a consolidated basis per CDU TEK methodology (not attributable).

* including Bashneft

** about 50/50 owned by Rosneft and Gazprom Neft

*** Russneft and Neftisa have common shareholders

Source: CDU TEK, Sberbank CIB Investment Research

We will refrain from commenting on the chances of Rosneft's acquiring the first four, except to note that the often-heard perception that Surgutneftegaz's \$42 bln in cash is just sitting there waiting for Rosneft to scoop it up appears naive to us. Rosneft would likely pay the fair value or more for the operating assets of the politically-protected company, and Surgutneftegaz's cash would have been gone by then.

Rosneft already attempted to wrest control over Russneft in 2005-07, according to discussions in the Russian press. As for NNK, the company has widely been seen as a vehicle for acquiring assets on behalf of Rosneft. We estimate its current debt load (including the debt of its major subsidiary Alliance Oil) at around \$5 bln, while the assets it has managed to consolidate, including the upstream and the Khabarovsk refinery, are of poor quality. The Kondaneft transaction could be an indication that Rosneft is willing to overpay for NNK's assets to bail out the group – hence, it will be important to watch that acquisition's production curve.

If Rosneft is set on continuing the strategy of empire-building, and fails to clinch major Russian assets like Lukoil or Surgutneftegaz, its heft will keep on pushing it both out of its sector and out of Russia.

Some of the projects that have been announced by the company – which may also point to its M&A strategy in the future – include:

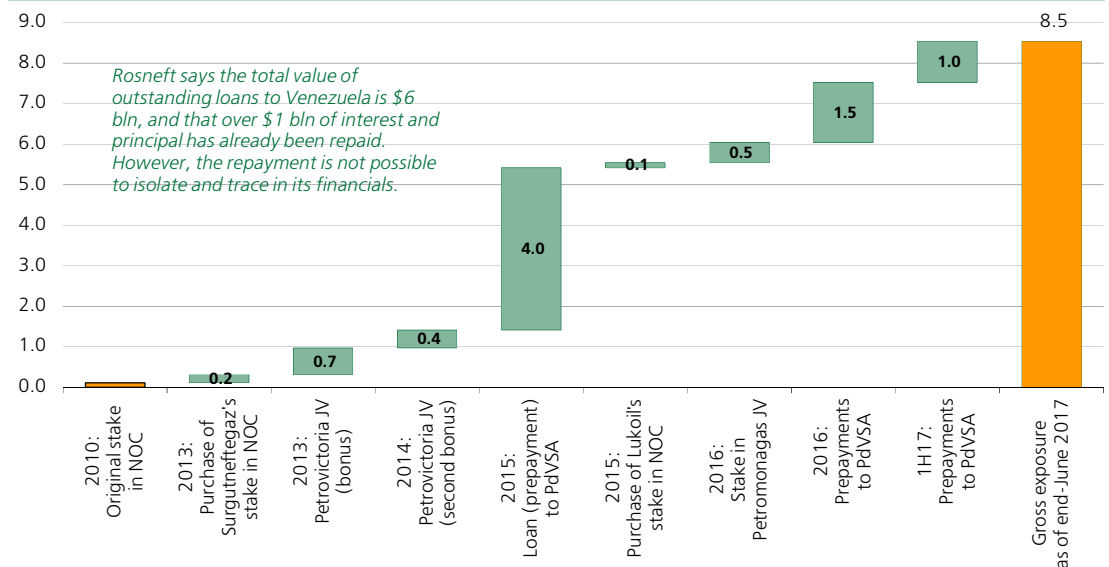
- FEPCO, the major refining and petrochemicals complex in the Russian Far East (see the discussion above).
- The 15 mln tonne Tuban refining and petrochemicals complex in northeast Java in Indonesia (Indonesian company Pertamina may in turn get a stake in the Russkoye field).
- A 30 bcm gas pipeline from Kurdistan to Turkey. Rosneft has no comparative advantage here and given the upstream issues in Kurdistan, the pipeline may remain well below capacity for years. This is not to mention the political problems that have become more apparent in recent days. Turkey, which is fighting a decades-long war against Kurdish separatists, may shut down the pipeline in the future.
- Zvezda shipbuilding complex and the related Eastern Mining and Metallurgical Company to supply the steel sheets for the dock yard ("the project ... stimulates development of related industries and is a key driver of the development of the region," was the way Rosneft's then-chairman justified the project, to shareholders, in the 2016 annual report). The shipyard is a JV between Rosneft, Gazprombank and Rosneft's parent holding Rosneftegaz. Thankfully for Rosneft's shareholders, most of the costs of setting up the plant are borne by Rosneftegaz, with Rosneft contributing "only" \$2.5 bln, according to Sechin. However, Rosneft will be the major buyer of vessels and may in that sense "backstop" Zvezda's future operations.

The latter project is also a testament to the Rosneft CEO's apparent ideology of consolidating corporate control along the whole value chain. One example is the ongoing collection of oil field services assets; another is the setting up of what is effectively a Rosneft-controlled JV for the production of helicopters (which are used extensively in Russian oil production for the many assets that cannot be reached by road). Zvezda is also part and parcel with Rosneft's ambitions to develop the offshore Arctic, an expensive undertaking that could become the dominant theme in the future; we discuss it in this report's section on the Arctic.

While we cannot assess the valuation of possible future deals or major investments not yet announced, Rosneft faces a key handicap: its higher cost of equity compared with global majors such as Exxon or BP implies that it will always overpay for any assets that were also available for purchase to its Western competitors.

Ironically, acquisitions in places that Western majors cannot access – say, for argument's sake, Iran – could end up being more value-accretive, as they would in theory allow Rosneft to drive a harder bargain. In practice, however, something like the opposite of this has happened in Venezuela, where Rosneft's behavior resembles that of a hapless investor who keeps doubling down on his original position in a company headed for bankruptcy. If the Maduro government holds, Rosneft is likely to continue to be a net donor to the country. If it collapses, Rosneft could lose all of its assets there.

How Rosneft got bogged down in Venezuela, \$ bln



Note: NOC stands for National Oil Consortium Ltd., a joint venture with PdVSA developing Junin-6 block.

Source: Company

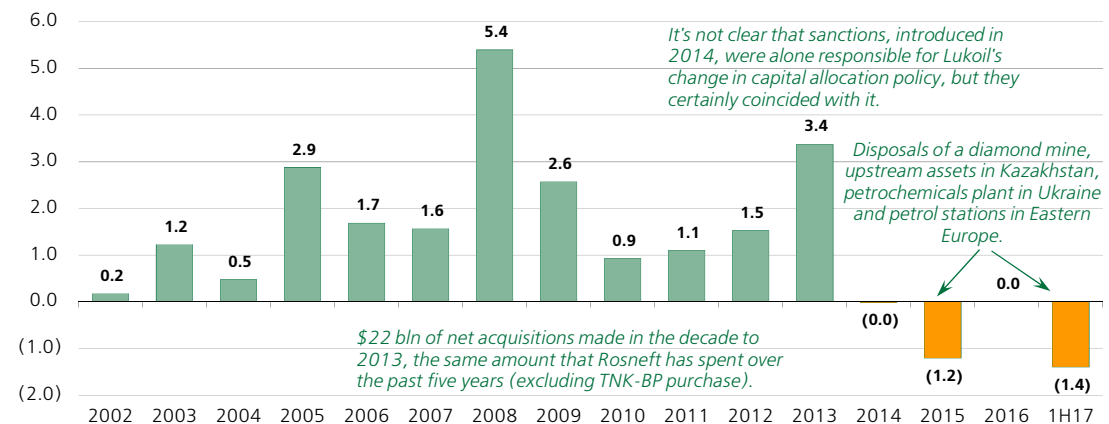
The problem of induction

Just because Rosneft has acted in a certain way so far does not mean it will keep on doing so. For instance, Lukoil's capital allocation has improved significantly in recent years.

Lukoil's net acquisitions/(disposals), \$ bln

"Three years ago I was in Washington and met the gentleman in charge of the US sanctions department. That was at the beginning of the events related to Ukraine. And he said: 'If Russia does this and that, then we will do that and this'. And so I told him: 'My country is never going to leave you unemployed.'"

- Vagit Alekperov, Financial Times, October 2017



Source: Company, Sberbank CIB Investment Research

Much of the sell side has a BUY recommendation on Rosneft. Implicitly, these analysts seek to avoid falling into the induction trap. However, it would seem they need to show *why* the company's behavior should undergo a transformation.

In Lukoil's case, the management sobered up when sanctions were placed on Russia, which coincided with the drop in the oil price. Sanctions and the falling oil price have hit Rosneft even harder, but its management has not drawn similar lessons.

One possibility is that a new shareholder would exercise more oversight over management decisions. But CEFC China Energy, which bought a 14% stake in Rosneft from the Qatar Investment Authority-led consortium early this year and which has received a substantial loan from VTB to fund this acquisition, is unlikely to be such a shareholder. It is a notoriously nontransparent entity and is reported to be connected to the political elites in China. Fortune magazine has reported that it recruits from the government and military structures and awards "exemplary Party member" prizes to its

employees. It does not sound like the type of shareholder that would rock the boat. CEFC's executive director, Ye Jianming, has said he sees the role of corporations as helping to redistribute national assets across society – a way of thinking not incongruent with Sechin's.

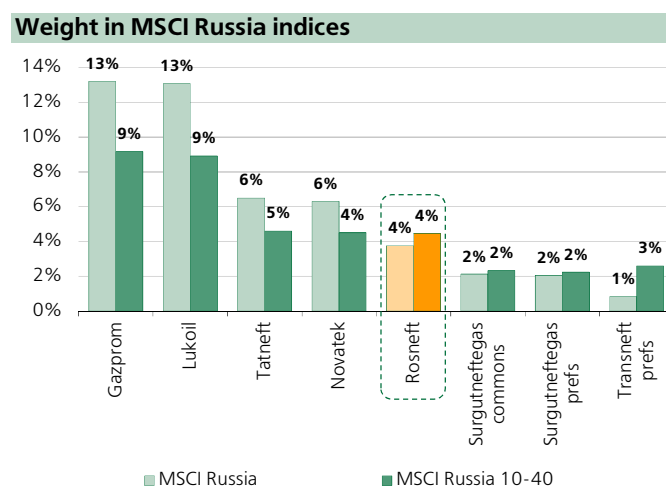
BP, a 19.75% Rosneft shareholder since 2013, has also shown no success – or perhaps even desire – in restraining Rosneft's expansion. Because Rosneft does not disclose the way individual board members have voted on major deals, all we can say is that BP's representatives on the board have either gone ahead with the management's proposals or have failed to persuade other board members to vote against them.

If Rosneft is unlikely to reform internally, could external events pressure it into changing its course? The possibility cannot be rejected outright. However, if the combined effect of the drastic fall in the oil price and Western sanctions has not helped improve its capital allocation, it is unclear what would.

If we're right in our thesis that one person directs essentially all of Rosneft's strategy, then analysts and investors who argue that Rosneft is about to change its course must therefore assume either that Rosneft's CEO will deliberately come to a different set of values or that he will move on from his role in the company. Either one seems a leap of faith to us. So while we're indeed using inductive reasoning and cannot in any sense "prove" our case that Rosneft will continue a non-organic, expansionist policy, the bullish view on Rosneft as churning loads of free cash flow in the future and sharing it with investors is even less justified.

Impersonal exchange

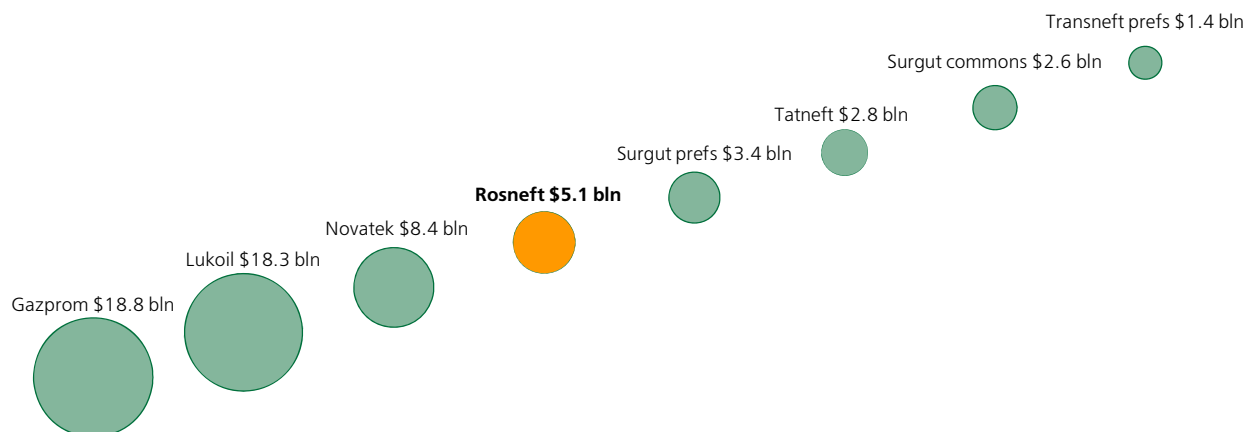
Investors who subscribe to a skeptical view on Rosneft no longer have to worry about its weight in the MSCI Index, either. Back in August 2015, we warned that the index was giving the company too much weight relative to the dollar value of its free float (see "Rosneft: A Phantasmagoria for the Shorts," August 2015). That made it risky to be underweight the stock in case of a general market rally. This scenario indeed played out the following year, when Rosneft outpaced the RTS Index by almost 80%.



Source: MSCI, Bloomberg

However, that situation has now self-corrected. Rosneft is no longer a company with a \$3 bln free float: it is now over \$5 bln, closer to its share in the main indexes.

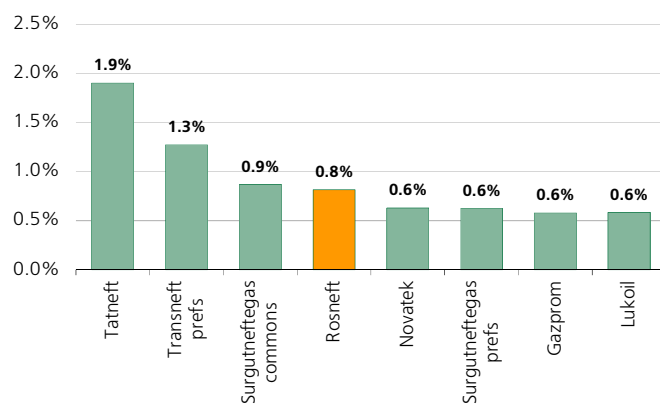
Free float of energy stocks



Source: Sberbank CIB Investment Research

That means that for every dollar of inflows into indexed or quasi-indexed funds, Rosneft will still get a bigger share than Gazprom or Lukoil, but not that much bigger. That distinction now goes to Tatneft and, as far as the 10-40 index is concerned, to Transneft.

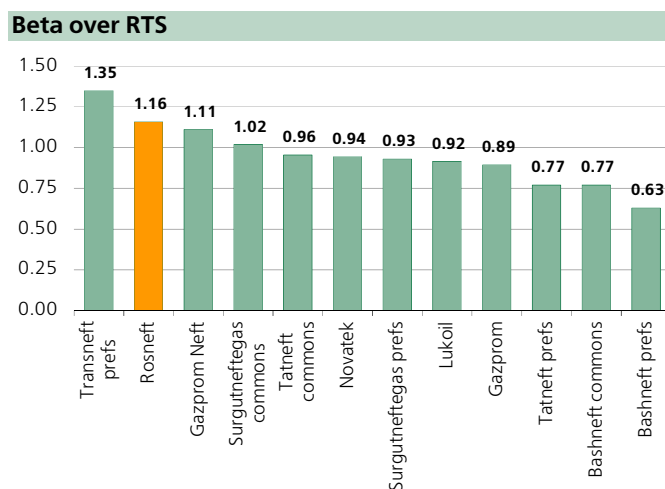
Additional bid as % of free float per each \$1 bln of inflows



Note: Based on mixed flows into funds tracking MSCI Russia/EM (circa 40%) and MSCI Russia 10-40 (circa 60%), per the current following. Assumes indexed funds invest with no deviation from the index (true for passive funds, not always so for actively-managed money).

Source: MSCI, Bloomberg, Sberbank CIB Investment Research

Rosneft stock still has higher volatility relative to the market (beta). But this stems from the company's leverage, not from bids or offers coming from indexed funds. The shares may outpace the rest of the market when the oil price rises, and vice versa, but at least that is no longer amplified by outsized trading from indexed accounts.



Note: Based on 30-day excess volatility over a one-year period.

Source: Sberbank CIB Investment Research

The only remaining reason *not* to recommend that investors stay underweight Rosneft stock is that the bullish forecasts might prove fully or partially right. Our financial projections, after all, are not that far from the consensus; the only difference is that we don't entirely believe them. But what if the company really does take a long pause on acquisitions, addresses its swelling costs and reduces debt?

