

Year	Crude Oil & NGL		Natural Gas			Gross production		
	Net production	Net production	Net production	Net production	Net production	Gross production	Gross production	
	Thousand bbl/d	million tonnes/yr	Million bbl	Million cf/d	Million SCM/d	Billion cf/yr	Million tons/yr	Million tonnes/yr
1950								
1951								
1952								
1953								
1954								
1955								
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1999								
2000								
2001								
2002			7	assume 50% of 2003		350		
2003		2.00	15		19.80	699		
2004		2.80	21		20.90	738		
2005		2.60	19		25.20	890		
2006		2.50	18		28.70	1,014		
2007		2.50	18		28.50	1,006		
2008		2.60	19		30.90	1,091		
2009		3.00	22		32.80	1,158		
2010		3.60	26		37.80	1,335		
2011		4.10	30		52.90	1,868		
2012		4.30	32		56.50	1,995		
2013		4.80	35		61.20	2,161		
2014		6.00	44		62.10	2,193		
2015	83% condensate	9.10	67		67.90	2,398		
2016	17% crude oil	12.44	91		67.65	2,389		
2017		11.77	86		63.40	2,239		
2018		11.80	86		68.81	2,430		
<b>Total</b>	<b>na</b>	<b>86</b>	<b>637</b>	<b>na</b>	<b>803</b>	<b>25,955</b>	<b>-</b>	<b>-</b>

# Oil, gas, & coal extraction data

Richard Heede  
 Climate Mitigation Services  
 File started: 11 January 2005  
 Last modified: June 2019

Copyright Climate Accountability Institute

AOA Novatek  
 www.tnk.ru Tyumen

yellow column indicates original reported units Investor-owned

## Production / Extraction data

Year	Crude Oil & NGL			Natural Gas			Gross production	
	Net production	Net production	Net production	Net production	Net production	Net production	Gross production	Gross production
	Thousand bbl/d	million tonnes/yr	Million bbl	Million cf/d	Million SCM/d	Billion cf/yr	Million tons/yr	Million tonnes/yr

Novatek, founded 1994; OAO FIK Novafininvest



NOVATEK's hydrocarbon production including share in production of joint ventures

	2018	2017	Change,%
Natural gas, bcm	68.81	63.40	8.5%
Liquids, thousand tons	11,800	11,774	0.2%
Total hydrocarbons, mln boe	548.4	513.3	6.9%
Total hydrocarbons, mln boe per day	1.50	1.41	6.9%

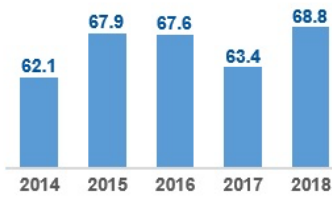


1 SCM =	35.315	cubic feet
1 tonne oil	7.330	bbl
bcm=	35.315	bcf

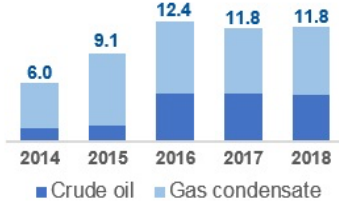
Mt	Mb	Bcm	Bcf
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Oil&Gas Journal: no data prior to 2002.  
 "gas marketing commenced in 2002"  
 earliest archived AnnRpt: 2005

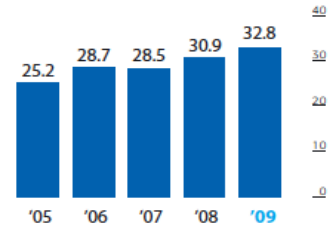
Production of natural gas, bcm



Production of liquid hydrocarbons, mmt



NATURAL GAS PRODUCTION, bcm



<http://www.novatek.ru/en/business/production/>

Since 2016 natural gas production incl gas volumes consumed in oil & gas production and development (primarily, as fuel gas).

Key Environmental Indicators of NOVATEK (including joint ventures)

	Unit	2016	2017	Change
Water consumption	'000 m <sup>3</sup>	2,701	2,779	2.9%
Atmospheric emissions	'000 tons	121.2	108.9	(10.1%)*

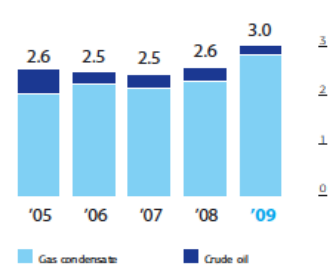
\*Decrease in atmospheric emissions is due to implementation of Rational APG Utilization Program (putting on stream a 3S separator) at the Yarulskoye oil field.

One of the Company's priorities is the rational usage of resources, including energy resources. The table below sets out the physical volumes and the Russian rouble equivalent of energy resources consumed by the company in 2017.

