

OIL REFINING

LUKOIL Group refineries



* Capacity of the ISAB complex is shown in accordance with the Company share (49%). The throughput represents the Company share in December 2008.

Input capacity of LUKOIL facilities, th. barrels per day

	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating
Perm	254.6	116.3	17.6	–	9.3	36.9	65.2	146.3
Volgograd	225.2	68.2	18.5	–	–	43.7	–	95.9
Nizhny Novgorod	337.1	132.4	–	42.2	–	47.1	–	158.5
Ukhta	73.4	18.1	–	14.1	–	9.2	–	29.4
Burgas	175.1	72.6	–	26.4	34.8	14.4	–	101.4
Ploiesti	47.8	21.8	10.5	–	18.5	10.1	–	45.7
Odessa	55.7	25.5	–	12.3	–	11.5	–	33.9
Total*	1,168.9	454.9	46.6	95.0	62.6	172.9	65.2	611.1

Production capacity of LUKOIL facilities, th. barrels per day

	Alkylation	Aromatics	Isomerization	Lubricants	Oxygenates	Hydrogen, mcf per day	Sulfur, tons per day	Bitumen
Perm	–	2.2	12.0	9.4	–	119.4	213.7	12.1
Volgograd	–	1.8	9.8	11.3	–	10.7	111.8	4.2
Nizhny Novgorod	–	–	11.8	4.5	–	–	–	20.7
Ukhta	–	–	–	–	–	11.9	11.0	4.4
Burgas	4.6	3.3	1.3	–	1.9	16.1	164.4	4.8
Ploiesti	–	–	3.8	–	2.6	3.9	54.8	–
Odessa	–	–	3.2	–	–	–	21.1	3.3
Total*	4.6	7.3	41.9	25.2	4.5	162.0	576.8	49.5

Capital expenditures in refining, mln USD

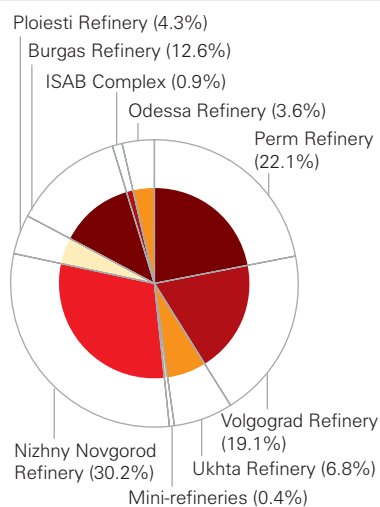
	2004	2005	2006	2007	2008
Expenditures	428	412	696	830	1,023

Refining expenses, mln USD

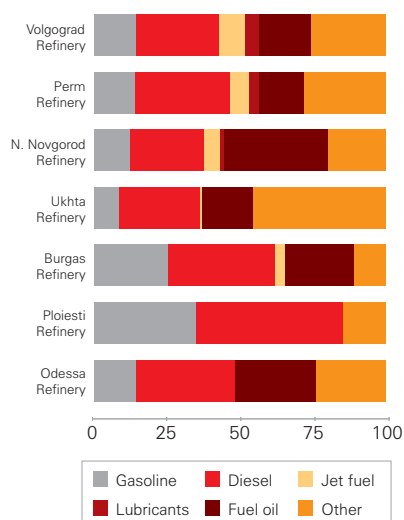
	2004	2005	2006	2007	2008
Owned refineries	532	644	730	880	1,115
Affiliated refineries	n/a	104	230	242	439

* Excluding mini-refineries and ISAB Complex.

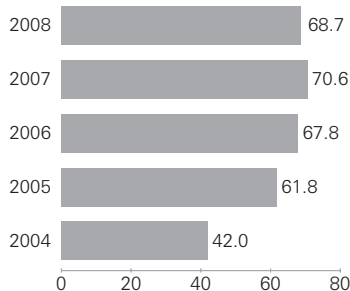
Distribution of throughputs at LUKOIL refineries (2008)



Output of main petroleum products at LUKOIL refineries (2008), %



Share of clean diesel (Euro-2 and higher) in total output of diesel fuel at LUKOIL refineries, %***


Refinery throughputs and petroleum product output at LUKOIL Group refineries, mln tons

	2004*	2005*	2006	2007	2008**
Throughputs	43.62	47.27	48.88	52.16	56.28
Russian refineries	35.55	37.30	39.50	42.55	44.18
Including mini-refineries	0.22	0.21	0.20	0.19	0.20
Foreign refineries	8.07	9.97	9.38	9.61	12.10
Throughputs, th. barrels per day	874	949	982	1,047	1,127
Petroleum product output	41.05	44.40	45.85	49.00	53.22
Russian refineries	33.66	35.48	37.64	40.56	42.25
Including mini-refineries	0.22	0.20	0.18	0.18	0.19
Foreign refineries	7.39	8.92	8.21	8.44	10.97