In fact, what if it simply allows the accounting adjustments that bring down the net income to lapse, without otherwise changing the rest of the strategy? Given that Rosneft will never be taken over or face the prospect of bankruptcy, would investors really care about the shrinking value remaining to equity when they stand to get a 9% dividend yield in a couple of years' time?

Because Rosneft has tinkered with its P&L thus far (see discussion above), our level of conviction even on this one aspect is not very strong. Whether it pays up or not depends to a large extent on whether its management will want to. That, in turn, will largely depend on whether the government is successful in getting the holding company Rosneftegaz to share the dividends it receives from Rosneft: if it is successful, the incentive to pay would be reduced.

And even if Rosneft does pay up, it could not finance the \$5 bln annual dividend with leverage indefinitely. Sooner or later, the market would discount this. Rosneft's CFO has said publicly that the company is comfortable with its current debt load. Its in-house target for conventional debt is roughly twice as high as where it is right now, implying that the management is open to piling on more debt as prepayments are reduced. This would suggest that any future free cash flow beyond the dividend will be reinvested. We have already examined the investment track record.

To take a neutral, much less a bullish, stance on Rosneft would require lots of things going right, first and foremost, inside one person's head. We are not prepared to believe in that quite yet.

China Gas Imports: The Phantom Pipeline

We are going to discuss something here that may or may not exist. It is a project – the fourth link of the Central Asia-China Gas Pipeline, known as “Line D” – that some claim to have seen being constructed. Yet others deny it, and we could find no evidence, thus far, that it is anything but a desert mirage.

Those who must have seen it are the presidents of China and Tajikistan – they presided over the ceremony marking the start of its construction back in September 2014. Three years later, however, there has been no sighting of the pipeline. This past March, Uzbekneftegaz, the state-owned holding company for Uzbekistan’s oil and gas assets, and CNPC agreed to postpone the start of construction of the Uzbek section of Line D for an indefinite period. This was the third time the construction on this stretch was delayed after its originally proposed start date of late 2015.

But as usual, those who are the thirstiest insist on the reality of the mirage. In July, Tajikistan’s minister of energy and water resources, Usmonali Usmonzoda, claimed that a CNPC subsidiary, Trans-Asia Gas Pipeline Company, had started delivering equipment and machinery for the Tajikistan section of the pipeline.

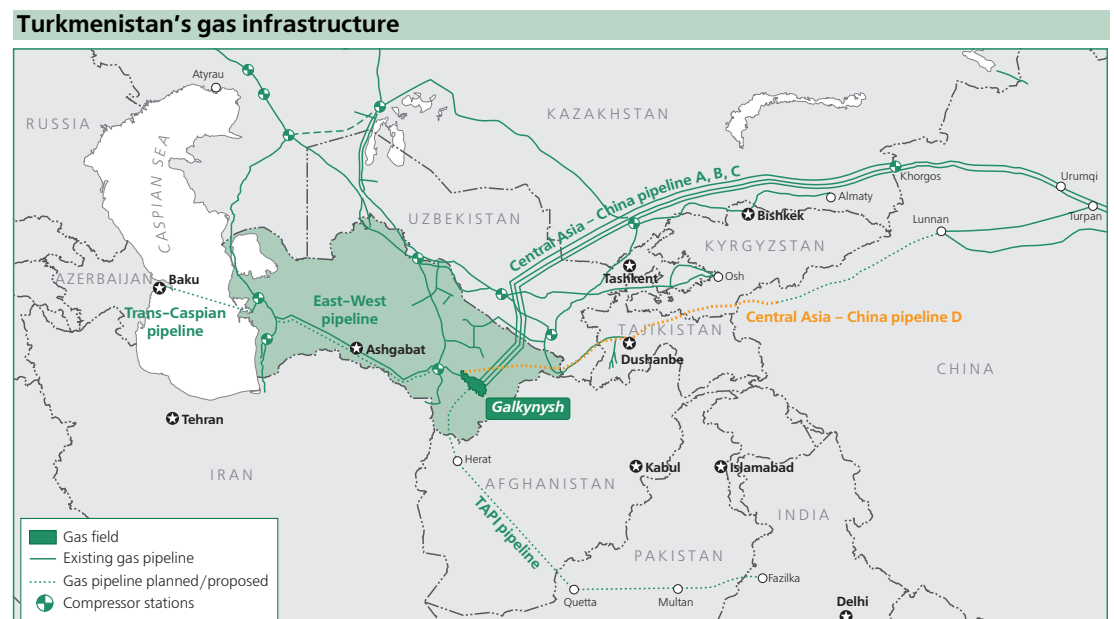
No details on the progress have emerged since then. CNPC, which is financing and operating the project, coyly refrained from commenting.

If you invest in Novatek, the prospects for the incarnation of this apparition will increase in importance as the company begins inviting partners for its second major project, Arctic LNG-2.

So let’s try to find out what is really going on.

D is for detour

Line D is scheduled to deviate significantly from the rest of the Central Asia-China corridor. The first three lines – A, B and C – will have a combined annual capacity of 55 bcm, with 35 bcm of this reserved for Turkmenistan. They run parallel to each other across Uzbekistan and Kazakhstan. Lines A and B, with a combined capacity of 30 bcm, carry gas exclusively from Turkmenistan, while Line C also supplies gas from Uzbekistan and Kazakhstan. Line C has been operational since 2014 and is expected to reach its full capacity of 25bcm in 2018, once the last four compressor stations in Kazakhstan are cranked up.



The 30 bcm Line D, if it is ever constructed, will cut across Uzbekistan, Tajikistan and Kyrgyzstan. It is set to carry gas from Phase Two of the Galkynysh field in Turkmenistan.

Why the deviation from the first three lines? China has never publicly commented on this, but there are three possible reasons. First, this route is shorter. Second, as we wrote in our February 2014 report, China had hopes that Tajikistan could eventually develop the Bokhtar formation, where estimated unrisks resources were assessed at 3.2 tcm: even if just one-tenth of these could be proven, eventual annual production could reach 10-15 bcm. (Soviet geologists reportedly appraised Tajik gas reserves – a step above resources – at 860 bcm). The Tajik government has offered a massive sweetener in the form of a production sharing contract. From CNPC's point of view, the risk was small but the upside of owning reserves below the ground via the PSA and pretty much everything above the ground via eventual service contracts must have been very appealing.

But Tajikistan borders China directly. Why then have the pipeline cross Kyrgyzstan, thus taking on an additional political risk for seemingly no reason?

The third possible reason for the country-hopping route is that China was trying to pull the small Central Asian states into its economic orbit. Under that thinking, gas deliveries were always auxiliary to the New Silk Road thinking that has become popular in Beijing.

That idea has not abated. Why, then, the delays, and will the pipeline ever get built? We see several possible reasons for the delays:

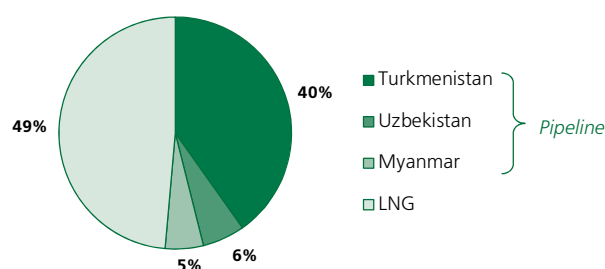
- China no longer needs this gas;
- No commercial volumes were ever found in Tajikistan, and the gas is too difficult to extract in Turkmenistan and pipe through the mountainous Tajikistan, raising the project's costs;
- Central Asian gas has become too expensive for China, partly because of the longer transportation leg.

Let's look at each in turn.

China still needs the gas

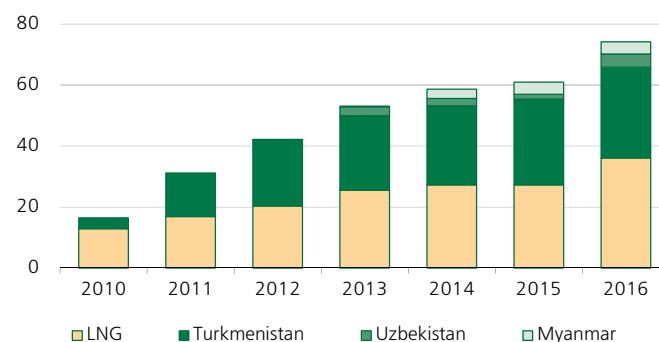
Pipeline gas from Turkmenistan is China's second largest source of gas, after LNG, accounting for 40% of total imports.

China 2016 gas imports breakdown



Source: IHS CERA

China gas imports breakdown, bcm



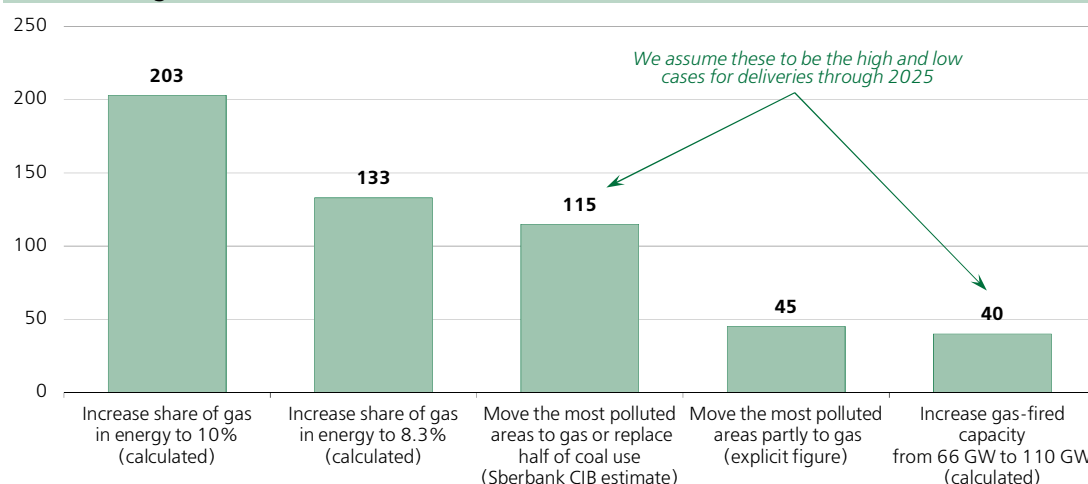
Source: IHS CERA

We analyzed Chinese gas demand in depth in our May report "Marking Territory." The Chinese government has long been focused on increasing the share of clean energy, largely by replacing coal with gas. We estimated in our report that the coal-to-gas switch could generate an additional 40-115 bcm of gas demand by 2025, depending on which of the targets set out in China's 13th Five-Year Plan are met (see the chart below).

- The low end of the range is based on the government's plan to boost gas-fired power capacity from 66 GW to 110 GW.
- The high end is our estimate of the additional gas demand that would be generated from switching all of the coal power capacity in the provinces of China's 10 most polluted cities (based on PM2.5 emissions) to gas. The same amount of additional gas would be required to replace half of the coal used in China's power generation and industrial and residential heating, on our estimates.

Other targets in the plan could bring the amount of additional gas consumption to 133 bcm or 203 bcm, but we believe these goals are overly optimistic. We also assume that the targets will be achieved by 2025, rather than 2020 (as in the plan).

Boost to China's annual gas consumption from coal-to-gas switch, based on China's 13th Five-Year Plan targets and our estimates, bcm

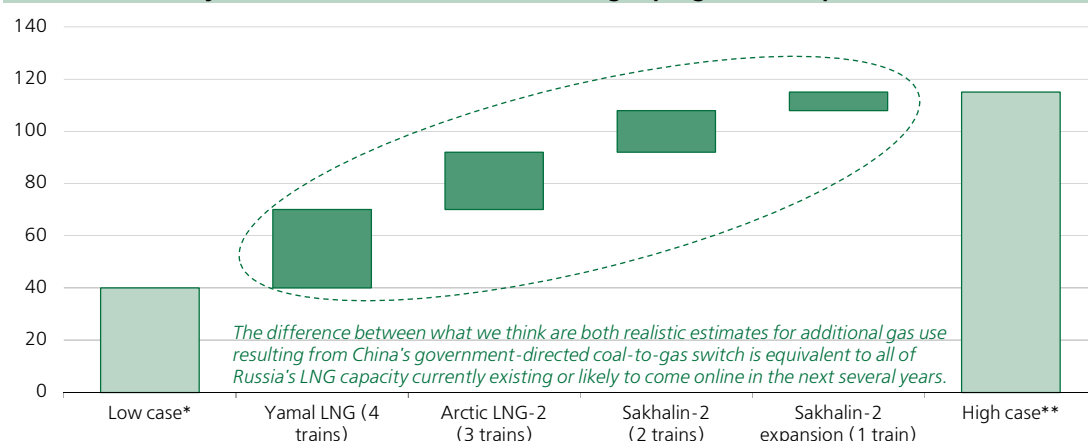


Note: The calculated and explicit figures in this chart are based on China's 13th Five-Year Plan, unveiled in late 2016, and the sector supplements to the plan, released in early 2017.

Source: China National Development and Reform Commission, Sberbank CIB Investment Research

The range between various above targets is quite wide. The difference between our high and low-end scenarios is roughly equal to the entire amount of Russian LNG capacity that is expected to be online by 2022-25, or almost all of the US LNG capacity currently under construction.

Gas use created by China's different realistic coal-to-gas programs, bcmpa



* China's 13th five-year development plan's target of moving from 66 GW of gas-fired capacity to 110 GW

** substituting half of the coal used in the most polluted provinces for gas

Source: Sberbank CIB Investment Research

Although the track record of past five-year plans is rather underwhelming, the recently intensifying rhetoric regarding air pollution control means the upper end of the range is more achievable.

This August, China's Ministry of Environmental Protection introduced the "2+26" plan, which aims to cut PM2.5 emissions (the main contributor to air pollution) by 15% between October 2017 and March 2018 in Beijing, Tianjin and 26 cities in the surrounding provinces of Hebei, Shandong, Shanxi and Henan – the areas with the highest pollution levels in the country. The ministry also asked CNPC to complete the fourth Shaan-Jing pipeline by end October (the pipeline is designed to transport 25 bcma of gas to Northeastern China, from Shaanxi to Beijing via Hebei) and demanded that China's three NOCs speed up the construction of underground gas storage units.

Amid the intensifying push toward gas, China already looks set to experience gas shortages this winter. According to Interfax, a number of industry experts expect NOCs to raise gas prices this winter for nonresidential consumers in response to high demand. They are also expected to draw from storage and increase LNG imports. Interfax reported that over 3 mln households in 28 cities are expected to move from coal to gas or electricity this winter, which we estimate as equivalent to circa 11 bcm of additional gas demand.

The environmental push has been felt across various sectors of the economy. China cut 68 mtpa of steelmaking capacity in 2016, along with 110 mtpa of highly polluting induction furnace capacity, in part to meet environmental targets. A further 50 mtpa of capacity cuts are planned for this year. Over 150 mtpa of coal production capacity is scheduled to be shut down, and at least 50 GW of planned new coal-fired power generation capacity will be suspended or postponed (from 940 GW in 2016), while another 120 GW of capacity will be cancelled. The utilities sector continues to gradually phase out coal-fired plants in favor of gas-powered plants, while the production of gas-fueled heavy-duty trucks increased more than fivefold y-o-y in 7m17, according to Interfax.

This all leads us to believe that the project delay is not due to an expected lack of demand in 2020 or beyond.

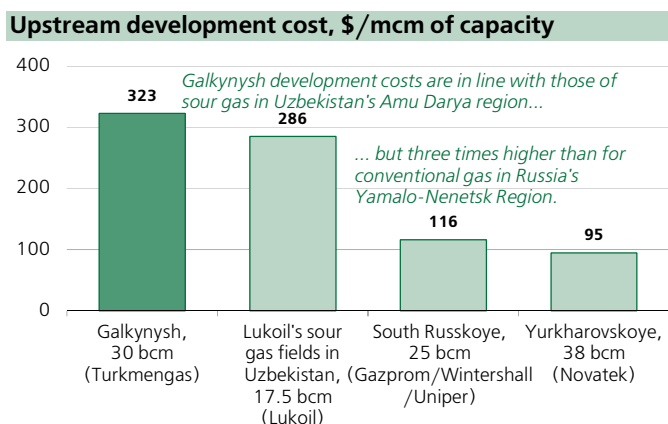
Turkmen gas is difficult, and the Tajik bonanza is still far off

Line D is complex and expensive from a technical standpoint, as it is intended to pass through the mountainous terrain of Tajikistan and Kyrgyzstan and will require the construction of 40 tunnels in Tajikistan alone. Mountains cover over 90% of the surface of Tajikistan. This includes three major mountain systems, two of which also cover over 65% of Kyrgyzstan.