Energy Resource Consumption by NOVATEK in 2017 (including joint ventures)

	Units	Volume	RR mln, net of VAT
Natural gas	mmcm	2,121	2,811.0
Electricity	MW·h	927,883	3,877.6
Heating energy	Gcal	459,435	672.2
Oil	tons	2,150	13.3
Motor gasoline	tons	1,133	40.2
Diesel fuel	tons	6,398	232.1
Other	tons	96,448	14.8

LIQUIDS PRODUCTION, mmt



Novatek Annual Report 2009, page 5.

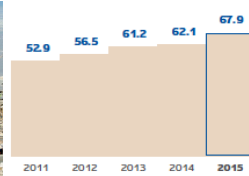
Novatek Annual Report 2017, page 53.

Novatek Annual Report 2015, page 27.

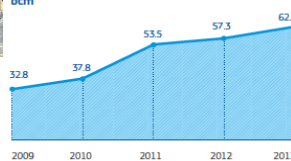


Novatek Annual Report 2015, page 42. Yamal LNG project, Sabetta Port

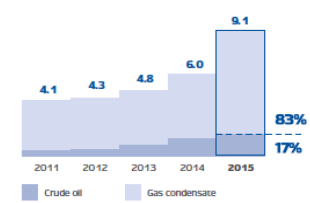
Marketable natural gas production, bcm



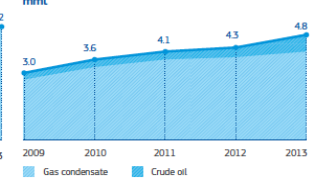
Gross natural gas production, bcm



Marketable liquids production, mmt

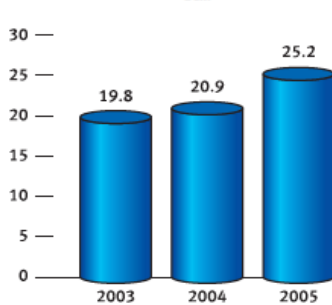


Gross liquids production, mmt

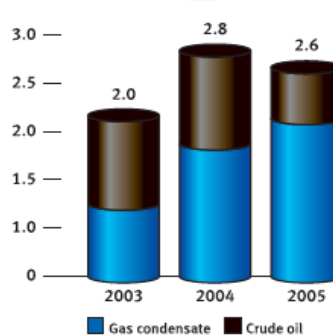


Novatek Annual Report 2013, page 15.

Natural Gas Production bcm



Liquids Production mmt



Novatek Annual Report 2005, page 3.

**Cell:** I9**Comment:** Rick Heede:

Wiki (Jan19): Novatek (LSE: NVTK) is Russia's largest independent natural gas producer, and the seventh largest publicly traded company globally by natural gas production volume. The company was originally known as OAO FIK Novafininvest. Novatek is based in the Yamalo-Nenets Autonomous Region in West Siberia, and maintains a sales office in Moscow.

The major gas field owned by Novatek is the Yurkharovskoye field. On 27 May 2009, Novatek bought a 51% stake in Yamal LNG from Volga Resources, which controls the giant South-Tambeyskoye field.[9] On 2 July 2010, Novatek purchased Tambeyneftegas, which holds the licence to the Arctic Malo-Yamalskoye field, located on the Yamal Peninsula and holding 161 billion cubic metres (5.7 trillion cubic feet) of natural gas and 14.4 million tonnes of gas condensate. Novatek and Gazprom plan to build a liquefied natural gas plant in Yamalo-Nenets Autonomous Okrug.[11] Total S.A. will also be involved as a 20% shareholder.[12] Together with Total S.A., Novatek is developing the Termokarstovoye field in Yamal.

In December 2010, Novatek bought a 51% stake in Sibneftegaz from Gazprombank (Itera owns 49% of the shares). Sibneftegaz holds licences for exploration and production in the Yamal-Nenets region, including for the Beregovoye field, Pyreinoe field, Zapadno-Zapolyarnoye field, and the Khadyryakhinskiy licence area. Sibneftegaz owns rights to develop oil and gas condensate fields with a total resource of 395.53 bcm of natural gas and 8.44 million tonnes of gas condensate.

In 2011, Novatek was awarded licences to develop the Geofizicheskoye field, Salmanovskoye (Utrenneye) field, Severo-Obskoye field and Vostochno-Tambeyskoye field.

In addition, Novatek has acquired the following companies:

SNP Nova - pipeline construction  
Purneftegasgeologiya - natural gas  
Tarkosaleneftegas - natural gas  
Khancheyneftegas - natural gas  
Yurkharovneftegas - natural gas

Novatek is developing the Sabetta port, in a joint project with the Russian government. This port would allow LNG exports by sea from the Yamal peninsula.

The history of NOVATEK started in August 1994, when AOOT FIK Novafininvest was established (the name was changed to OAO NOVATEK later). The new Company focused on oil and gas assets development from the very beginning.