Structure of petroleum product output at LUKOIL Group refineries*, %**

	2004	2005	2006	2007	2008
Motor gasoline	14.6	15.0	14.6	14.8	15.3
Diesel fuel	28.6	30.7	30.4	30.1	30.5
Jet fuel	5.4	5.0	5.3	5.4	5.4
Ship fuel	4.0	4.7	3.5	2.2	2.2
Heating oil	1.1	1.1	0.9	0.8	0.7
Vacuum gas oil	5.2	7.5	8.9	9.3	11.2
Naphta	3.4	3.4	3.7	3.8	3.0
Fuel oil	26.6	22.4	22.8	24.8	23.1
Bitumen	3.9	3.2	3.0	3.0	2.8
Lubricants	3.1	2.6	2.7	2.3	2.2
Coke	1.3	1.5	1.4	1.3	1.3
Other	2.8	2.9	2.8	2.2	2.3

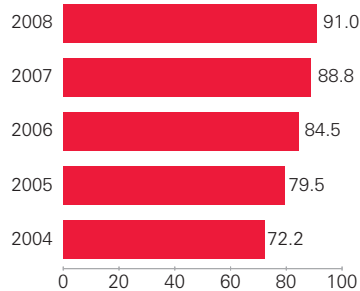
Depth of refining at LUKOIL Group refineries*, %**

	2004	2005	2006	2007	2008
Total	74.4	77.5	77.0	75.3	76.7
Russian refineries	75.4	77.5	76.2	74.0	76.0
Foreign refineries	70.5	77.5	80.4	81.0	79.7

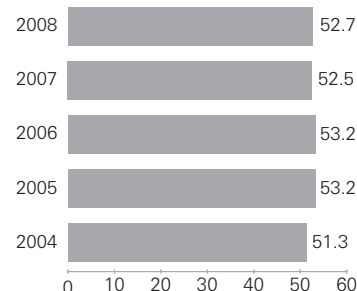
Production and blending of lubricants at LUKOIL refineries, th. tons

	2004	2005	2006	2007	2008
Total production (full cycle)	1,199	1,115	1,174	1,120	1,128
Mixing of lubricants	83	88	91	93	76
Packaged lubricants output	142	180	206	223	231

Share of high-octane gasolines in total output of motor gasolines at LUKOIL refineries, %***



Light products yield at LUKOIL refineries, %***



* Excluding fuel oil processed at Burgas Refinery.

** Including refinery throughputs at ISAB Complex in December 2008 (Company's share).

*** Excluding mini-refineries and ISAB Complex.



VOLGOGRAD REFINERY

Throughput and petroleum product output at Volgograd Refinery

	2004	2005	2006	2007	2008
Refinery throughput, mln tons	8.98	9.23	9.62	9.61	10.74
Petroleum product output, mln tons	8.46	8.74	9.12	9.06	10.18

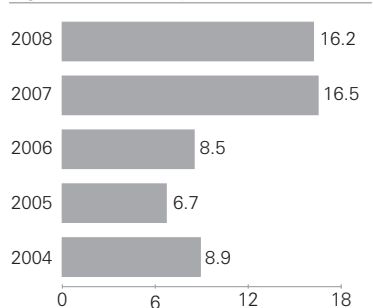
Structure of petroleum product output, %

	2004	2005	2006	2007	2008
Motor gasoline	10.9	9.5	9.5	12.9	14.3
Diesel fuel	29.2	28.0	28.7	27.1	28.3
Jet fuel	8.8	9.1	8.8	9.5	9.2
Ship fuel	0.9	1.7	1.7	1.4	1.1
Heating oil	4.1	3.9	2.2	2.6	2.6
Vacuum gas oil	6.1	9.3	11.4	9.2	12.7
Naphta	9.9	11.1	9.9	6.2	4.4
Fuel oil	17.7	15.9	17.0	21.0	17.6
Bitumen	1.7	1.4	1.6	1.5	1.1
Lubricants	5.7	5.3	5.4	5.1	4.7
Coke	3.1	2.8	2.1	2.0	2.1
Other	1.9	2.0	1.7	1.5	1.9

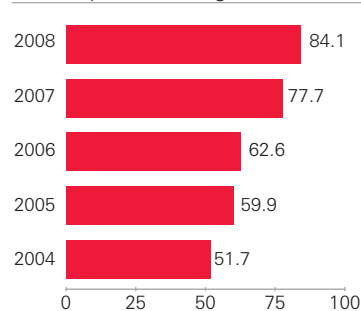
Main operating indicators

	2004	2005	2006	2007	2008
Depth of refining, %	82.3	83.7	81.8	78.4	81.3
Light products yield, %	60.5	60.2	57.9	56.6	57.0
Share of high-octane gasoline in total output of motor gasoline, %	51.7	59.9	62.6	77.7	84.1
Share of clean diesel in total output of diesel fuel, %	8.9	6.7	8.5	16.5	16.2