As a result, according to media reports, China's Ministry of Commerce estimates the cost of construction for the 1,000 km Line D at \$8 bln. Some \$3.2 bln of the cost would apply to the 400 km stretch through Tajikistan.

For comparison, Line A reportedly costs \$7.3 bln, despite being almost twice as long (1,830 km). However, it had just half of the capacity. Line B was then added for an additional \$3.8 bln to double the capacity, or a combined \$11.1 bln capex (in nominal terms, according to Wood Mackenzie) for 30 bcm of capacity of both lines. Per volume of gas delivered, then, the 30 bcm Line D is still a bargain.

The source gas at Turkmenistan's Galkynysh field has very high carbon dioxide (CO₂) and hydrogen sulfide (H₂S) content, and is known as "sour gas." It therefore needs to be cleaned at "gas sweetening" units before being sent through the pipeline. The field's reserves are also located at a depth of nearly 5,000 meters, which means a very high level of pressure. Therefore, the production and processing of such gas entail higher costs and environmental risks. We discussed the gas at Galkynysh in more detail in our February 2014 report. Galkynysh's capex per mcm is broadly in line with that of other sour gas fields in the region, such as Lukoil's assets in Uzbekistan. However, it is almost three times higher than at the conventional gas fields of Gazprom and Novatek (see the chart below).



Source: IEA, Severneftegazprom, Novatek, Lukoil, Sberbank CIB Investment Research

This may indeed be the real problem for China. If the prospects for Galkynysh Phase 2 turn out to be less than bright, then the hope could have been that gas for Tajikistan would provide enough volumes to fill up the pipeline. But the JV between Tethys Petroleum, France's Total and CNPC, charged with finding the gas in the Bokhtar area, has collapsed into mutual recriminations and lawsuits (Tajikistan has piled in too).

We think the treacherous terrain combined with no progress on the Tajik gas may certainly have played a role in the delay. But in the next section, we will address what we see as the crux of the matter – China is looking for a better deal.

The real issue: China is seeking a price cut

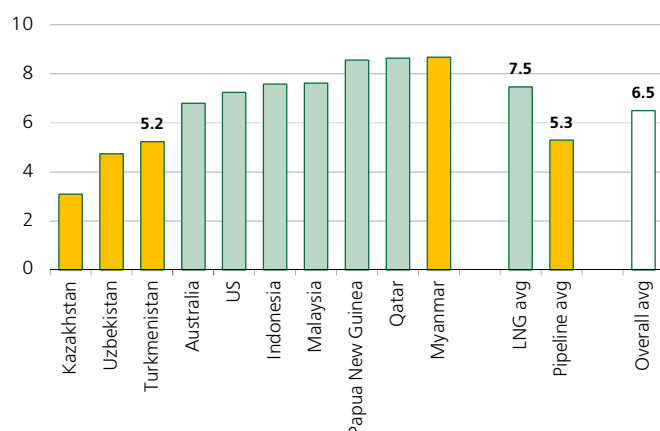
"The cheap prices of its commodities are the heavy artillery with which [the bourgeoisie] batters down all Chinese walls..."

Karl Marx and Friedrich Engels, The Communist Manifesto

Although gas from Turkmenistan is sold at China's western border at competitive prices, the cost of transportation within China to consumption centers in the East is estimated at around \$4 per MMBtu, according to the Oxford Institute for Energy Studies.

On the one hand, this makes Central Asian gas uncompetitive against LNG, since LNG is delivered almost directly to industrial customers on China's eastern seaboard. So China may not be all that interested in expanding the infrastructure for gas from Central Asia not because it does not require the gas, but because the gas enters China at the wrong end.

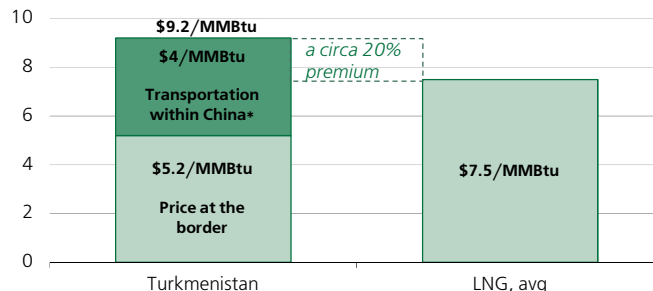
China gas import prices by source, August 2017, \$/MMBtu



Note: Orange bars indicate pipeline gas; green bars indicate LNG.

Source: IHS CERA

China gas import prices by source, \$/MMBtu



* via the West-East Gas Pipeline II to Shanghai

Source: IHS CERA, Oxford Institute for Energy Studies, Sberbank Investment Research

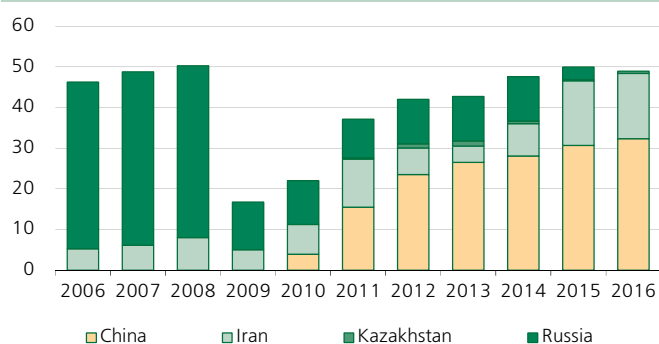
On the other hand, CNPC, which markets the gas, pays the transport costs to its 86% subsidiary PetroChina. So one wonders why they should particularly care. Well, perhaps they care because the tariff, which captures the investments into the pipeline, reflects the \$8 bln that they would have to invest into the new pipeline in the first place. In other words, CNPC does not care about the costs already sunk into Lines A-C, expressed in the \$4/MMBtu tariff it pays to its subsidiary. But it does not want to spend money on a new pipeline.

If so, then what it really needs is to receive a price cut. And this may be the best time in decades to get one. Turkmenistan finds itself in a rather vulnerable position: China is its only remaining export customer.

Only a few years ago, there were concerns over whether Turkmenistan had enough gas at Galkynysh and its older fields to service its supply contracts with China, Russia and Iran, and to potentially begin to supply India, Pakistan and Afghanistan as well as via the prospective TAPI (Turkmenistan-Afghanistan-Pakistan-India) pipeline – all this in addition to supplying the gas-hungry domestic market. In fact, in early 2014, in order to save up gas for export, the Turkmen government abolished the unlimited free gas allowances for the population and requested to install metering equipment in households. It also launched a media campaign promoting energy efficiency (see our report “Two Weddings and One Funeral”).

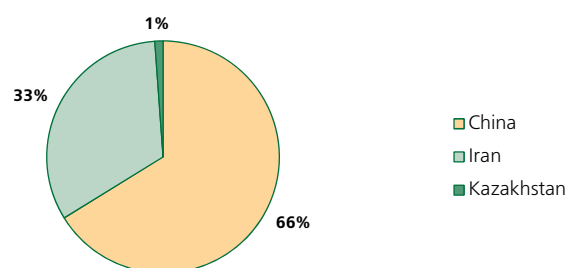
Turkmenistan’s customer base started to crumble in 2009, when Gazprom sharply cut its imports – from over 40 bcm per year to just 12 bcm – following a pipeline explosion widely suspected of having been staged. Early last year, Gazprom stopped purchases altogether. Although export volumes to Russia the year before were commercially insignificant at just around 3 bcm, having another buyer gave Turkmenistan some leverage in its negotiations with Iran and China.

Turkmenistan gas exports by destination, bcm



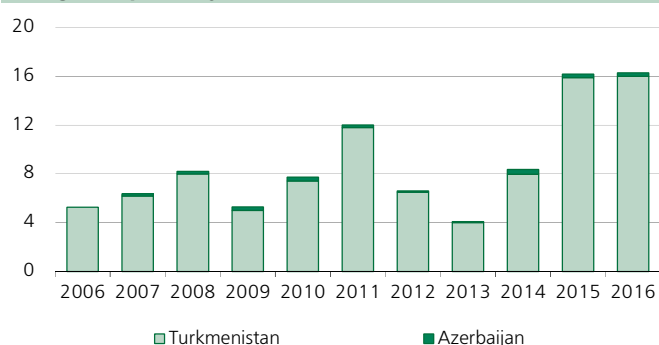
Source: IHS Energy Eurasia Gas Export Outlook

Turkmenistan gas exports by destination, 2016

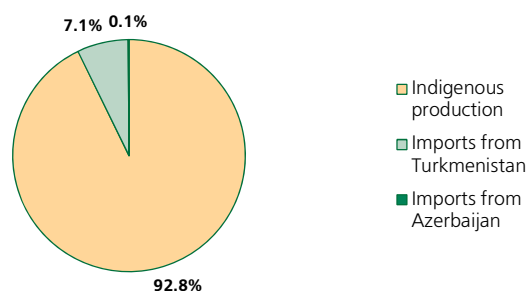


Source: IHS Energy Eurasia Gas Export Outlook

This January, another tap was turned off. Amid a prolonged dispute over payments for gas supplies, Turkmenistan abruptly halted exports to Iran during the winter period of peak demand, requesting repayment of \$1.8 bln of debt for supplies since 2013. In response, the National Iranian Gas Company (NIGC) accused its counterparty of breach of contract and threatened to file a request with the International Court of Arbitration (ICA). The incident prompted Iran to speed up the construction of the Damghan-Neka pipeline, which was launched this August. The 170 km pipeline, with a capacity of 14.6 bcm, was built to supply gas to the country’s northern provinces. Despite Iran’s substantial gas reserves, it was cheaper and easier to buy gas from Turkmenistan than to extend own network. Hedayat Omidvar, a communications officer for NIGC, told Interfax that the new pipeline could theoretically allow Iran to do away with gas imports from Turkmenistan altogether. Neither side has actually filed for arbitration as of yet, despite continuing threats, which makes us believe the parties are eager to reach an agreement after all. It is therefore possible that Iran will continue importing some gas from Turkmenistan, at least to cover peak demand.

Iran gas imports by source, bcm

Source: IHS Energy Eurasia Gas Export Outlook

Iran gas consumption sources, 2016

Source: IHS Energy Eurasia Gas Export Outlook

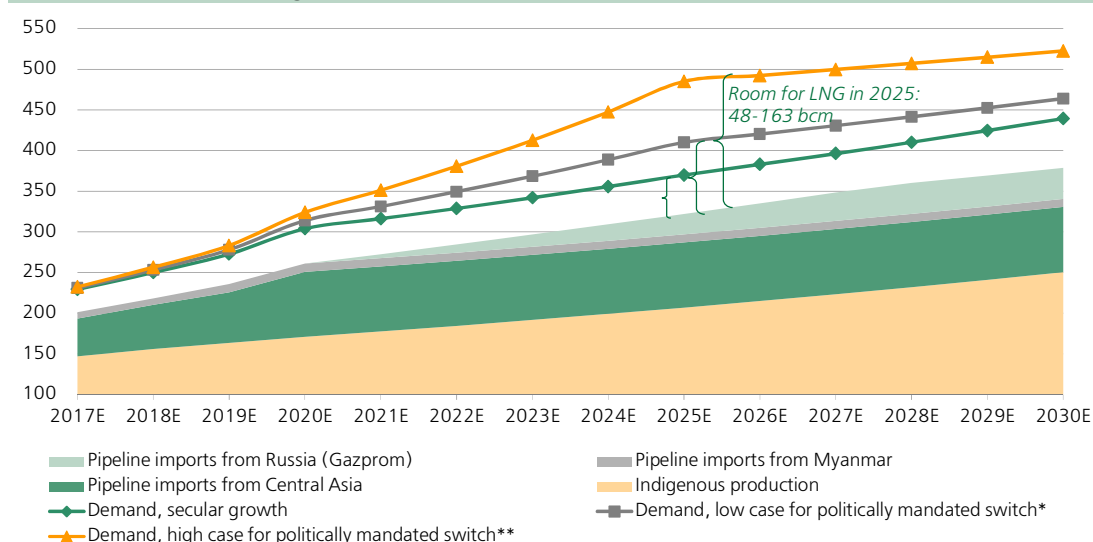
What other options remain for Turkmenistan? The proposed TAPI pipeline, which has been in the design phase since 1997, would carry 33 bcm of gas over 1,814 km from Turkmenistan's Galkynysh field (Phase Three) to Afghanistan, Pakistan and India. Its development is being carried out by a consortium of the four countries led by Turkmenistan. Officially, the pipeline is expected to be completed by end 2020. So far, however, there have been vague signs of activity, and only in two of the countries involved: Turkmenistan has built just 6 km of its 214 km section, while Pakistan is still in the FEED stage. The longest stretches of the pipeline will pass through Afghanistan (774 km) and Pakistan (826 km). So far no work has been done on these sections, and security issues related to the Taliban insurgency are likely to hinder any further progress. We believe that the pipeline is unlikely to go ahead, at least as long as the political instability in the region persists. If TAPI were to be cancelled, then its feeder gas from the third phase of Galkynysh could potentially go toward doubling the capacity of Line D.

This situation, the opposite of what we were seeing just a few years back, puts Turkmenistan in a position where it needs to secure access to the Chinese market at all costs. This might result in price dumping to incentivize the construction of Line D. Perhaps this is exactly what the Chinese are waiting for.

But soon it may be too late for Turkmenistan to entice the Chinese, because a different option is hovering on the horizon.

Arctic LNG-2 as a direct competitor to Line D

We believe China will take all the gas supplied by pipelines, and treat LNG as a balancing item between the country's consumption on the one hand, and its indigenous production and pipeline deliveries on the other. We currently estimate 80 bcm supplied to China from Central Asia by 2020, because we assume that Line D will be launched.

Room for LNG in China's gas balance, bcm

* 40 bcm of consumption more than under secular trend by 2025

** 115 bcm of consumption more than under secular trend by 2025

Source: Sberbank CIB Investment Research

However, Lines A-C would provide only 55 bcm of capacity. So if Line D were cancelled, it could open up space for an additional 25 bcm of demand for LNG against our projections.

This would very neatly open up room for Novatek, whose 25 bcm Arctic LNG-2 project is scheduled to launch in 2022-23: probably about the same time that Line D were to realistically launch.

Novatek can offer CNPC something it values at a premium: participation in the integrated project, which is more than what Turkmenistan has been offering. The Russian government, meanwhile, is considering lowering taxes on dividends that CNPC and its compatriot Silk Road Fund stand to receive from Yamal LNG and perhaps the future LNG project. This is a very timely gesture of hospitality – a virtue that Central Asia used to be known for.

What Happened to the Russian Arctic?

In this section, we return to the topic of offshore Arctic expansion, which we last discussed in April 2011. We had not heard much on the subject at all since until just recently, when the head of the Natural Resources Ministry announced that Rosneft had added 81 mln tonnes of crude oil reserves after exploring Khatanga Bay in the Laptev Sea in the East Arctic.

If these locales seem unfamiliar, it is because they are about as remote as you can get in Russia – which is saying a lot. Back in 2014, however, Russia's Arctic offshore was on the lips of many energy executives. ExxonMobil and Rosneft drilled an expensive well and found a field in the Kara Sea, which they named Pobeda ("Victory"). And then, silence. So what happened? Sanctions are far from the only problem for the offshore Arctic. We decided to find out what's really going on there. Our findings are especially relevant, because at least one Russian company is set to continue exploration and development there.

Defining the Arctic and offshore

Technically, "Arctic" means north of the Arctic Circle, which is near the 66th parallel. This is the area that would get one 24-hour day and one 24-hour night each year were it not for atmospheric refraction.

Main explored oil and gas areas in the offshore Arctic



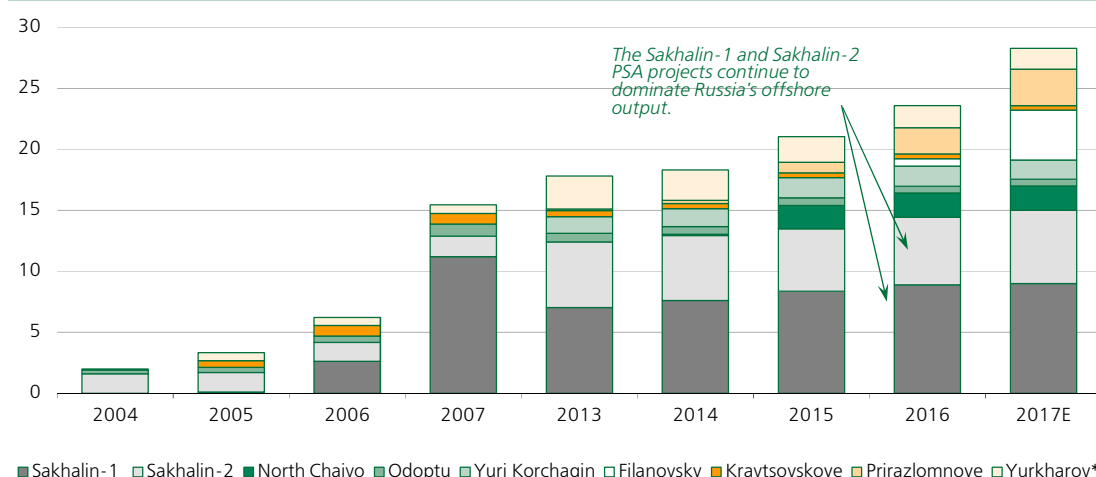
Source: US Geological Survey

The Arctic Circle cuts well into the northern part of Russia. The port of Murmansk, for instance, is considered to be within it. So was 81% of Russian gas production last year, along with 17% of oil and condensate output. Almost all of this production took place onshore, though. Of the 346 Arctic oil and gas fields in Russia with established reserves, only 19 are located offshore.