We acquired the exploration and production licenses in the YNAO (East-Tarkosalinskoye, Khancheyskoye and Yurkharovskoye fields) and made significant investments in the fields development and surface facilities construction. The trial operation of the East-Tarkosalinskoye oil field commenced in 1996 and commercial production of natural gas started in 1998. Gas marketing development commenced in 2002 with first natural gas sales to end-customers.

We completed the consolidation of NOVATEK's main assets in 2004 and disposed the non-core businesses - in 2005 in order to focus on our core assets.

Our Purovsky Condensate Processing Plant was commissioned the same year becoming the most important element of the vertically integrated production chain of the Company and the Company's IPO was conducted on the London stock exchange and Russia's MICEX stock exchange.

The Company's production volumes and asset portfolio grew rapidly in the subsequent years. NOVATEK acquired stakes in SeverEnergia, Nortgas and Yamal LNG, as well as new licenses including prospective areas in the Gydan Peninsula and the Gulf of Ob. We continued the development of the vertically integrated production chain with the launch of Ust-Luga complex in 2013.

Yamal LNG has commenced producing liquefied natural gas (LNG) at the first LNG train in 2017. The second LNG train was launched in August 2018. Therefore, NOVATEK entered the global gas market and transforms into a global gas and LNG power.

<http://www.novatek.ru/en/about/general/history/printable.php?print=1>

**Cell:** M9**Comment:** Richard Heede:

Founded 1994. Novatek is a public company with shares traded on the London and Moscow stock exchanges. The major shareholders of Novatek are Leonid Michelson, the CEO, with around 28% of the shares, Volga Group with 23% of shares, Total SA with 16% and Gazprom with 9.4%. Source: Wiki (Jan19)

**Cell:** D11**Comment:** Rick Heede:

On this worksheet we report extractive data for each company or state-owned enterprise. Three columns under crude oil and natural gas allow for data reported in one of three formats (e.g., thousand barrels per day, or million barrels per year, or million tonnes per year). Coal is normally reported in U.S. or metric tonnes per year.

Note: the carbon content of the extracted resources is adjusted by a number of factors before emissions estimates are made in the worksheet 1 to the left. Most important is the subtraction of the fraction typically sequestered in petrochemicals and other non-combusted uses such as road oils, waxes, lubricants, greases, etc. See the comment for each extracted resource for detailed discussions of the combusted vs sequestered fractions.

**Cell:** D12**Comment:** Rick Heede:

Total net worldwide crude oil plus natural gas liquids produced by each company or state-owned enterprise. Where data is available, we list gross production (before royalty production is netted out). More often, however, oil companies report production net of royalty production.

Oil & Gas Journal Data Book (our primary source for oil and gas production from 1988 through 2003) reports net production.

Crude production includes natural gas liquids (NGL) unless noted.

**Cell:** H12**Comment:** Rick Heede:

Natural gas is typically reported as dry gas; natural gas liquids are reported under crude oil.

Carbon dioxide is normally removed from the gas flow at the production site (see "Vented Carbon Dioxide").

"SCM/d" = standard cubic meters per day. "cf/d" = cubic feet per day.

Net production typically excludes a number of diverted gas streams. Quantities and fractions vary; ExxonMobil's exclusions are probably typical of the industry: "Net production available for sale quantities are the volumes withdrawn from ... natural gas reserves, excluding royalties and volumes due to others when produced, and excluding gas purchased from others, gas consumed in producing operations, field processing plant losses, volumes used for gas lift, gas injections and cycling operations, quantities flared, and volume shrinkage due to the removal of condensate or natural gas liquids production."

ExxonMobil Corporation (2004) 2003 Financial and Operating Review, [www.exxonmobil.com](http://www.exxonmobil.com), p. 55

**Cell:** L12**Comment:** Rick Heede:

Coal production by coal mining companies and state-owned enterprises, including subsidiaries of oil and gas companies.

Coal types produced are not ordinarily reported by coal operators (except for metallurgical coal). We distinguish, where possible and reasonably well known, between hard and soft coals, especially for the larger companies operating in regions such as Australia and India where soft coals are predominant. Soft coals have a much lower carbon content per tonne than do hard coals. See "Coal" under "Extractive Activities" in each sheet 1 for details.

**Cell:** E69**Comment:** Richard Heede:

Novatek Annual Report 2005, page. Liquids production, in million tonnes.

**Cell:** E80**Comment:** Rick Heede:

Novatek production data for 2014 to 2018, in million tonnes of gas condensate and crude oil.

<http://www.novatek.ru/en/business/production/>

Since 2016 natural gas production includes gas volumes consumed in oil and gas production and development activities (primarily, as fuel gas).

**Cell:** I80**Comment:** Rick Heede:

Novatek production data for 2014 to 2018, in billion cubic metres (Bcm) per year: <http://www.novatek.ru/en/business/production/>

Since 2016 natural gas production includes gas volumes consumed in oil and gas production and development activities (primarily, as fuel gas).

**Cell:** N187**Comment:** Rick Heede:

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