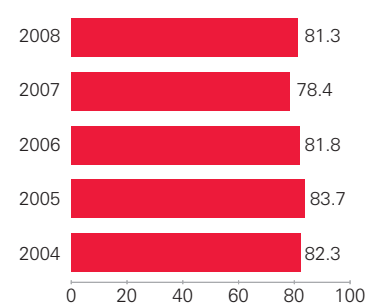
Share of clean diesel (Euro-2 and higher) in total output of diesel fuel, %



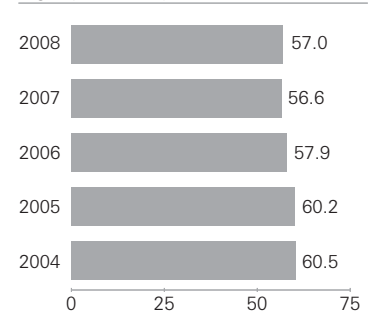
Share of high-octane gasoline in total output of motor gasoline, %



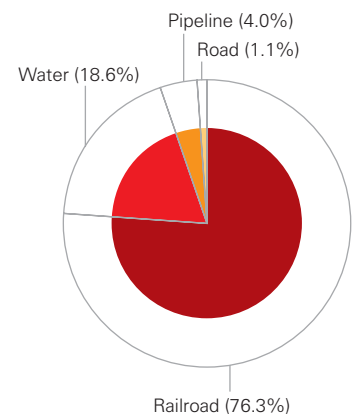
Depth of refining, %



Light products yield, %

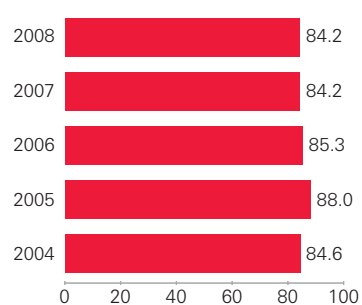


Shipment by transport type from the Volgograd Refinery (2008)

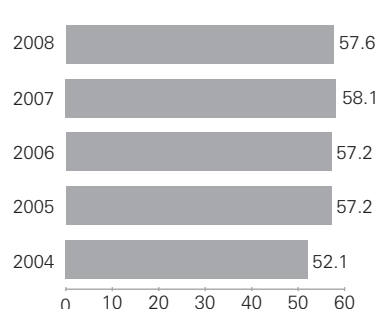


PERM REFINERY

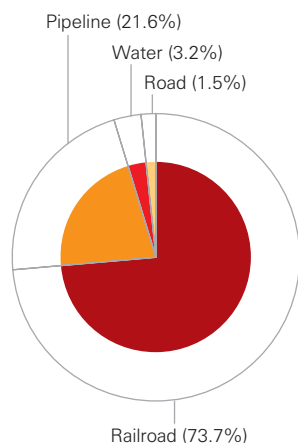
Depth of refining, %



Light products yield, %



Shipment by transport type from the Perm Refinery (2008)


Throughput and petroleum product output at Perm Refinery

	2004	2005	2006	2007	2008
Refinery throughput, mln tons	11.13	10.98	11.86	11.94	12.46
Petroleum product output, mln tons	10.49	10.43	11.32	11.38	11.89

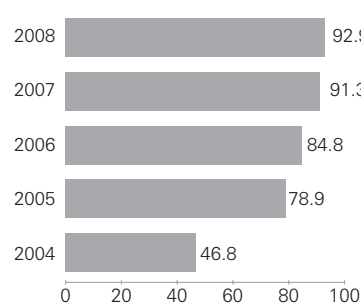
Structure of petroleum product output, %

	2004	2005	2006	2007	2008
Motor gasoline	14.7	14.8	12.9	12.3	13.8
Diesel fuel	28.5	32.8	31.9	32.4	32.8
Jet fuel	5.3	5.2	5.8	6.7	6.5
Ship fuel	4.8	5.1	2.6	2.1	1.8
Heating oil	0.3	0.1	0.1	0.0	0.1
Vacuum gas oil	6.0	8.8	9.9	10.1	10.6
Naphta	2.2	2.8	4.4	6.5	4.6
Fuel oil	19.4	12.2	14.8	15.4	15.4
Bitumen	5.5	5.2	4.8	4.1	4.3
Lubricants	4.2	4.0	3.8	3.7	3.4
Coke	2.3	2.3	2.3	2.2	2.3
Other	6.8	6.7	6.7	4.5	4.4

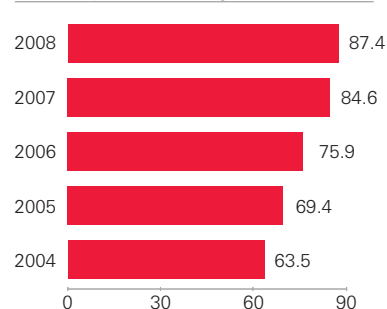
Main operating indicators

	2004	2005	2006	2007	2008
Depth of refining, %	84.6	88.0	85.3	84.2	84.2
Light products yield, %	52.1	57.2	57.2	58.1	57.6
Share of high-octane gasoline in total output of motor gasoline, %	63.5	69.4	75.9	84.6	87.4
Share of clean diesel in total output of diesel fuel, %	46.8	78.9	84.8	91.3	92.9