In this section, we are mainly focused on the Arctic offshore. Russia produces offshore oil and gas from 13 fields spread across six seas, but there are only two major offshore fields in the Arctic. These two fields contributed only a respective 0.5% and 5.3% of Russia's total oil and gas production last year. This year, offshore oil and condensate output will total around 28 mln tonnes and be dominated by the Sakhalin-1 and Sakhalin-2 PSA projects. Lukoil's Caspian fields have also become significant contributors. These fields are generally viewed as being "offshore" in terms of the difficulty of development and based on the general definition of the word. However, we feel the need to acknowledge Lukoil's justified annoyance with this, as the Caspian is not really a sea, but rather an inland lake – the world's largest. So the company's projects there are, in a sense, onshore. The US and the European Union did not even impose sanctions on them.

Arctic offshore oil production this year is projected at about 4.5 mln tonnes, or only 16% of the country offshore total. This figure is attributable entirely to two fields: Gazprom Neft's Prirazlomnoye and Novatek's Yurkharov.

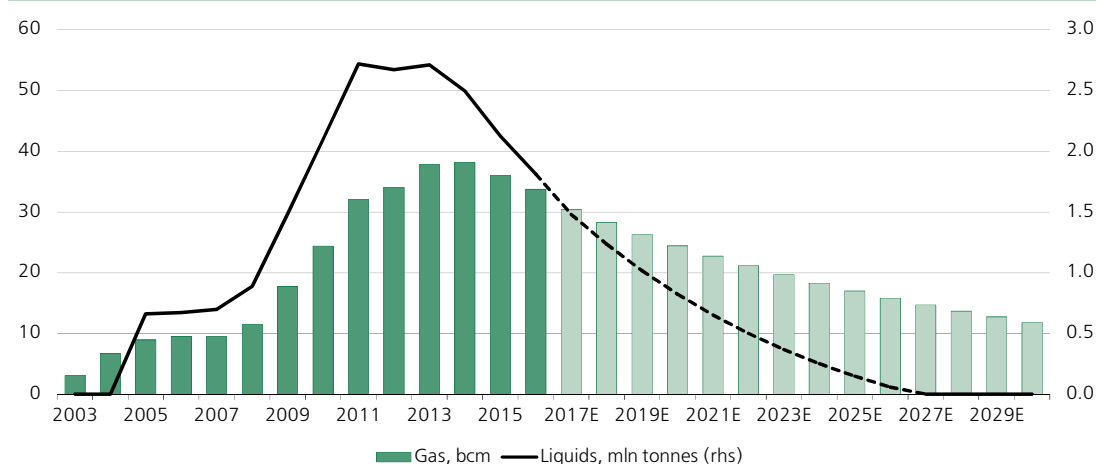
Russian offshore oil and condensate production, mln tonnes



* production from transitional field under the Taz Bay

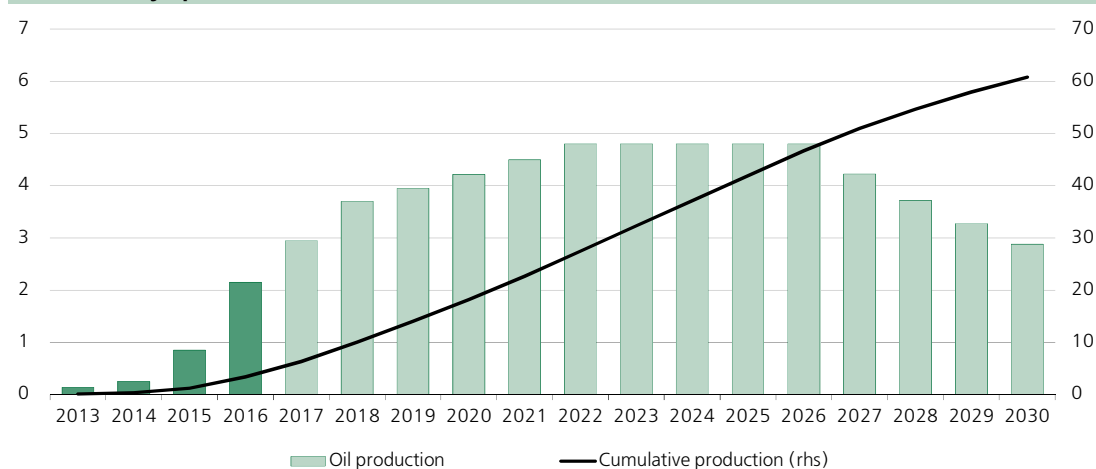
Source: CDU TEK, Interfax, Sberbank CIB Investment Research

Many will be surprised to see us treat Novatek's Yurkharov field as "offshore," and we admit that we are stretching the definition a bit. While Yurkharov is indeed submerged under the Taz Bay, its producing central and western domes are tapped via 3 km-long horizontal wells that start onshore. So it is technically "transitional." The field has been in production since 2003 and is the only gas and condensate project technically classified as "Arctic offshore." Yurkharov's gas output peaked at 38.2 bcm in 2014 and will decline to below 30 bcm this year. Novatek has implemented geotechnical measures to ensure a smooth decline in production in the years to come, most likely through developing the nearby onshore West Yurkharov field or tapping into the Jurassic layers.

Yurkharov gas and condensate production

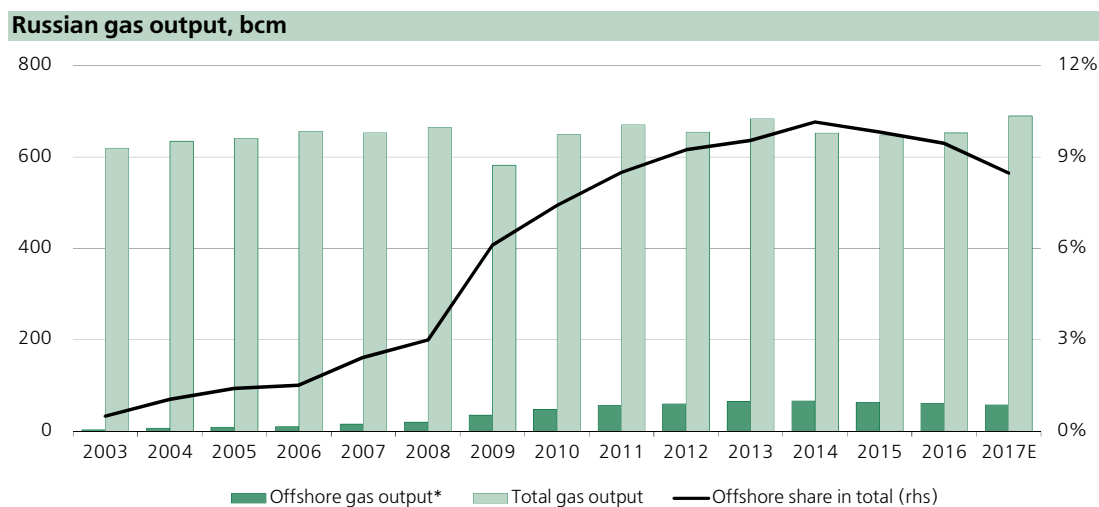
Source: Novatek, Interfax, Sberbank CIB Investment Research

Prirazlomnoye is the only fully offshore Arctic oil field in the development stage. It is located in the Pechora Sea and has been producing oil since late 2013. Production there looks set to peak at around 4.8 mln tonnes in 2022. This rather unique project has had its share of well-documented problems, but it has nonetheless provided a good testing ground for Russia to gain valuable experience operating in Arctic waters.

Prirazlomnoye production, mln tonnes

Source: Gazprom Neft, Argus FSUE, Sberbank CIB Investment Research

In contrast to offshore oil, Russia's offshore gas production, which ranges from 50 to 60 bcmpa or about 8-10% of Russia's total gas score, is quite significant. However, these figures are inflated, as the bulk of reported production is either output from Novatek's transitional Yurkharov gas and condensate field or production from the Sakhalin-1 PSA project, more than 70% of which is re-injected, since there are no marketing opportunities as of yet. Last year, these two projects contributed about 70% of Russia's total offshore gas output.



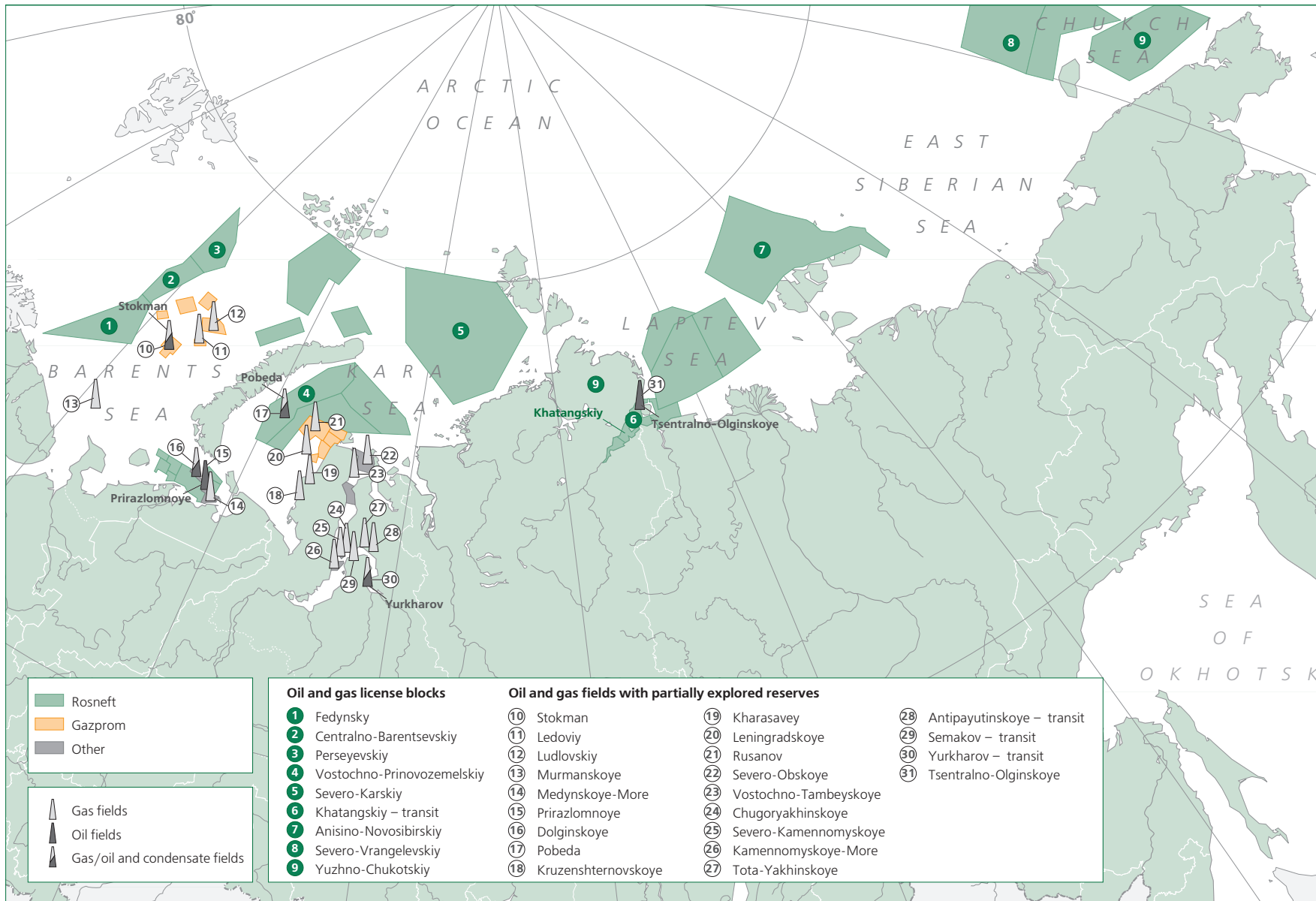
* including production at Yurkharov

Source: Interfax, Sberbank CIB Investment Research

So while there is a lot going on onshore the Russian Arctic, not much is happening in the harder to access offshore part of the region.

Russia's Arctic offshore was once frequently discussed. It was hated by financial analysts, loved by the government and eyed with interest by many oil company executives. What has since made it much less attractive is gas.

Russian Arctic offshore oil and gas discoveries and licenses

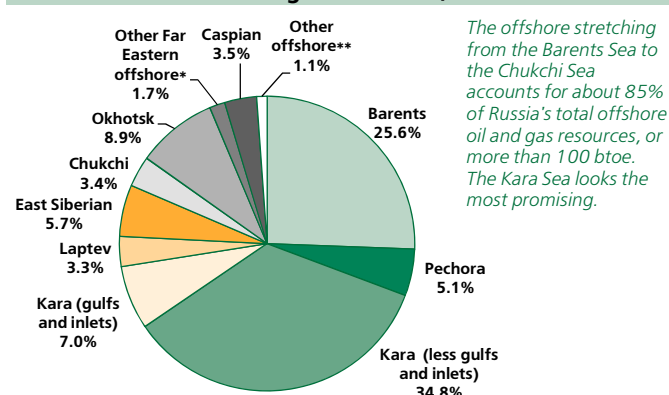


Source: Natural Resources Ministry, Sberbank CIB Investment Research

The main problem: Too much gas

There are no reliable estimates of initial recoverable oil and gas resources for Russia's 14 seas, which account for 22% of the world's offshore acreage. The estimates of oil and gas resources for the Russian offshore that are available add up to a total of around 100 btoe (or 730 bln boe). However, they were made in the 1990s and early 2000s and have not been substantially revised since.

Russian offshore oil and gas resources, % of total



Note: Including cumulative production.

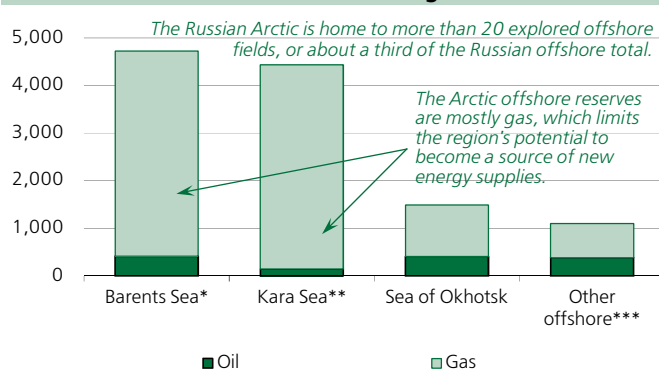
* Bering and Japan seas

** Black, Azov and Baltic seas

Source: Natural Resources Ministry, Sberbank CIB Investment Research

But of course we have a better idea about reserves, because these are a product of exploration. And what we know is that the offshore holds mostly gas. According to the Natural Resources Ministry's 2015 estimates, offshore liquids reserves (including "transitional" fields with both onshore and offshore sections) totaled 1.69 bln tonnes (or 12.3 bln bbl), while gas reserves amounted to 13.19 tcm (or about 83 bln boe).

Russia's offshore recoverable oil and gas reserves, mtoe



Note: ABC1+C2 reserves.

* including the Pechora Sea

** accounting for the not yet fully assessed Pobeda discovery

*** mainly the Russian section of the Caspian Sea

Source: Natural Resources Ministry

Russia's offshore oil and natural gas reserves

	Fields	Oil, mln tonnes				Gas, bcm			
		ABC1	%	C2		Fields	ABC1	%	C2
Barents Sea*	5	105	17%	311		7	4,192	56%	1,090
Kara Sea**	1	0	0%	144		9	2,053	27%	2,215
Total Arctic	6	105	17%	455		16	6,245	83%	3,305
Sea of Okhotsk	7	313	50%	96		9	949	13%	250
Other offshore***	12	209	33%	44		11	336	4%	461
Total offshore	25	627	100%	595		36	7,530	100%	3,517

Note: Not accounting for transitional fields where most of the explored reserves are located onshore.

* including the Pechora Sea

** accounting for the not yet fully assessed Pobeda discovery

*** mainly the Russian section of the Caspian Sea

Source: Natural Resources Ministry, Interfax, Sberbank CIB Investment Research

As for resources (not reserves) – that is, what is potentially available out there – the ministry's estimates were 20.79 bln tonnes (150 bln bbl) for liquids and 94.53 tcm (595 bln boe) for gas. These figures were not much higher than the estimates made 20 years ago.

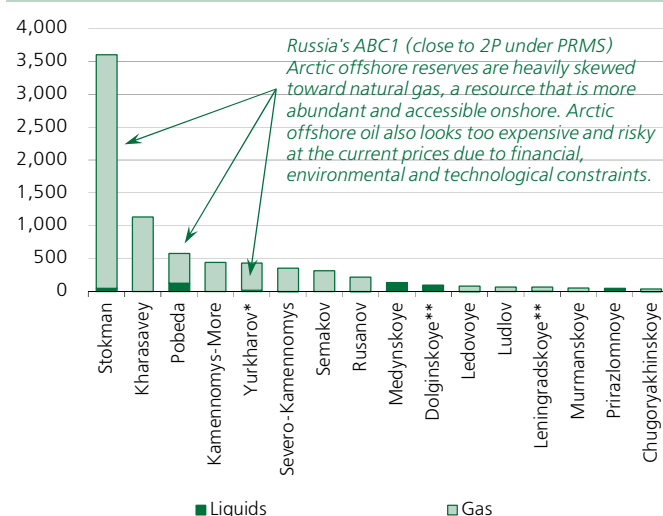
The picture does not change when we isolate Russia's biggest offshore area, the Arctic. The Arctic offshore comprises mainly shallow aquifers of the Arctic Ocean. In this research, we are focusing on the aquifers of the seven seas north of the Arctic Circle. Their subsoil harbors about 85 btoe (more

than 620 bln boe) of potential recoverable hydrocarbon reserves, or 85% of the country's total offshore endowment. There are a few things that need to be pointed out about these resources:

- About 85% of the Arctic offshore total is in the Western Arctic (the Barents, Pechora and Kara seas);
- The total exploration levels are very low – less than 6% for oil and 10% for gas;
- Russia's Arctic offshore harbors mainly gas (80-85% of the total); for comparison, the much smaller resource base off the shore of Alaska is about evenly split between oil and gas.

A quick glance at the chart below depicting the reserves of Russia's main Arctic offshore fields confirms that the reserves are mostly gas and demonstrates the Stokman field's clear dominance. However, gas is quite abundant in Russia and is more accessible onshore, which limits offshore gas's potential as a source of future energy supplies.

ABC1 reserves of main Russian offshore Arctic fields, mtoe



* the eastern and central part of the field located offshore in the Taz Bay

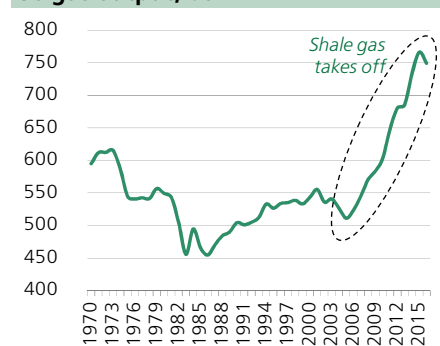
** the unreliability of early reserve estimates is highlighted by the still little explored Dolginskoye and Leningradskoye fields; the former may contain more gas than oil, while the latter is now believed to have more than 1 tcm of gas

Source: Natural Resources Ministry, Gazprom, Interfax, Sberbank CIB Investment Research

There was a time when the high gas content of offshore reserves was seen as a positive. This was back when it was thought that this gas was going to be the main source of Russia's future LNG exports. A consortium of Gazprom, Total and Statoil hoped to supply up to 67 bcmpa of LNG from Stokman to the US market. But by 2014, the project's operating consortium had closed its offices in Paris and Murmansk, fired about 700 employees and written down more than \$1.5 bln worth of investments.

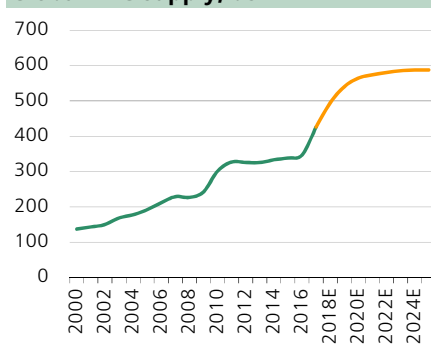
Gazprom today touts abandoning the project as one of its main strategic successes of the past decade. What happened, of course, was the shale gas revolution in the US, which turned the country from a net importer into an exporter of gas. Even as this was happening, global LNG supplies were increasing, causing prices to fall to little more than a third of the 2012-13 highs.

US gas output, bcm



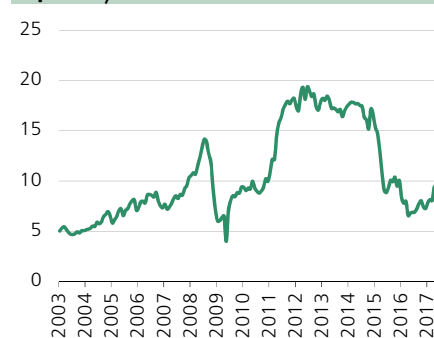
Source: BP

Global LNG supply, bcm



Source: GIIIGNL, IGU, BP, Sberbank CIB Investment Research

Price of Indonesian LNG delivered to Japan, \$/MMBtu



Source: Bloomberg

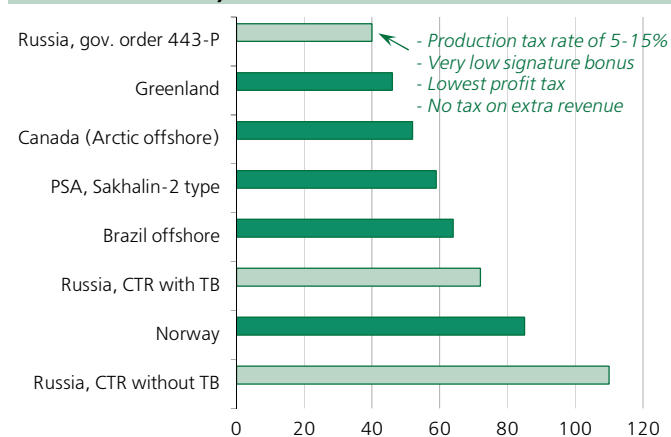
Even earlier, when the “Golden Age of Gas” (the now infamous title of IEA’s mistimed 2011 report) seemed to be looming, the development of offshore gas fields was seen as something of a luxury given the vast amount of untapped onshore resources. BP estimates Russia’s *proved* gas reserves, all onshore, at 32 tcm, or enough to maintain the current level of production for 50 years. Considering that the replacement rate has remained well above 100% and has only been increasing, Russia’s gas reserves are effectively unlimited. There is no reason to venture hundreds of miles from the coast to develop more difficult offshore deposits.

The state won’t give up

So the recent exploration that has actually taken place in the Arctic has focused mainly on crude oil. In 2011-13, Rosneft, the Russian state-controlled oil company, teamed up with Western partners ExxonMobil, Statoil and Eni to set up JVs dedicated to E&P in the Russian Arctic offshore. The Western partners took 33.3% stakes and agreed to provide the financing for a number of projects through the exploration phase. The most successful of these ventures was the one between Rosneft and ExxonMobil in the Kara Sea, which drilled the Pobeda well and in 2014 discovered one of the two largest liquids structures in the offshore Russian Arctic.

However, progress has ground to a near halt. Since Pobeda in 2014, no major fields have been discovered in Russia’s Arctic waters. In fact, spending on offshore Arctic exploration plummeted from \$1.8 bln in 2014 to \$170 mln the next year. The two main culprits, of course, were the plunge in oil prices and Western sanctions: Russia does not have the telemetric, drilling and marine equipment, much less the financial resources, needed to explore the region. The sanctions prohibited Western companies from participating in the E&D of offshore Arctic deposits more than 152 meters deep as well as shale oil deposits.

Does this mean that Arctic offshore exploration is essentially dead? Not if the Russian government has anything to say about it. It is incentivizing development in the region with some of the lowest taxes to be found in the country: a 5-15% MET and zero export duties. The tax incentives, which were outlined in the government’s order 443-P in 2013, also include allowing operators to expense funds set aside for the future decommissioning of offshore installations.

State's share of cash flows from international projects (at 10% discount rate)


Note: Dark green indicates foreign projects. Light green indicates Russian projects.

Source: Natural Resources Ministry, Skolkovo

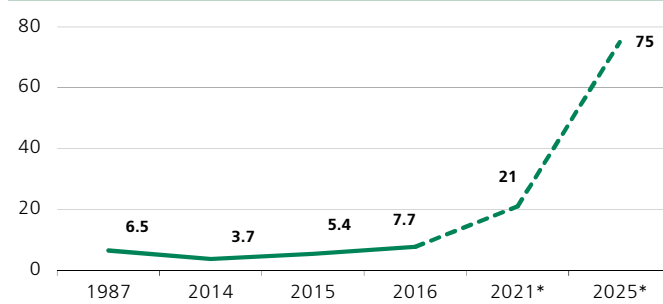
The government can point to several advantages of offshore Arctic development. Russia's Arctic offshore resources are far more abundant than those of Northern Canada, Greenland and Norway, making the chances of commercial discovery higher. Punishment for environmental mishaps is also likely more lax. This is important, given that the former US Minerals Management Service once estimated the chances of an oil spill exceeding 1,000 gallons while drilling in the Chukchi Sea offshore Alaska at about 40%, should one happen.

Another natural advantage for Russian development is that over the next few decades, a large portion of the Arctic Ocean is expected to become ice-free as a result of climate change. This would facilitate E&P and potentially open up year-round maritime transportation in the region, the latter of which is a goal of Russia's Northern Sea Route (NSR) project.

The NSR shortens travel time between Europe and the Asian-Pacific and could one day handle up to 25% of the sea trade between the regions. Getting from the port of Murmansk in Northwestern Russia to the Chinese port of Ningbo would take just 20-23 days instead of the 35-38 days required when crossing through the Suez Canal. A trip from Rotterdam to Shanghai via the NSR would also take two fewer weeks than a voyage through the Suez Canal. The time savings would only increase if the plans to develop a higher-latitude route (only 2,890 km long, compared with 3,500 km for the littoral route) come to fruition. Last year, Russia's Northern Sea Route Administration issued 718 navigation permits, including 144 for foreign ships.

The NSR would, however, provide the greatest benefit to Russia, which has recently seen a surge in shipping volumes for energy, metals, agricultural products and other goods. Meanwhile, Novatek is on the verge of exporting at least 17.5 mtpa of LNG from its Yamal LNG project, while Gazprom Neft will soon ship up to 8.0 mtpa of oil from its Novoport field on the coast of the Gulf of Ob in the Kara Sea and ramp up to 4.8 mtpa of oil output from its platform at Pirazlomnoye, also in the Kara Sea. Norilsk Nickel, the Timan-Pechora oil projects, Lukoil's Varandey Terminal in the Barents Sea and mining projects in the Arctic Basin could also potentially use the route. This all translates into an expected spike in NSR transportation volumes in 2021-25.

Northern Sea Route shipping volumes, past and future potential, mln tonnes



* estimates from GEKON

Source: Neft Rossii

The real winner from the NSR project, however, will be gas, not oil. Russia is likely to offer cheaper LNG over the next decade than any other competing supplier. The Russian LNG projects likely to go ahead are all based either on fields within the Arctic Circle or around Sakhalin Island and would call for transport by tanker through the harsh northern seas. After implementation of all Yamal LNG projects, we expect up to 80 mln tonnes (over 108 bcm) of additional LNG to come onto the market. The single biggest potential LNG project from Russia is based on the four Tambey group of fields, currently owned by Gazprom. The second biggest is Arctic LNG-2, which is scheduled to be launched by Novatek in 2022-23. Both of these projects stand to benefit from the NSR.

Russian LNG capacity, bcm

	Capacity at peak
Existing	15.8
Sakhalin-2 (Shell/Gazprom)	15.8
Under construction	22.4
Yamal LNG (Novatek/partners)	22.4
Likely to begin construction in 2018-19	28.4
Arctic LNG-2 (Novatek)	25.0
Yamal LNG 4th train (Novatek/partners)	1.4
Portovaya (Gazprom)	2.0
FID likely to be made	64.7
Tambey group (Gazprom, Novatek or RusGazDobycha)	57.2
Sakhalin-2 (3rd train) or Sakhalin-1 (Exxon/Rosneft)	7.5
Other proposed projects	27.0
Vladivostok LNG (Gazprom)	13.6
Baltic LNG (Gazprom)	10.0
Pechora LNG (Rosneft)	3.4
Total possible	158.3

Source: Companies, Sberbank CIB Investment Research

Among the headwinds we can list for the NSR are inadequate knowledge of the Arctic Ocean and a lack of infrastructure, modern port discharge technology and links to roads and railroads. Moreover, a significant minority of climate experts expect the recent environmental changes to be temporary: even climate alarmists have stopped talking about “global warming” and now refer to “climate change” instead. The reversal of warming trends would make traveling the NSR without the assistance of ice-breakers and ice-class vessels unfeasible. One way that Novatek, in particular, will try to solve this risk for its Arctic LNG-2 project is by building a reloading facility in Kamchatka that will allow expensive ice-class vessels to head back for more cargo, while the LNG will proceed to the end destination on board cheaper conventional vessels. When the ice-class vessels become unneeded (during the summer), the reloading facility will simply lie idle.

So the Russian Arctic offers more resources, better tax rates, arguably laxer regulation and the potential future upside from continued climate change. All of this, however, does not solve the key problem: the fact that while the Russian Arctic offshore may well be competitive with the similarly situated basins abroad, it is still far more challenging and less profitable than the Russian *onshore*.

So why is the Russian government so eager to provide all these incentives for what is clearly an uneconomical undertaking compared with conventional reserves?

The reason seems to be that it hopes to recapture the “Sputnik moment” and demonstrate that Russia is capable of such a feat. We believe the government’s push is only tangentially related to other factors commonly cited: geopolitics, “calling dibs” on acreage and creating a manufacturing base to generate technology and jobs. The government, however, is not willing to be alone to pay for its boreal Sputnik. So it has lined up someone else to do its bidding.

Rosneft’s burden

Several companies have licenses for offshore exploration, but since 2008, only the state-owned groups have been able to access the offshore Arctic.

Gazprom Neft owns the only producing oil asset in the region, the Pirazlomnoye field. The project was initially expected to produce up to 7 mln tonnes per year, but this estimate has since been scaled back to less than 5 mln tonnes. Moreover, it is not clear how long this plateau will last given that the 2015 year-end proven reserve score for the field was only 26 mln tonnes.

Gazprom Neft once intended to extend Pirazlomnoye’s life by connecting its platform to the nearby Dolginskoye field. However, it eventually turned out that Dolginskoye appears to harbor mostly gas, as is the case with most of the Arctic, so Gazprom Neft wisely put off development there. The company’s management hasn’t spoken of pursuing other major projects in the Arctic offshore. On a recent investor trip to the Arctic, Gazprom Neft assured us that it would proceed very cautiously and that the strategic focus was on economic viability.

Gazprom is similarly cautious. It once had the grandest plans for the Arctic, mostly in gas of course, and had explored 8 tcm of recoverable reserves (C1 under the Russian classification) about evenly split between the Barents and Kara seas. As recently as 2014, Gazprom still hoped to more than double its Arctic offshore reserves and launch no fewer than 12 new fields by 2024. But the change in the economics of gas, which we discussed above, has pretty much scuppered these plans.