Share of clean diesel (Euro-2 and higher) in total output of diesel fuel, %



Share of high-octane gasoline in total output of motor gasoline, %





NIZHNY NOVGOROD REFINERY

**Throughput and petroleum product output at
Nizhny Novgorod Refinery**

	2004	2005	2006	2007	2008
Refinery throughput, mln tons	12.33	13.47	14.26	16.67	16.97
Petroleum product output, mln tons	11.69	12.85	13.58	15.97	16.33

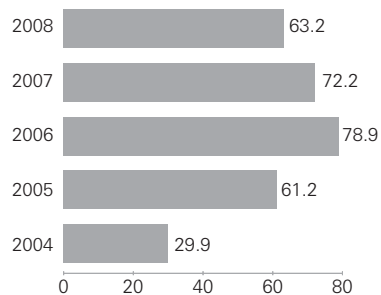
Structure of petroleum product output, %

	2004	2005	2006	2007	2008
Motor gasoline	12.3	12.4	13.0	12.4	12.2
Diesel fuel	24.5	25.8	25.4	25.3	25.5
Jet fuel	5.7	5.0	5.5	5.1	5.4
Ship fuel	5.7	7.1	3.5	0.4	0.0
Heating oil	0.1	0.0	0.0	0.0	0.0
Vacuum gas oil	5.0	8.7	11.1	12.6	14.3
Naphta	1.3	0.6	0.5	1.6	1.7
Fuel oil	37.7	34.5	35.8	37.2	35.6
Bitumen	4.5	3.4	3.0	3.4	3.3
Lubricants	2.4	1.8	1.9	1.5	1.5
Coke	0.0	0.0	0.0	0.0	0.0
Other	0.8	0.7	0.3	0.5	0.5

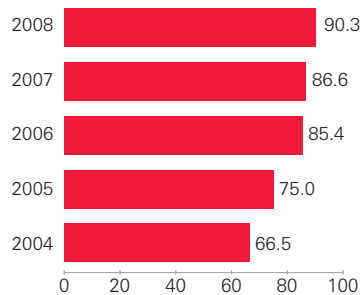
Main operating indicators

	2004	2005	2006	2007	2008
Depth of refining, %	63.4	66.2	64.8	63.7	65.0
Light products yield, %	43.4	42.8	42.3	42.6	43.1
Share of high-octane gasoline in total output of motor gasoline, %	66.5	75.0	85.4	86.6	90.3
Share of clean diesel in total output of diesel fuel, %	29.9	61.2	78.9	72.2	63.2

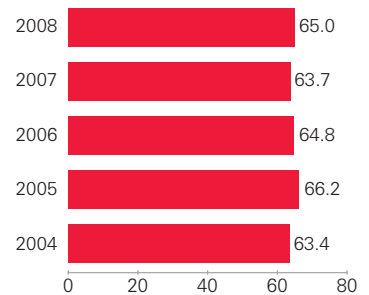
Share of clean diesel (Euro-2 and higher) in total output of diesel fuel, %



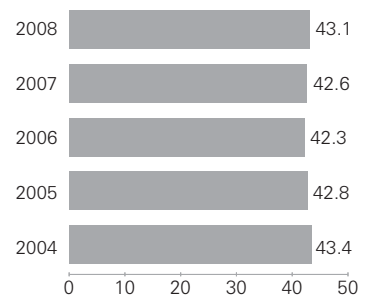
Share of high-octane gasoline in total output of motor gasoline, %



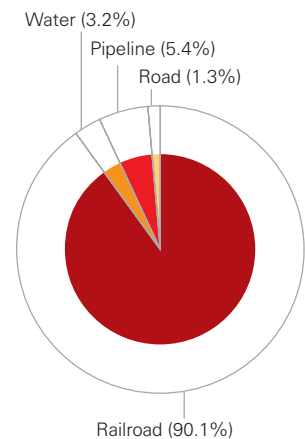
Depth of refining, %



Light products yield, %

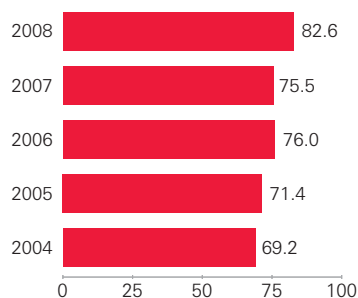


Shipment by transport type from the Nizhny Novgorod Refinery (2008)

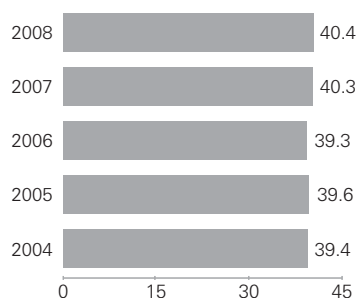


UKHTA REFINERY

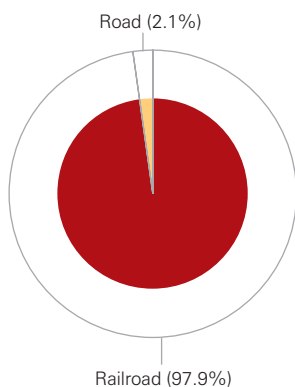
Depth of refining, %



Light products yield, %



Shipment by transport type from the Ukhta Refinery (2008)