Gazprom Arctic offshore gas reserves, bcm

	C1	C2	Expected C1*
Barents Sea	4,111	461	5,681
Stokman	3,939	0	3,939
Ludlovskoye	80	131	185
Ledovoye	92	330	257
5 other fields	0	0	1,300
Kara Sea	4,162	2,656	13,636
Gulf of Ob			
Severo-Kamennomysskoye	403	27	425
Kamennomysskoye-More	535	0	535
Other**	0	0	1,444
Taz Estuary			
Semakov	319	0	338
Tota-Yakhinskoye	113	11	124
Antipayutinskoye	215	20	275
Chugoryakhinskoye	43	4	47
Ob and Taz total	1,627	63	3,188
Yamal offshore			
Kharasavey	1,259	365	1,814
Krusenstern	965	710	2,262
Leningradskoye	71	981	2,242
Rusanov	240	539	2,430
2 other fields	0	0	1,700
Yamal total	2,535	2,594	10,448
Gazprom's offshore Arctic total	8,273	3,118	19,317

* estimates by Gazprom accounting for C2 reserves and C3+D1 resources

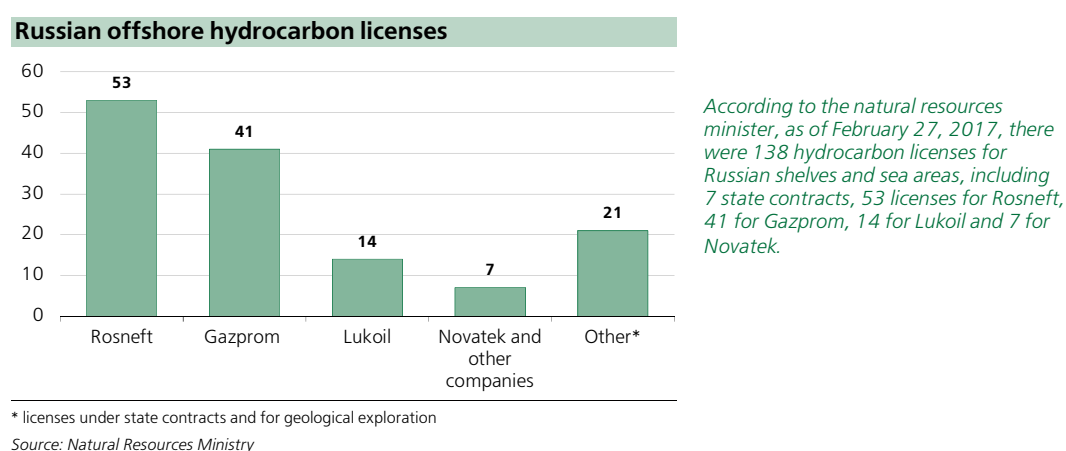
** five established fields plus new explored structures

Source: Gazprom, Sberbank CIB Investment Research

Gazprom may consider itself lucky, because its other projects (most notably a pipeline to China and its two pipeline routes around Ukraine, Turkish Stream and Nord Stream 2) have prevented the government from pressuring it into further Arctic exploration. It has been able to consistently scale back its offshore ambitions.

Rosneft is a different matter. It clearly stands out in its zeal for the Arctic offshore. Andrei Shishkin, the company's vice president, stated at a recent international conference that Arctic development was a task exceeding space exploration in importance. The company's vision seems to be in sync with the government's grand "Sputnik moment" ambitions.

To be fair, Rosneft's interest in the offshore Arctic has diminished following the drop in oil prices and the introduction of Western sanctions. This year, it reduced its planned investment in the region over 2017-21 from the previous \$4 bln to \$2.5 bln. We fear, however, that its interest has not waned enough.



Rosneft holds 53 offshore licenses, about 40% of the Russian total. Its license areas harbor an estimated 43 btoe of hydrocarbon resources. We have already discussed the most promising project, the 2,115 meter-long Pobeda well drilled in 2014 into the Universitetskaya structure in the Kara Sea. That uncompleted well is estimated to have cost the Rosneft/ExxonMobil JV up to \$500-600 mln. According to the above-mentioned Andrei Shishkin, one completed exploration well in Arctic waters costs some \$1 bln and requires 13 support vessels. But the reserves it has discovered need more drilling to become proven, and this has been indefinitely postponed by sanctions.

Rosneft's other key project is in the Khatanga Gulf, which opens up into the Laptev Sea. The drilling there, like at Yurkharov, is done from the shore, with a horizontal well long 5,500 meters targeting deposits in the gulf. A similar fully onshore well drilled by Lukoil at a nearby license is reported to cost about \$200 mln. In June, Rosneft trumpeted a possible oil discovery at a depth of 2,300 meters. Then in October, the company announced it had added 81 mln tonnes of C1+C2 recoverable reserves from the Khatanga project. It claims that the oil is light and has little sulfur. Our fear is that this may whet its geologists' appetite for more exploration. However, the problem in Khatanga is not finding crude oil, but rather producing it at a profit. There are no ports in the area, and navigation is generally restricted to just two months out of the year.

Rosneft is not only exploring in the Arctic. It seeks to control development along the supply chain, which suggests that its goal is eventual Arctic development autarky for Russia. The company is engaged in several costly projects that could result in Russia gaining the ability to construct offshore platforms, equipment and service ships. For instance, Rosneft has allocated R120 bln (\$2 bln) to an offshore construction complex in Murmansk that will produce concrete bases for drilling platforms and service offshore fleets.

However, the company's most ambitious offshore service project is in Russia's Far East. According to Rosneft CEO Igor Sechin, Rosneft's future investments into Zvezda Shipyard will be R145 bln (\$2 bln), adding to the more than R22 bln (\$350 mln) already ploughed into the construction. Slated production at Zvezda includes tankers with DWT of up to 350,000 tonnes, 250,000 cm LNG-carriers, ice-class vessels and parts for offshore production platforms for Arctic oil and gas fields.

The project was originally spurred by the government's bright plans for the offshore, including the mammoth Stokman gas and condensate project in the Barents Sea. However, after DSME, a key Korean partner, exited the Stokman project in 2012, the project was revised and rescheduled. Zvezda was transformed into a massive ball of geopolitical ambition to liberate Russia from its dependence on offshore equipment, platforms and vessels. In 2015, a Rosneft-Gazprombank JV obtained a 75% stake in the consortium constructing the shipyard. Rosneft also contracted the construction of 41 vessels and 12 offshore platforms at Zvezda. The shipyard will need many more orders to warrant investment, which other Russian companies like Gazprom, Sovcomflot and Novatek are reluctant to place even if pressured to do so by the government.

Valuations

Comparative multiples-based valuations

	P/E			EV/EBITDA		
	2017E	2018E	2019E	2017E	2018E	2019E
Russia and FSU						
Gazprom	5.6	3.7	4.3	3.2	2.7	2.9
Lukoil	6.5	6.0	6.2	3.4	3.1	3.1
Novatek	18.3	15.6	13.2	11.0	11.2	11.1
Gazprom Neft	4.7	4.1	4.1	3.9	3.8	4.0
Surgutneftegaz	4.3	5.6	5.8	neg	neg	neg
Tatneft	7.8	7.5	7.6	4.9	4.5	4.5
Rosneft	13.6	9.8	6.1	7.0	6.1	5.5
Transneft	6.9	6.8	6.2	4.1	4.0	3.7
KazMunaiGas EP	4.6	6.2	6.4	neg	neg	neg
Bashneft	5.5	3.6	3.2	3.4	2.7	2.5
Emerging markets						
Sinopec	11.5	11.0	9.7	3.7	3.4	3.1
CNOOC	13.6	11.9	9.6	4.6	4.3	3.8
PetroChina	58.1	40.7	27.1	6.1	5.9	5.2
Petrobras	13.1	10.0	6.6	5.5	4.8	4.1
ONGC	9.5	8.4	8.1	4.6	4.2	4.0
Developed markets						
Royal Dutch Shell	17.6	15.8	14.0	6.4	5.7	5.2
BP	22.7	17.3	14.6	6.1	5.5	4.9
ChevronTexaco	30.2	24.8	21.3	8.5	7.4	6.6
ConocoPhillips	200.5	41.3	33.4	10.2	7.4	6.9
ENI	23.6	19.6	17.0	4.6	4.1	3.7
Exxon Mobil	24.2	21.5	19.6	9.7	8.8	8.5
Statoil	17.1	18.5	16.3	3.8	3.7	3.4
Total	13.4	12.7	11.8	6.3	5.5	5.1

Note: Based on prices as of October 17, 2017. Bloomberg consensus estimates are used for foreign companies and Sberbank Investment Research estimates for Russian and FSU companies.

Source: Bloomberg, Sberbank CIB Investment Research

Expected dividend yields for companies we cover

	2016	2017E	2018E	2019E
Gazprom	6%	6%	6%	6%
Lukoil	6%	7%	7%	7%
Rosneft	2%	4%	5%	8%
Novatek	2%	3%	3%	3%
Gazprom Neft	4%	5%	6%	6%
Surgutneftegaz commons	2%	2%	2%	2%
Surgutneftegaz prefs*	2%	9%	7%	7%
Tatneft commons	5%	6%	6%	6%
Tatneft prefs	7%	8%	8%	8%
Bashneft commons**	0%	5%	5%	5%
Bashneft prefs**	0%	7%	7%	7%
KazMunaiGas EP	2%	3%	2%	2%
Transneft prefs***	4%	4%	4%	4%

*Surgutneftegaz 2017 preferred dividend is based on the assumption of USD/RUB closing the year at 63

**for Bashneft, we assume a flat R20 bln dividend from 2017 onward (R113 per share); clarification on the 2016 dividend and the general policy may come in November

***Transneft dividend assumes a 25% IFRS payout; the payout may rise to 50% as soon as next year

Note: For other assumptions used in calculating yields, please inquire with the Sberbank CIB Investment Research team.

Source: Sberbank CIB Investment Research

Financial Profiles

Bashneft

Income statement (IFRS), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Revenues	17,658	16,765	10,061	8,931	10,864	11,753	11,999
Operating costs	15,111	14,670	8,504	7,627	9,083	9,293	9,320
EBIT	2,547	2,095	1,557	1,305	1,781	2,460	2,679
Depreciation	628	618	546	644	729	709	751
EBITDA	3,175	2,714	2,103	1,949	2,510	3,169	3,430
Net interest expenses	(137)	(215)	(198)	(164)	(305)	(298)	(262)
FX gain	34	6	(58)	(87)	(13)	–	–
Net other expenses	(465)	(273)	(24)	(84)	(83)	(60)	(60)
EBT	1,980	1,613	1,277	970	1,380	2,102	2,357
Tax	(513)	(380)	(280)	(191)	(301)	(458)	(514)
Income before minority interest	1,467	1,233	997	779	1,079	1,644	1,843
Minority interest	(7)	1	(24)	10	12	19	21
Net income	1,460	1,235	973	789	1,091	1,663	1,864

Source: Company, Sberbank CIB Investment Research

Balance sheet (IFRS), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Fixed assets and investments	10,500	6,902	5,756	7,581	8,259	8,568	8,681
Current assets	3,113	2,406	1,380	2,050	2,535	3,529	4,913
Stock and inventories	652	469	303	482	513	520	533
Accounts receivable	1,800	967	551	1,001	1,218	1,318	1,345
Cash and securities	498	939	452	124	360	1,248	2,592
Other current assets	163	32	75	443	443	443	443
Total assets	13,613	9,308	7,136	9,631	10,794	12,096	13,594
Current liabilities	2,611	1,977	1,299	1,804	2,052	2,083	2,119
Accounts payable	1,847	992	759	1,380	1,626	1,657	1,692
Short-term debt	362	508	329	399	401	401	401
Other current liabilities	402	477	211	26	26	26	26
Long-term liabilities	3,818	3,712	2,480	3,465	3,434	3,369	3,296
Long-term debt	2,399	2,783	1,775	2,405	2,417	2,417	2,417
Other long-term liabilities	1,419	928	704	1,060	1,017	952	879
Total liabilities	6,429	5,689	3,779	5,269	5,486	5,452	5,415
Minority interest	5	139	127	47	35	16	(6)
Equity	7,180	3,481	3,231	4,314	5,406	6,761	8,317
Share capital	2,286	1,483	1,145	1,375	1,375	1,375	1,375
Retained earnings	4,894	1,997	2,087	2,939	4,030	5,385	6,942
Total liabilities and equity	13,613	9,308	7,136	9,631	10,926	12,229	13,726

Source: Company, Sberbank CIB Investment Research

Cash flow statement, \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
EBT	1,980	1,613	1,277	970	1,380	2,102	2,357
Provisions and non-cash items	1,288	1,183	884	1,012	1,077	1,023	1,065
Taxes	(495)	(387)	(346)	(241)	(343)	(523)	(587)
Interest paid	(238)	(313)	(275)	(100)	(312)	(314)	(314)
Decrease in working capital	136	(70)	153	(694)	(2)	(75)	(6)
Increase in other assets	(71)	754	(130)	511	–	–	–
Operating cash flow	2,599	2,780	1,563	1,459	1,799	2,213	2,516
Capital expenditures	(1,271)	(1,230)	(1,026)	(1,261)	(1,461)	(1,017)	(865)
Other investments	459	(1,060)	60	216	–	–	–
Free cash flow	1,788	491	597	414	338	1,196	1,651
Increase in debt	(622)	1,696	(504)	(301)	–	–	–
Dividends	(1,334)	(981)	(302)	(437)	(0)	(308)	(308)
Additional share issues/(purchases)	66	(511)	–	(48)	–	–	–
Net cash flow	(103)	694	(210)	(371)	338	888	1,343
FX and monetary effects on cash	(10)	249	3	(58)	–	–	–
Change in cash position	(113)	943	(208)	(429)	338	888	1,343

Source: Company, Sberbank CIB Investment Research

Gazprom

Income statement (IFRS), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Revenues	165,311	145,880	98,994	91,320	109,322	109,943	109,209
Operating costs	115,220	111,233	78,948	80,681	95,193	93,208	95,041
EBIT	50,090	34,647	20,046	10,638	14,129	16,734	14,167
Depreciation	13,175	12,385	8,465	8,573	10,010	11,830	12,743
EBITDA	63,265	47,033	28,511	19,211	24,139	28,564	26,910
Net interest expenses	(293)	515	757	326	451	144	178
FX gain	(4,596)	(24,492)	(6,923)	6,707	(3,762)	–	–
Net other expenses	1,646	1,464	1,899	1,276	1,586	1,875	1,767
EBT	46,847	12,134	15,779	18,948	12,403	18,754	16,112
Tax	(10,086)	(4,528)	(2,135)	(4,254)	(2,927)	(4,425)	(3,802)
Income before minority interest	36,762	7,606	13,644	14,694	9,477	14,329	12,310
Minority interest	(817)	(88)	(311)	(686)	(840)	(1,271)	(1,092)
Net income	35,944	7,518	13,333	14,008	8,636	13,058	11,219

Source: Company, Sberbank CIB Investment Research

Balance sheet (IFRS), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Fixed assets and investments	316,844	206,406	177,694	223,870	239,136	254,134	269,083
Current assets	87,026	61,522	54,797	53,322	59,021	60,743	62,082
Stock and inventories	17,320	11,943	11,036	11,725	14,757	14,295	14,442
Accounts receivable	31,374	18,592	15,288	17,887	16,883	16,979	16,865
Cash and securities	20,950	18,454	18,648	14,784	18,455	20,543	21,848
Other current assets	17,383	12,533	9,825	8,926	8,926	8,926	8,926
Total assets	403,870	267,929	232,491	277,192	298,157	314,877	331,166
Current liabilities	42,301	32,990	29,152	31,683	40,583	39,812	40,873
Accounts payable	32,210	24,728	20,284	24,313	31,747	30,196	30,477
Short-term debt	10,091	8,262	8,869	7,371	8,068	8,766	9,464
Long-term liabilities	73,277	56,907	55,057	58,613	64,043	70,051	75,818
Long-term debt	44,689	39,533	38,361	39,279	43,581	47,883	52,186
Deferred profit tax liability	16,990	10,560	8,485	11,351	12,479	14,184	15,649
Other long-term liabilities	11,599	6,814	8,211	7,983	7,983	7,983	7,983
Total liabilities	115,578	89,897	84,210	90,296	104,626	109,863	116,691
Minority interest	9,569	5,394	4,460	5,726	6,566	7,837	8,928
Equity	283,318	174,491	145,296	182,906	188,614	198,745	207,035
Share capital	9,886	5,780	4,462	5,361	5,361	5,361	5,361
Retained earnings	273,432	168,710	140,834	177,545	183,253	193,383	201,674
Total liabilities and equity	408,466	269,781	233,966	278,928	299,807	316,444	332,654

Source: Company, Sberbank CIB Investment Research

Cash flow statement, \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
EBITDA	63,265	47,033	28,511	19,211	24,139	28,564	26,910
Provisions and non-cash items	2,915	8,674	3,596	2,505	932	0	(0)
Taxes	(6,262)	(5,512)	(1,710)	(1,431)	(1,799)	(2,720)	(2,337)
Decrease in working capital	(3,310)	(4,613)	(2,310)	361	5,407	(1,185)	248
Increase in other assets	(1,461)	4,308	4,871	2,366	(2,742)	82	82
Operating cash flow	55,148	49,890	32,958	23,012	25,937	24,741	24,903
Capex	(43,977)	(33,164)	(26,740)	(20,326)	(25,557)	(25,951)	(26,929)
Other investments	(2,374)	(4,401)	(418)	(1,079)	1,817	1,541	1,605
Free cash flow	11,171	16,726	6,218	2,686	380	(1,210)	(2,026)
Increase in debt	4,022	(1,022)	1,107	(1,551)	5,000	5,000	5,000
Interest paid	(883)	(818)	(663)	(737)	(284)	(315)	(345)
Dividends	(4,185)	(4,922)	(2,732)	(2,886)	(3,241)	(2,928)	(2,928)
Additional share issues/(purchases)	6	(0)	–	(2,036)	–	–	–
Net cash flow	7,757	5,562	3,512	(5,602)	3,671	2,088	1,305
FX and monetary effects on cash	674	3,012	1,328	(1,840)	–	–	–
Other sources/(uses) of funds	165	(360)	1	(29)	–	–	–
Change in cash position	8,596	8,213	4,841	(7,471)	3,671	2,088	1,305

Source: Company, Sberbank CIB Investment Research

Gazprom Neft

Income statement (US GAAP), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Revenues	47,195	44,414	27,269	25,566	33,245	33,516	33,926
Operating costs	40,235	38,601	23,592	21,972	28,008	27,935	28,969
EBIT	6,960	5,814	3,676	3,593	5,237	5,582	4,956
Depreciation	2,410	2,257	1,615	1,962	2,287	2,265	2,420
EBITDA	9,370	8,070	5,291	5,556	7,524	7,847	7,376
Net interest expenses	(165)	(208)	(309)	(345)	(325)	(273)	(175)
FX gain	(70)	(1,191)	(1,031)	433	94	–	–
Net other expenses	350	(96)	264	245	400	862	1,395
EBT	7,074	4,319	2,600	3,927	5,405	6,171	6,176
Tax	(1,230)	(626)	(509)	(758)	(1,059)	(1,210)	(1,211)
Income before minority interest	5,845	3,693	2,092	3,169	4,346	4,961	4,965
Minority interest	(273)	(122)	(108)	(149)	(257)	(293)	(294)
Net income	5,571	3,571	1,984	3,020	4,089	4,668	4,672

Source: Company, Sberbank CIB Investment Research

Balance sheet (US GAAP), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Fixed assets and investments	34,369	28,917	27,095	35,486	39,198	42,388	44,343
Current assets	13,165	8,371	7,008	6,534	7,978	8,696	10,678
Stock and inventories	2,743	1,825	1,405	1,660	1,975	1,974	2,008
Accounts receivable	2,655	1,831	1,307	1,905	2,477	2,498	2,528
Cash and securities	2,769	945	1,567	554	1,111	1,809	3,727
Other current assets	4,999	3,770	2,729	2,414	2,414	2,414	2,414
Total assets	47,535	37,287	34,102	42,020	47,176	51,083	55,021
Current liabilities	6,321	4,457	4,789	4,772	6,398	6,367	6,506
Accounts payable	3,608	2,313	2,126	2,723	3,360	3,328	3,467
Short-term debt	1,593	1,086	2,021	1,322	2,312	2,312	2,312
Other current liabilities	1,119	1,057	642	727	727	727	727
Long-term liabilities	10,874	12,748	12,183	13,439	13,485	13,485	13,485
Long-term debt	7,948	8,929	9,204	9,829	9,746	9,746	9,746
Other long-term liabilities	2,926	3,820	2,979	3,610	3,740	3,740	3,740
Total liabilities	17,195	17,205	16,972	18,211	19,884	19,852	19,991
Minority interest	1,380	1,138	1,254	1,385	1,642	1,936	2,230
Equity	28,960	18,944	15,876	22,424	25,650	29,296	32,800
Share capital	589	892	610	843	843	843	843
Retained earnings	28,370	18,052	15,266	21,580	24,807	28,452	31,957
Total liabilities and equity	47,535	37,287	34,102	42,020	47,176	51,083	55,021

Source: Company, Sberbank CIB Investment Research

Cash flow statement, \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
EBITDA	9,370	8,070	5,291	5,556	7,524	7,847	7,376
Provisions and non-cash items	(1,071)	1,090	226	(1,266)	170	(294)	(781)
Taxes	(1,210)	(843)	(719)	(693)	(1,026)	(1,094)	(971)
Decrease in working capital	178	338	317	(54)	(251)	(51)	74
Increase in other assets	56	(407)	(10)	254	(27)	(0)	(0)
Operating cash flow	7,323	8,248	5,106	3,795	6,390	6,408	5,698
Capex	(6,523)	(6,977)	(5,693)	(5,807)	(5,972)	(5,455)	(4,375)
Other investments	(1,452)	(2,485)	379	852	122	587	1,074
Free cash flow	799	(1,214)	(207)	(1,160)	541	1,540	2,398
Increase in debt	1,705	1,871	1,881	(847)	1,000	–	–
Interest paid	(447)	(438)	(593)	(611)	(500)	(526)	(526)
Dividends	(1,936)	(1,148)	(563)	(40)	(862)	(1,022)	(1,167)
Net cash flow	(66)	(1,180)	471	(2,687)	178	(7)	705
FX and monetary effects on cash	123	703	100	(143)	–	–	–
Change in cash position	57	(477)	571	(2,830)	178	(7)	705

Source: Company, Sberbank CIB Investment Research

KazMunaiGas EP

Income statement (IFRS), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Revenues	5,835	5,174	2,443	2,188	3,056	3,059	3,152
Operating costs	4,115	3,918	2,681	1,708	2,190	2,282	2,393
EBIT	1,720	1,256	(237)	480	867	778	759
Depreciation	310	332	94	90	108	141	161
EBITDA	2,029	1,588	(143)	570	975	919	920
Net interest expenses	(53)	(50)	(72)	(17)	(13)	(2)	(2)
FX gain (loss)	74	639	1,832	(40)	158	–	–
Net other expenses	(428)	(1,452)	(17)	75	83	–	–
EBT	1,312	393	1,505	497	1,095	776	758
Tax	(384)	(93)	(522)	(108)	(199)	(143)	(142)
Income before minority interest	928	300	983	389	895	633	616
Minority interest	32	311	1,050	(35)	(45)	–	–
Net income	960	611	2,033	354	851	633	616

Source: Company, Sberbank CIB Investment Research

Balance sheet (IFRS), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Fixed assets and investments	4,314	3,172	2,095	2,212	2,359	2,462	2,557
Current assets	6,021	4,965	3,808	4,113	4,204	4,595	4,956
Stock and inventories	178	145	68	74	74	82	88
Accounts receivable	1,807	731	507	544	574	598	606
Cash and securities	771	988	697	486	645	1,006	1,352
Other current assets (cash deposits)	3,265	3,101	2,537	3,009	2,910	2,910	2,910
Total assets	10,335	8,137	5,904	6,325	6,563	7,057	7,513
Current liabilities	1,181	576	433	383	391	410	427
Accounts payable	444	326	145	203	203	224	240
Short-term debt	16	16	16	16	16	16	16
Deferred taxes and provisions	130	45	206	138	133	133	133
Other current liabilities	591	188	65	26	39	37	38
Long-term liabilities	255	218	151	148	143	143	143
Long-term debt	28	23	18	12	11	11	11
Other long-term liabilities	227	195	134	136	132	132	132
Total liabilities	1,436	794	584	530	534	553	570
Equity	8,899	7,344	5,320	5,794	6,029	6,504	6,943
Share capital	1,056	894	479	495	479	479	479
Retained earnings	7,843	6,450	4,841	5,299	5,549	6,025	6,464
Total liabilities and equity	10,335	8,137	5,904	6,325	6,563	7,057	7,513

Source: Company, Sberbank CIB Investment Research

Cash flow statement, \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Profit before tax	1,317	343	1,666	493	1,095	776	758
Adjustments for non-cash items	740	1,303	(1,622)	(12)	(132)	38	53
Income tax paid	(510)	(486)	(446)	(124)	(199)	(143)	(142)
Share in associates	(334)	(336)	90	37	(140)	(133)	(124)
(Increase)/decrease in working capital	(566)	270	(3)	72	(31)	(12)	3
Operating cashflow	647	1,095	(316)	466	592	526	547
Capital expenditures	(923)	(737)	(396)	(296)	(404)	(290)	(290)
Other investments, net	772	622	787	(396)	236	238	234
Investing cashflow	(150)	(115)	391	(692)	(169)	(52)	(56)
Increase/(decrease) in debt	(7)	(6)	(6)	(6)	(2)	(2)	(2)
Dividends	(723)	(719)	(130)	(0)	(63)	(128)	(95)
Additional share issues (purchase)	–	–	–	–	–	–	–
Financing cashflow	(730)	(725)	(136)	(7)	(64)	(129)	(97)
FX and monetary effects on cash	(1)	87	316	13	(175)	16	(49)
Change in cash position	(234)	341	256	(220)	184	361	346

Source: Company, Sberbank CIB Investment Research

Lukoil

Income statement (IFRS), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Revenues	141,452	144,167	94,816	78,652	95,807	99,728	100,414
Operating costs	131,205	137,041	87,333	72,379	88,743	91,558	92,491
EBIT	10,247	7,126	7,483	6,273	7,063	8,170	7,923
Depreciation	5,756	8,816	5,943	4,661	5,677	5,697	5,993
Impairment	2,561	1,753	–	–	–	–	–
EBITDA	18,564	17,695	13,426	10,933	12,740	13,867	13,916
Net interest expenses	(249)	(362)	(491)	(488)	(456)	(542)	(493)
FX gain	(443)	(355)	1,637	(1,642)	(442)	–	–
Net other expenses	903	363	(2,386)	(36)	934	140	140
EBT	10,458	6,772	6,243	4,107	7,100	7,768	7,570
Tax	(2,831)	(2,058)	(1,550)	(981)	(1,348)	(1,554)	(1,514)
Income before minority interest	7,627	4,714	4,693	3,126	5,752	6,215	6,056
Minority interest	205	32	(27)	(13)	(11)	(12)	(12)
Net income	7,832	4,746	4,667	3,113	5,740	6,202	6,044

Source: Company, Sberbank CIB Investment Research

Balance sheet (IFRS), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Fixed assets and investments	86,044	89,041	52,234	61,972	65,742	67,833	69,416
Current assets	23,395	22,759	16,652	20,701	20,489	21,850	24,242
Stock and inventories	8,801	6,154	4,668	6,665	7,380	6,946	7,159
Accounts receivable	11,744	11,387	6,044	5,950	5,250	5,465	5,502
Cash and securities	1,712	3,004	3,530	4,309	3,590	5,555	7,697
Other current assets	1,138	2,214	2,411	3,777	4,269	3,884	3,884
Total assets	109,439	111,800	68,886	82,673	86,231	89,684	93,658
Current liabilities	13,097	14,212	9,538	13,695	13,919	13,472	13,797
Accounts payable	9,836	8,538	6,576	10,637	11,158	10,711	11,037
Short-term debt	1,338	2,168	830	963	666	666	666
Deferred taxes and provisions	1,923	3,506	2,132	2,095	2,095	2,095	2,095
Long-term liabilities	17,487	16,236	15,011	15,766	15,811	15,811	15,811
Long-term debt	9,483	11,361	10,966	10,554	10,554	10,554	10,554
Other long-term liabilities	8,004	4,875	4,046	5,212	5,257	5,257	5,257
Total liabilities	30,584	30,448	24,549	29,461	29,729	29,283	29,608
Minority interest	277	222	122	112	112	112	112
Equity	78,578	81,130	44,214	53,100	56,389	60,289	63,938
Share capital	4,589	4,539	1,791	2,154	2,154	2,154	2,154
Retained earnings	73,989	76,591	42,423	50,946	54,235	58,135	61,784
Total liabilities and equity	109,439	111,800	68,886	82,673	86,231	89,684	93,658

Source: Company, Sberbank CIB Investment Research

Cash flow statement, \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
EBITDA	18,564	17,695	13,426	10,933	12,740	13,867	13,916
Provisions and non-cash items	1,805	(1,761)	1,519	1,386	1,162	278	336
Taxes	(2,452)	(2,300)	(1,509)	(1,069)	(1,303)	(1,554)	(1,514)
Interest paid	(405)	(565)	(675)	(742)	(694)	(694)	(694)
Decrease in working capital	(968)	(370)	2,013	1,865	507	(228)	75
Increase in other assets	(95)	2,869	(1,037)	(1,044)	(1,384)	582	140
Operating cash flow	16,449	15,568	13,736	11,330	11,028	12,252	12,260
Capex	(14,957)	(14,545)	(9,909)	(7,456)	(9,296)	(7,984)	(7,723)
Other investments	(3,682)	(98)	1,230	(22)	–	–	–
Free cash flow	(2,190)	925	5,057	3,853	1,732	4,268	4,536
Increase in debt	4,125	2,524	(1,507)	(446)	–	–	–
Dividends	(2,383)	(1,357)	(1,778)	(1,876)	(2,451)	(2,303)	(2,395)
Additional share issues/(purchases)	(713)	(107)	(710)	(825)	–	–	–
Net cash flow	(1,161)	1,985	1,064	707	(719)	1,965	2,142
FX and monetary effects on cash	(41)	(693)	(538)	72	–	–	–
Change in cash position	(1,202)	1,292	526	779	(719)	1,965	2,142

Source: Company, Sberbank CIB Investment Research

Novatek

Income statement (IFRS), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Revenues	9,367	9,388	7,791	8,053	9,721	9,225	9,350
Operating costs	6,027	6,051	5,499	5,780	6,887	6,514	6,598
EBIT	3,339	3,337	2,292	2,272	2,834	2,712	2,751
Depreciation	423	450	327	521	588	639	639
EBITDA	3,763	3,788	2,619	2,793	3,423	3,350	3,390
Net interest expenses	(95)	(21)	63	108	167	167	167
FX gain	(118)	(599)	(147)	(402)	32	(82)	–
Net other expenses	(4)	(1,071)	(607)	1,532	(251)	276	591
EBT	4,280	1,721	1,613	4,491	2,782	3,072	3,509
Tax	(848)	(460)	(317)	(620)	(598)	(551)	(575)
Income before minority interest	3,431	1,261	1,295	3,871	2,184	2,521	2,934
Minority interest	2	9	7	(109)	(238)	(237)	(234)
Net income	3,433	1,271	1,302	3,761	1,946	2,284	2,699

Source: Company, Sberbank CIB Investment Research

Balance sheet (IFRS), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Fixed assets and investments	15,673	10,177	10,312	13,701	13,315	12,848	12,562
Current assets	2,506	2,250	1,763	2,189	4,176	6,194	8,481
Stock and inventories	181	125	113	149	180	178	179
Accounts receivable	1,505	615	515	686	828	785	796
Cash and securities	240	734	400	796	2,611	4,673	6,948
Other current assets	579	776	734	558	558	558	558
Total assets	18,179	12,427	12,075	15,890	17,491	19,041	21,043
Current liabilities	1,820	1,443	2,328	1,794	1,929	1,882	1,909
Accounts payable	646	544	666	634	715	693	708
Short-term debt	730	728	1,463	914	914	914	914
Deferred taxes and provisions	443	172	199	245	299	275	286
Long-term liabilities	5,018	4,103	3,872	3,253	3,253	3,253	3,253
Long-term debt	4,305	3,639	3,458	2,659	2,659	2,659	2,659
Other long-term liabilities	713	464	413	594	594	594	594
Total liabilities	6,838	5,546	6,200	5,047	5,182	5,135	5,162
Minority interest	87	42	29	154	392	630	864
Equity	11,254	6,839	5,846	10,689	11,916	13,277	15,017
Share capital	890	470	353	408	408	408	408
Retained earnings	10,364	6,369	5,494	10,280	11,508	12,869	14,609
Total liabilities and equity	18,179	12,427	12,075	15,890	17,491	19,041	21,043

Source: Company, Sberbank CIB Investment Research

Cash flow statement, \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
EBITDA	3,763	3,788	2,619	2,793	3,423	3,350	3,390
Taxes	(461)	(694)	(270)	(423)	(599)	(553)	(577)
Decrease in working capital	(603)	66	(84)	217	(37)	(3)	15
Operating cash flow	2,699	3,160	2,266	2,587	2,786	2,795	2,828
Capex	(1,605)	(1,608)	(826)	(514)	(366)	(328)	(353)
Other investments	(1,550)	377	(1,748)	721	103	276	591
Free cash flow	1,094	1,930	(308)	2,794	2,524	2,742	3,066
Increase/(decrease) in debt	609	13	919	(1,533)	–	–	–
Dividends	(691)	(751)	(582)	(622)	(923)	(959)	(1,103)
Additional share issues/(purchases)	(56)	(72)	(13)	(14)	–	–	–
Net cash flow	957	1,120	16	625	1,600	1,783	1,963
FX and monetary effects on cash	31	376	22	(147)	–	–	–
Other sources/(uses) of funds	(1,582)	(81)	(142)	(302)	214	279	312
Change in cash position	(593)	1,414	(103)	176	1,815	2,062	2,275

Note: Novatek income statement numbers exclude share in Yamal-LNG as the consolidation method had not been confirmed at the time of publication.