Throughput and petroleum product output at Ukhta Refinery

	2004	2005	2006	2007	2008
Refinery throughput, mln tons	2.89	3.41	3.56	4.14	3.81
Petroleum product output, mln tons	2.80	3.26	3.44	3.97	3.66

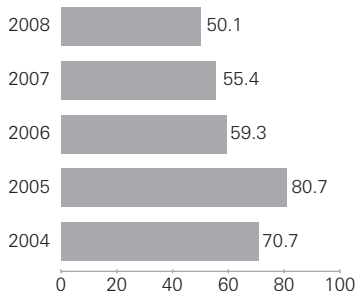
Structure of petroleum product output, %

	2004	2005	2006	2007	2008
Motor gasoline	9.8	9.6	9.0	8.9	8.3
Diesel fuel	27.3	27.9	27.4	28.4	27.9
Jet fuel	0.9	0.7	1.2	0.4	0.7
Ship fuel	12.2	14.5	19.9	16.8	21.7
Heating oil	0.0	0.0	0.0	0.0	0.0
Vacuum gas oil	10.8	11.8	11.8	13.6	15.6
Naphta	2.6	3.1	3.2	4.1	5.1
Fuel oil	33.4	29.6	24.7	25.1	17.6
Bitumen	3.0	2.7	2.7	2.6	3.0
Lubricants	0.0	0.0	0.0	0.0	0.0
Coke	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.1	0.1	0.1	0.1

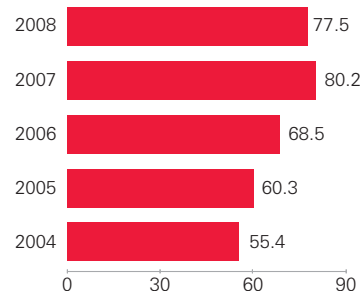
Main operating indicators

	2004	2005	2006	2007	2008
Depth of refining, %	69.2	71.4	76.0	75.5	82.6
Light products yield, %	39.4	39.6	39.3	40.3	40.4
Share of high-octane gasoline in total output of motor gasoline, %	55.4	60.3	68.5	80.2	77.5
Share of clean diesel in total output of diesel fuel, %	70.7	80.7	59.3	55.4	50.1

Share of clean diesel (Euro-2 and higher) in total output of diesel fuel, %



Share of high-octane gasoline in total output of motor gasoline, %



URAY MINI-REFINERY

Throughput and petroleum product output at Urayneftegaz Mini-refinery

	2004	2005	2006	2007	2008
Crude oil inputs, th. tons	100.0	100.0	100.0	99.7	100.0
Returned to oil, th. tons	57.0	57.4	60.8	61.1	58.6
Used for product output, th. tons	43.0	42.6	39.2	38.6	41.4
Output of petroleum products, th. tons	40.1	39.8	36.6	36.1	38.8

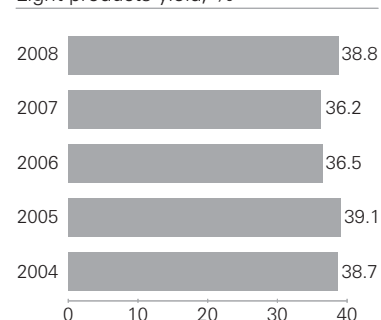
Structure of petroleum product output, %

Motor gasoline	32.4	31.9	34.4	34.0	32.1
Diesel fuel	60.4	60.2	65.6	66.0	67.9
Naphta	3.7	6.1	0.0	0.0	0.0
Bitumen	3.5	1.8	0.0	0.0	0.0

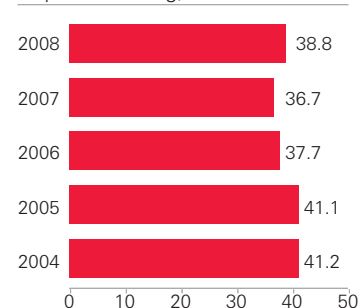
Main operating indicators

	2004	2005	2006	2007	2008
Depth of refining, %	41.2	41.1	37.7	36.7	38.8
Light products yield, %	38.7	39.1	36.5	36.2	38.8

Light products yield, %



Depth of refining, %



KOGALYM MINI-REFINERY

Throughput and petroleum product output at Kogalymneftegaz Mini-refinery

	2004	2005	2006	2007	2008
Crude oil inputs, th. tons	355.4	383.1	377.9	381.3	393.4
Returned to oil, th. tons	174.7	212.3	220.5	227.1	236.3
Used for product output, th. tons	180.7	170.8	157.4	154.2	157.1
Output of petroleum products, th. tons	179.3	158.4	145.1	144.4	146.4

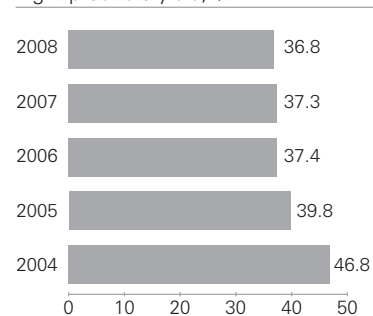
Structure of petroleum product output, %

Motor gasoline	12.8	23.8	29.1	29.1	29.8
Diesel fuel	45.4	49.4	52.3	53.3	54.1
Jet fuel	14.0	14.6	16.0	16.1	14.9
Naphta	20.6	8.4	0.0	0.0	0.0
Bitumen	7.2	3.8	2.6	1.5	1.2

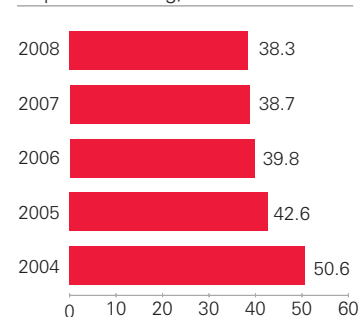
Main operating indicators

	2004	2005	2006	2007	2008
Depth of refining, %	50.6	42.6	39.8	38.7	38.3
Light products yield, %	46.8	39.8	37.4	37.3	36.8

Light products yield, %

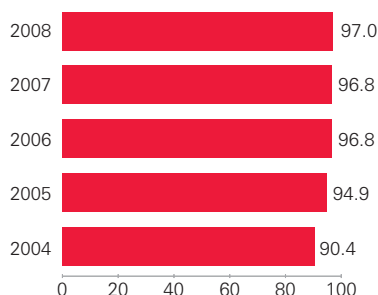


Depth of refining, %

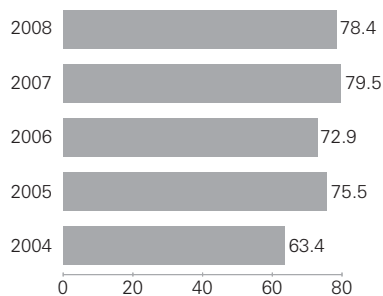


PLOIESTI REFINERY

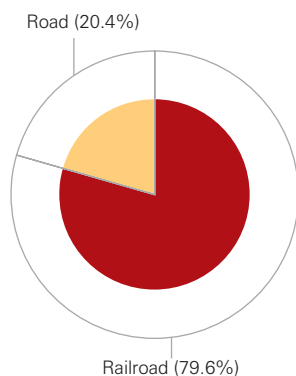
Depth of refining, %



Light products yield, %



Shipment by transport type from the Ploiesti Refinery (2008)


Throughput and petroleum product output at Ploiesti Refinery

	2004	2005	2006	2007	2008
Refinery throughput, mln tons	0.36	2.41	2.32	2.54	2.42
Upgrading of gasolines and diesel fuel, mln tons	0.03	0.00	0.00	0.00	0.00
Blending and packaging of lubricants, mln tons	0.05	0.04	0.04	0.03	0.02
Petroleum product output, mln tons	0.33	2.23	2.03	2.39	2.22

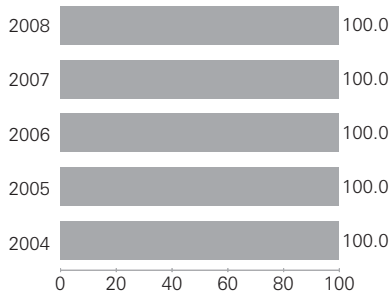
Structure of petroleum product output, %

	2004	2005	2006	2007	2008
Motor gasoline	35.6	36.4	35.1	35.3	34.8
Diesel fuel	35.1	45.3	48.0	49.4	50.4
Jet fuel	0.0	0.0	0.0	0.0	0.0
Ship fuel	0.0	0.0	0.0	0.0	0.0
Heating oil	0.0	0.0	0.0	0.0	0.0
Vacuum gas oil	0.0	0.0	0.0	0.0	0.0
Naphta	0.0	0.0	0.0	0.0	0.0
Fuel oil	4.8	1.4	0.0	0.0	0.0
Bitumen	0.0	0.0	0.0	0.0	0.0
Lubricants	14.9	2.0	2.0	0.4	0.0
Coke	5.8	7.6	8.6	8.3	8.2
Other	3.8	7.3	6.3	6.6	6.6