Source: Company, Sberbank CIB Investment Research

Rosneft

Income statement (IFRS), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Revenues	146,290	145,887	84,808	74,886	99,749	102,166	105,760
Operating costs	128,582	129,287	73,194	65,270	89,293	89,089	90,489
EBIT	17,708	16,600	11,614	9,616	10,456	13,077	15,271
Depreciation	11,882	12,099	7,458	7,242	9,816	10,125	10,425
EBITDA	29,590	28,699	19,072	16,858	20,272	23,201	25,696
EBITDA (adjusted)	29,590	28,699	20,493	18,858	23,542	25,881	27,006
Net interest expenses	(1,099)	(4,586)	(3,439)	(1,510)	(1,842)	(1,921)	(1,795)
FX gain	(2,255)	267	1,353	(1,033)	194	–	–
Net other expenses	1,256	196	(1,771)	(2,185)	(2,030)	(1,873)	694
EBT	15,611	12,478	7,757	4,888	6,778	9,282	14,170
Tax	(2,675)	(3,168)	(1,735)	(1,805)	(1,269)	(1,737)	(2,652)
Income before minority interest	12,936	9,310	6,022	3,083	5,510	7,545	11,517
Minority interest	(159)	(72)	(16)	(315)	(1,076)	(1,346)	(1,572)
Net income	12,777	9,238	6,006	2,768	4,433	6,199	9,946

Note: Adjusted EBITDA includes portion of revenues from supplies under prepayments not reflected in the income statement.

Source: Company, Sberbank CIB Investment Research

Balance sheet (IFRS), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Fixed assets and investments	180,456	117,405	97,197	143,924	149,246	152,129	154,198
Current assets	48,701	37,879	35,043	37,918	35,624	36,933	42,623
Stock and inventories	6,141	4,142	3,005	4,666	6,383	6,368	6,468
Accounts receivable	12,616	9,847	5,035	7,996	4,919	4,758	4,636
Cash and securities	8,390	3,857	7,697	13,057	12,122	13,606	19,318
Other current assets	21,554	20,033	19,305	12,200	12,200	12,200	12,200
Total assets	229,158	155,283	132,240	181,842	184,870	189,062	196,821
Current liabilities	43,016	36,101	25,795	45,716	44,657	43,990	44,049
Accounts payable	14,835	8,781	6,531	9,611	6,902	6,308	6,264
Short-term debt	20,794	23,037	15,916	31,752	31,752	31,752	31,752
Deferred taxes and provisions	5,229	3,573	2,003	3,759	5,409	5,336	5,440
Other current liabilities	2,158	711	1,345	594	594	594	594
Long-term liabilities	89,924	67,972	66,257	74,699	74,356	73,885	73,168
Long-term debt	65,239	54,694	55,816	57,702	57,702	57,702	57,702
Other long-term liabilities	24,685	13,278	10,441	16,997	16,654	16,184	15,466
Total liabilities	132,941	104,073	92,052	120,415	119,012	117,876	117,217
Minority interest	1,186	160	590	6,875	7,951	9,297	10,869
Equity	95,031	51,050	39,598	54,553	57,907	61,889	68,735
Share capital	14,531	8,781	6,970	9,958	9,958	9,958	9,958
Retained earnings	80,500	42,269	32,628	44,595	47,949	51,931	58,778
Total liabilities and equity	229,158	155,283	132,240	181,842	184,870	189,062	196,821

Source: Company, Sberbank CIB Investment Research

Cash flow statement, \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
EBITDA	29,590	28,699	19,072	16,858	20,272	23,201	25,696
Provisions and non-cash items	(3,399)	8,742	3,023	1,161	3,710	3,631	6,019
Taxes	(2,545)	(5,074)	(1,980)	(554)	(1,612)	(2,208)	(3,370)
Interest paid	(1,752)	(2,255)	(2,466)	(2,642)	(3,578)	(3,578)	(3,578)
Decrease in working capital	11,760	13,183	17,929	(5,475)	462	(1,650)	(938)
Operating cash flow	33,654	43,295	36,999	11,348	22,524	22,077	25,139
Capex	(17,513)	(17,966)	(10,085)	(11,086)	(15,571)	(12,742)	(12,223)
Other investments	(53,680)	(13,631)	(2,889)	(4,577)	39	624	783
Free cash flow	16,141	25,329	26,914	262	6,953	9,335	12,916
Increase in debt	33,481	(9,423)	(14,735)	10,176	–	–	–
Dividends	(2,592)	(3,748)	(1,377)	(1,935)	(1,079)	(2,217)	(3,099)
Additional share issues/(purchases)	1,007	(2,531)	(1,521)	2,712	(3,578)	(3,578)	(3,578)
Net cash flow	(5,643)	(4,005)	6,392	6,639	2,335	4,164	7,022
FX and monetary effects on cash	480	1,724	791	(1,705)	–	–	–
Change in cash position	(5,163)	(2,281)	7,183	4,934	2,335	4,164	7,022

Source: Company, Sberbank CIB Investment Research

Surgutneftegaz

Income statement (IFRS), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Revenues	41,305	35,711	20,946	18,356	22,285	21,912	21,797
Operating costs	34,492	31,324	16,896	14,458	18,027	17,616	17,753
EBIT	6,813	4,387	4,050	3,899	4,259	4,296	4,044
Depreciation	1,522	1,920	1,150	1,157	1,189	1,190	1,188
EBITDA	8,334	6,307	5,200	5,056	5,448	5,486	5,232
Net interest expenses	1,524	1,613	1,503	1,615	1,231	736	765
Monetary gain/(loss)	2,505	20,204	9,067	(6,440)	972	–	–
Net other expenses	24	(42)	6	(33)	–	–	–
EBT	10,866	26,162	14,625	(959)	6,461	5,032	4,809
Tax	(2,057)	(4,529)	(2,494)	135	(1,292)	(1,006)	(962)
Income before minority interest	8,809	21,633	12,131	(825)	5,169	4,026	3,847
Net income	8,809	21,633	12,131	(826)	5,176	4,031	3,853

Source: Company, Sberbank CIB Investment Research

Balance sheet (IFRS), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Fixed assets and investments	33,613	20,665	17,704	22,945	24,969	26,797	28,689
Current assets	38,892	38,101	37,889	41,707	44,357	45,816	47,161
Stock and inventories	1,671	1,163	1,041	1,403	999	917	929
Accounts receivable	2,532	1,074	817	1,431	1,738	1,708	1,699
Cash and securities	33,145	34,521	35,314	37,739	40,487	42,057	43,399
Other current assets	1,543	1,343	717	1,133	1,133	1,133	1,133
Total assets	72,504	58,766	55,593	64,652	69,326	72,613	75,850
Current liabilities	3,671	3,161	3,034	3,502	3,450	3,408	3,414
Accounts payable	1,202	766	710	806	487	451	457
Def. taxes and provisions	1,190	1,298	914	828	1,095	1,089	1,089
Other current liabilities	1,280	1,097	1,410	1,868	1,868	1,868	1,868
Long-term liabilities	6,127	3,896	3,403	4,349	4,349	4,349	4,349
Other long-term liabilities	6,127	3,896	3,403	4,349	4,349	4,349	4,349
Total liabilities	9,799	7,058	6,437	7,850	7,799	7,757	7,763
Minority interest	5	3	3	4	(3)	(8)	(13)
Equity	62,700	51,706	49,153	56,798	61,530	64,864	68,101
Share capital	6,459	3,777	2,915	3,503	3,503	3,503	3,503
Retained earnings	56,241	47,929	46,238	53,295	58,027	61,361	64,598
Total liabilities and equity	72,504	58,766	55,593	64,652	69,326	72,613	75,850

Source: Company, Sberbank CIB Investment Research

Cash flow statement, \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
EBITDA	8,334	6,307	5,200	5,056	5,448	5,486	5,232
Provisions and non-cash items	326	663	163	65	30	28	29
Taxes	(1,143)	(3,101)	(2,456)	(795)	(1,292)	(1,006)	(962)
Interest received	1,315	1,944	1,889	966	1,231	736	765
Decrease in working capital	308	(0)	115	(134)	47	70	2
Operating cash flow	9,141	5,813	4,909	5,157	5,463	5,314	5,067
Capex	(5,575)	(4,102)	(2,791)	(2,715)	(3,243)	(3,047)	(3,109)
Other investments	(3,383)	(2,390)	(136)	(1,278)	–	–	–
Free cash flow	3,566	1,710	2,119	2,442	2,220	2,267	1,958
Dividends	(892)	(935)	(1,325)	(1,163)	(444)	(697)	(616)
Additional share issues/(purchases)	205	306	440	297	–	–	–
Net cash flow	(504)	(1,309)	1,097	298	1,776	1,570	1,342
FX and monetary effects on cash	7	255	24	(50)	–	–	–
Change in cash position	(497)	(1,054)	1,121	248	1,776	1,570	1,342

Source: Company, Sberbank CIB Investment Research

Tatneft

Income statement (US GAAP), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Revenues	20,289	17,155	10,830	10,041	12,244	12,270	12,405
Operating costs	17,019	14,210	8,653	7,842	9,674	9,426	9,596
EBIT	3,270	2,945	2,178	2,199	2,570	2,843	2,809
Depreciation	607	553	410	324	415	418	436
EBITDA	3,840	3,546	2,679	2,561	2,985	3,261	3,245
Net interest expenses	(112)	35	59	23	55	55	57
FX gain	(15)	313	34	(50)	(21)	–	–
Net other expenses	29	21	19	(35)	46	–	–
EBT	3,173	3,314	2,289	2,137	2,649	2,898	2,866
Tax	(719)	(700)	(530)	(527)	(555)	(715)	(707)
Income before minority interest	2,454	2,614	1,760	1,610	2,094	2,183	2,159
Minority interest	(233)	(146)	(113)	20	5	5	5
Net income	2,220	2,468	1,647	1,630	2,099	2,188	2,164

Source: Company, Sberbank CIB Investment Research

Balance sheet (US GAAP), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Fixed assets and investments	15,872	9,818	8,499	12,564	13,858	14,937	15,917
Current assets	4,621	3,210	2,459	5,482	5,722	5,748	5,939
Stock and inventories	898	577	440	549	601	599	615
Accounts receivable	1,584	819	825	1,053	1,271	1,275	1,302
Cash and securities	926	768	342	1,271	1,242	1,265	1,414
Other current assets	1,213	1,047	852	2,608	2,608	2,608	2,608
Total assets	20,493	13,028	10,959	18,046	19,580	20,684	21,857
Current liabilities	2,528	1,217	946	4,721	5,163	5,092	5,156
Accounts payable	1,417	932	846	1,142	1,367	1,299	1,363
Short-term debt	1,111	282	72	318	534	532	532
Other current liabilities	–	3	27	3,261	3,261	3,261	3,261
Long-term liabilities	2,643	1,462	990	1,638	1,428	1,440	1,453
Long-term debt	389	229	177	574	353	352	352
Other long-term liabilities	2,254	1,232	813	1,063	1,075	1,088	1,101
Total liabilities	5,171	2,679	1,935	6,359	6,591	6,532	6,609
Minority interest	686	467	403	89	84	79	73
Equity	14,635	9,882	8,621	11,598	12,905	14,073	15,174
Share capital	3,017	1,764	1,330	1,599	1,599	1,599	1,599
Retained earnings	11,618	8,118	7,291	9,999	11,306	12,474	13,575
Total liabilities and equity	20,493	13,028	10,959	18,046	19,580	20,684	21,857

Source: Company, Sberbank CIB Investment Research

Cash flow statement, \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
EBITDA	3,840	3,546	2,679	2,561	2,985	3,261	3,245
Provisions and non-cash items	143	592	138	54	34	14	13
Taxes	(719)	(700)	(530)	(527)	(555)	(715)	(707)
Decrease in working capital	41	200	(132)	46	(48)	(75)	22
Increase in other assets	277	(200)	67	79	–	–	–
Operating cash flow	3,582	3,439	2,222	2,212	2,416	2,485	2,572
Capex	(1,784)	(1,622)	(1,517)	(1,428)	(1,708)	(1,497)	(1,417)
Other investments	(33)	(241)	(439)	720	–	–	–
Free cash flow	1,765	1,577	266	784	708	988	1,156
Increase in debt	(740)	(875)	(210)	(121)	–	–	–
Interest paid	(112)	35	59	23	55	55	57
Dividends	(613)	(484)	(392)	(369)	(792)	(1,020)	(1,064)
Additional share issues/(purchases)	(31)	(46)	(32)	(107)	–	–	–
Net cash flow	270	207	(309)	930	(29)	23	149
FX and monetary effects on cash	8	41	18	(22)	–	0	–
Change in cash position	277	248	(291)	908	(29)	23	149

Source: Company, Sberbank CIB Investment Research

Transneft

Income statement (IFRS), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Revenues	23,543	20,370	13,425	12,733	14,657	14,712	15,333
Operating costs	15,665	14,143	9,540	8,541	10,000	10,034	10,366
EBIT	7,878	6,226	3,885	4,192	4,656	4,678	4,967
Depreciation	3,226	2,968	2,274	1,920	2,214	2,470	2,642
EBITDA	11,104	9,195	6,158	6,112	6,870	7,148	7,610
Net interest expenses	(646)	(466)	(153)	(535)	(429)	(540)	(448)
FX gain	(186)	(956)	(791)	603	(190)	–	–
Net other expenses	(375)	(1,681)	(93)	219	289	289	289
EBT	6,672	3,123	2,848	4,479	4,327	4,427	4,808
Tax	(1,689)	(995)	(402)	(1,027)	(992)	(1,015)	(1,102)
Income before minority interest	4,982	2,128	2,446	3,452	3,335	3,412	3,706
Minority interest	(160)	(26)	(1)	(1)	(1)	(1)	(1)
Net income	4,822	2,102	2,445	3,451	3,334	3,411	3,705

Source: Company, Sberbank CIB Investment Research

Balance sheet (IFRS), \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Fixed assets and investments	48,172	31,583	27,691	36,783	39,509	40,783	41,549
Current assets	16,173	12,398	8,794	8,830	8,540	8,162	9,119
Stock and inventories	848	533	481	510	613	606	617
Accounts receivable	2,943	1,790	1,007	1,218	1,429	1,407	1,467
Cash and securities	3,184	2,010	1,272	1,230	518	168	1,055
Other current assets	9,199	8,065	6,033	5,872	5,981	5,981	5,981
Total assets	64,345	43,981	36,485	45,613	48,050	48,945	50,668
Current liabilities	6,929	6,821	3,299	4,844	5,521	5,316	5,410
Accounts payable	4,012	3,587	2,181	3,047	3,677	3,472	3,567
Short-term debt	2,917	3,234	1,118	1,798	1,844	1,844	1,844
Long-term liabilities	17,439	12,829	12,770	12,472	11,886	10,408	9,183
Long-term debt	14,732	10,261	10,750	9,768	8,909	7,644	6,420
Other long-term liabilities	2,707	2,568	2,020	2,704	2,977	2,764	2,764
Total liabilities	24,368	19,650	16,069	17,317	17,407	15,724	14,594
Minority interest	772	471	23	30	30	31	32
Equity	39,206	23,861	20,392	28,267	30,612	33,190	36,042
Share capital	9	5	4	5	5	5	5
Retained earnings	39,196	23,856	20,388	28,261	30,607	33,185	36,037
Total liabilities and equity	64,345	43,981	36,485	45,613	48,050	48,945	50,668

Source: Company, Sberbank CIB Investment Research

Cash flow statement, \$ mln

	2013	2014	2015	2016	2017E	2018E	2019E
Cash receipts from customers	25,116	21,824	14,246	13,453	14,445	14,734	15,274
Cash paid to suppliers	(16,158)	(14,796)	(9,340)	(8,784)	(7,259)	(7,762)	(7,640)
Interest paid	(1,089)	(884)	(730)	(697)	(765)	(847)	(739)
Income tax paid	2,296	507	1,005	935	(992)	(1,015)	(1,102)
Operating cash flow	10,165	6,651	5,181	4,907	5,430	5,110	5,793
Capital expenditures	(6,972)	(7,952)	(5,262)	(4,832)	(5,582)	(3,744)	(3,408)
Other investments, net	(1,502)	2,409	2,009	998	–	–	–
Investing cash flow	(8,474)	(5,543)	(3,253)	(3,833)	(5,582)	(3,744)	(3,408)
Increase in debt	(586)	(2,126)	(1,093)	(761)	900	(1,550)	(1,500)
Dividends	(144)	(218)	(47)	(198)	(988)	(833)	(853)
Additional share issues (purchases)	(392)	0	(1,325)	(146)	–	–	–
Financing cash flow	(1,123)	(2,343)	(2,465)	(1,104)	(89)	(2,384)	(2,353)
FX and monetary effects on cash	102	844	170	(175)	–	–	–
Change in cash position	671	(392)	(366)	(206)	(241)	(1,018)	31
Cash at beginning of period	2,766	3,184	2,010	1,272	1,230	518	168
Cash at end of period	3,184	2,010	1,272	1,230	518	168	1,055

Source: Company, Sberbank CIB Investment Research

Disclosure appendix

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