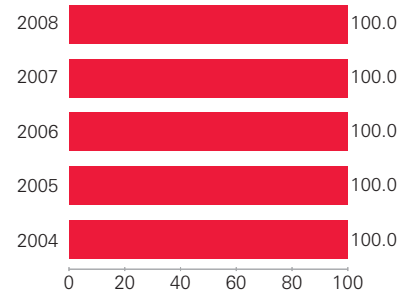
Main operating indicators

	2004	2005	2006	2007	2008
Depth of refining, %	90.4	94.9	96.8	96.8	97.0
Light products yield, %	63.4	75.5	72.9	79.5	78.4
Share of high-octane gasoline in total output of motor gasoline, %	100.0	100.0	100.0	100.0	100.0
Share of clean diesel in total output of diesel fuel, %	100.0	100.0	100.0	100.0	100.0

Share of clean diesel (Euro-2 and higher) in total output of diesel fuel, %



Share of high-octane gasoline in total output of motor gasoline, %



BURGAS REFINERY

Throughput and petroleum product output at Burgas Refinery

	2004	2005	2006	2007	2008
Refinery throughput, mln tons	5.26	6.17	7.06	7.06	7.12
Throughput of fuel oil from Odessa Refinery, mln tons	0.41	0.27	0.03	0.00	0.00
Petrochemical product output, th. tons	353.4	372.5	384.7	385.0	321.7
Petroleum product output, mln tons	4.72	5.34	6.18	6.04	6.21

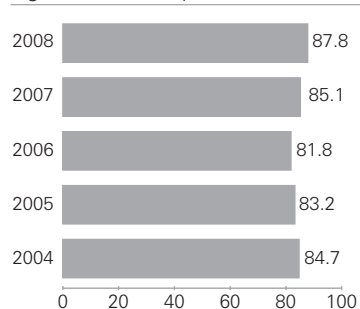
Structure of petroleum product output, %

Motor gasoline	29.7	25.8	25.2	24.3	25.3
Diesel fuel	38.3	39.7	37.4	36.7	36.7
Jet fuel	3.0	2.7	2.4	3.0	3.2
Ship fuel	0.3	0.3	0.0	0.0	0.2
Heating oil	1.7	2.2	3.1	2.4	1.8
Vacuum gas oil	0.0	0.0	0.0	0.0	0.0
Naphta	0.9	0.8	2.0	2.0	2.2
Fuel oil	20.1	22.4	23.8	25.0	23.9
Bitumen	2.8	3.4	3.3	3.4	3.1
Lubricants	0.0	0.0	0.0	0.0	0.0
Coke	0.0	0.0	0.0	0.0	0.0
Other	3.2	2.7	2.8	3.2	3.6

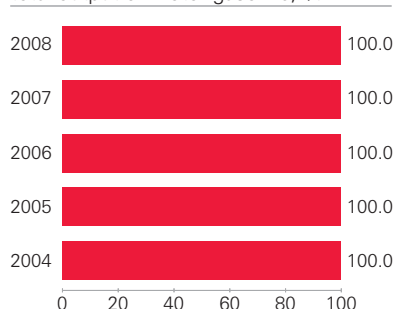
Main operating indicators

	2004	2005	2006	2007	2008
Depth of refining, %	75.5	76.1	75.0	75.3	76.1
Light products yield, %	61.5	59.2	63.7	59.1	61.2
Share of high-octane gasoline in total output of motor gasoline, %	100.0	100.0	100.0	100.0	100.0
Share of clean diesel in total output of diesel fuel, %	84.7	83.2	81.8	85.1	87.8

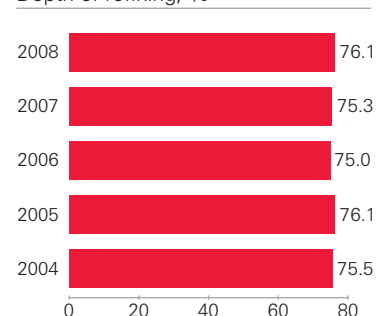
Share of clean diesel (Euro-2 and higher) in total output of diesel fuel, %



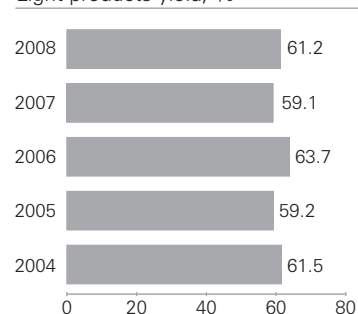
Share of high-octane gasoline in total output of motor gasoline, %



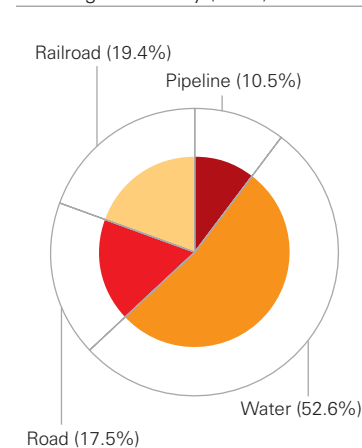
Depth of refining, %



Light products yield, %

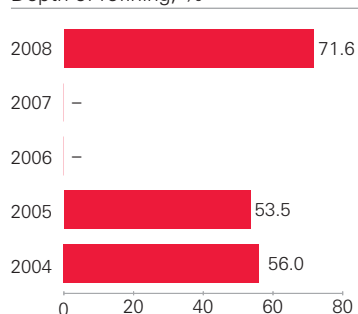


Shipment by transport type from the Burgas Refinery (2008)

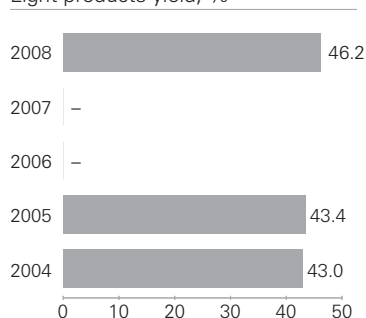


ODESSA REFINERY

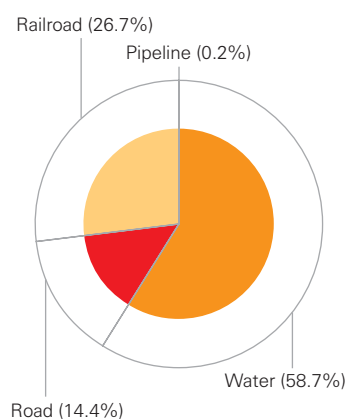
Depth of refining, %



Light products yield, %



Shipment by transport type from the Odessa Refinery (2008)


Throughput and petroleum product output at Odessa Refinery

	2004	2005	2006	2007	2008
Refinery throughput, mln tons	2.45	1.39	-	0.01	2.04
Petroleum product output, mln tons	2.34	1.35	-	0.01	1.96

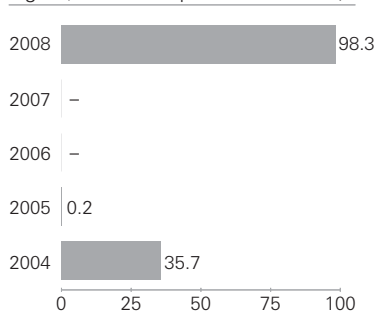
Structure of petroleum product output, %

	2004	2005	2006	2007	2008
Motor gasoline	12.0	13.3	-	-	14.3
Diesel fuel	28.1	27.6	-	-	33.9
Jet fuel	3.2	3.4	-	-	0.0
Ship fuel	0.0	0.0	-	-	0.0
Heating oil	0.0	0.0	-	-	0.0
Vacuum gas oil	4.8	3.9	-	-	20.6
Naphta	1.7	0.5	-	-	0.0
Fuel oil	44.3	46.4	-	-	28.0
Bitumen	5.1	3.9	-	-	1.8
Lubricants	0.0	0.0	-	-	0.0
Coke	0.0	0.0	-	-	0.0
Other	0.8	1.0	-	-	1.4

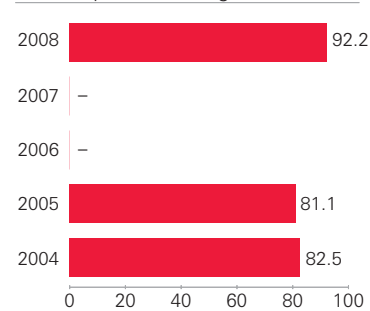
Main operating indicators

	2004	2005	2006	2007	2008
Depth of refining, %	56.0	53.5	-	-	71.6
Light products yield, %	43.0	43.4	-	-	46.2
Share of high-octane gasoline in total output of motor gasoline, %	82.5	81.1	-	-	92.2
Share of clean diesel in total output of diesel fuel, %	35.7	0.2	-	-	98.3

Share of clean diesel (Euro-2 and higher) in total output of diesel fuel, %



Share of high-octane gasoline in total output of motor gasoline, %





ISAB REFINERY COMPLEX

- LUKOIL purchased a 49% stake in a joint venture for management of the ISAB Refinery complex (Italy) in 2008. Value of the deal – 1.45 billion euros (about \$1.83 billion)
- ISAB consists of 2 oil refineries joined by a system of oil pipelines and integrated in a single operating complex, as well as three sea wharfs and a tank battery with capacity of 3.7 mcm
- Acquisition of a share in the complex increased LUKOIL's overall refining capacity by 13% and refining capacities abroad by 60%

2008

Complex capacity mln tons per year	16
<i>including</i>	
Northern Refinery	5
Southern Refinery	11
Complex capacity th. barrels per day	320
Nelson Index	9.3

*Throughput and petroleum product output at the ISAB complex**

2008

Refinery throughput, mln tons	0.52
Petroleum product output, mln tons	0.58

Structure of petroleum product output, %

Motor gasoline	19.0
Diesel fuel	47.1
Jet fuel	0.6
Ship fuel	0.0
Heating oil	0.0
Vacuum gas oil	0.0
Naphta	0.0
Fuel oil	17.8
Bitumen	0.0
Lubricants	0.0
Coke	0.0
Other	15.5

Main operating indicators

2008

Depth of refining, %	85.5
Light products yield, %	74.6

* Group's share for December 2008.