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Research on demand

Oil Refineries in Romania

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OVERVIEW

The Oil Refineries in Romania report concentrates on the present situation in the refining sector in Romania. The glimpse of the individual refineries with their processing capacity and financial performance unfolds into a picture of the whole sector. The report also touches upon the connections of the refining sector with the upstream, midstream and downstream activities of the domestic oil companies. A summary of refineries historical background and an examination of the supporting infrastructure add further scope to the report. The offered regional forecasts for the refining sector attempt to juxtapose the Romanian refineries to the regional context of events. The SWOT analysis at the end generally weighs up the sector.

Overview of the Romanian Economy

The Romanian economy registered a rise of 3.5% in 2013, compared to the previous year. Economic growth was driven by increased exports, mainly of agricultural products and robust industrial output. In 2013, the unemployment rose slightly to 7.3% from 7.0% in 2012, following the decrease in the number of self-employed. Average monthly inflation rate decreased by 0.3 pp year-on-year to 0.1% in 2013. This was driven by a cut in the value added tax (VAT) on flour and bakery products, as well as by an overall decrease in food prices. In 2013, export growth was strong and import remained relatively at the same levels compared to the previous year, leading to considerable improvement in the current account deficit. In 2013, Romania's trade deficit amounted to RON 25.2 bln, down by 41.3% on the year.

The European Commission (EC) forecasts that the Romanian economy will continue growing in 2014 and 2015 but at smaller scales, by 2.5% and 2.6% respectively. Foreign direct investments are forecasted to increase in 2014, as well as the absorption of the EU funds due to progress made in major infrastructure projects. Private consumption is expected to improve as consumers gain confidence on account of higher salaries.

Main Macroeconomic Indicators				
Year	Q1 2014	2013	2012	2011
GDP (bln RON)	126.384	631.1301	587.4994	578.5519
GDP growth rate (%)	3.9	3.5	0.7	2.5
Unemployment rate (%)	7.2	7.3	7	7.4
Inflation rate (avr. monthly for the period in %)	0.4	0.1	0.4	0.3
Trade Balace (total for the period, bln RON)	-5.012	-25.222	-42.964	-41.396

Source: Romanian National Institute of Statistics

In the first quarter of 2014, Romania's GDP rose by 3.9%, compared to the same period in the previous year, according to the country's National Institute of Statistics (INSSE). It was the largest growth reported by an EU member. In the fourth quarter of 2013, the country posted economic growth of 5.2%, the highest GDP growth in the EU.

Industry Overview

Romania's crude oil refining sector is the largest in terms of operating capacity in Southeast Europe (SEE). As of August 2014, there were five big refineries, namely Petromidia, Petrobrazi, Petrotel Ploiesti, Rafo Onesti, and Vega Ploesti. Arpechim Pitesti was among the largest refineries but its owner, OMV Petrom SA, decided to permanently shut it down. The largest fuel retailers are Rompetrol SA, OMV Petrom SA and Petrotel - Lukoil SA.

Romania's total annual refining capacity stands at 12 million tonnes of crude oil. Larger refineries seek to improve their profit and refining margins through ambitious investment programmes. Unable to compete with the refineries of giants as Petrom, Rompetrol and Lukoil, the smaller refineries in the country are either heading to a shut-down or to a shift to the petrochemicals sector.

HISTORY, GEOGRAPHY AND INFRASTRUCTURE

Historical Background

Romania boasts the first large oil refinery in the world built in Ploiesti, southern Romania and over 150 years of tradition in oil production and refining. An edition of *The Science of Petroleum* testifies for the production of 275 tonnes of crude oil in 1938, which made the country a pioneer in the sector worldwide.

The oldest refineries are the Astra and Steaua Romana refineries, which went operational in 1880 and 1885, respectively.

The largest refineries in terms of operating capacity as Petromidia, Petrobrazi and Arpechim in southern Romania, and Rafo, eastern Romania, were built and started work between 1927 and 1977.

Privatisation

As of August 2014, all refineries are in private hands. Oil majors from Europe, the Russian Federation and Kazakhstan operate local refining capacities after extensive investments in modernisation.

The wave of refineries privatisation started in 1997 when Romanian private company Interago SA bought 51% in Astra Romana refinery.

In early-1999, Russia's oil company Lukoil OAO stepped on the Romanian oil market through the acquisition of 51% in Petrotel refinery for some USD 300 mln.

In May 1999, Dutch-based Rompetrol Group BV became the majority shareholder of 51% in Vega refinery for USD 330 mln in cash and commitment to invest in refinery's installations over the following four years. Then, in November 2000, Rompetrol gained control over second local refinery through the purchase of 70% in Petromidia refinery for USD 50.5 mln in cash and another USD 205 mln in pledged investments over a period of five years.

Romania's privatisation authority APAPS (now AVAS) sold 59.9% in Rafo refinery to a consortium of local company Imperial Oil SA and Portuguese investment firm Canyon Servicos LDA for USD 7.48 mln in cash and a commitment to invest another USD 63.37 mln over the following five years.

In December 2004, Austrian OMV AG acquired 51% in Romania's leading oil company Petrom SA and with that the control over its two refineries Arpechim and Petrobrazi. Petrom took over the refineries in 1997 after the restructuring of Romania's state-run National Oil Company. A year later in 1998, the company absorbed Darmanesti crude oil refinery, which later was sold to Romanian company Imperial Oil SA.

Geography

Major Cities in the Domestic Oil Sector

Romania's oil refining sector is concentrated in the vicinity of Ploiesti, southern Romania, where are located four of the country's refineries. The city is the second largest rail transport centre in Romania, which allows for fast connection to all major Romanian cities as well as an access to all parts of the country. In Ploiesti is headquartered Petrotrans SA, the Romania's largest railroad transport operator for crude oil and oil products. Ploiesti also lies along the route of existing pipelines, carrying oil from Constanta oil terminal, southeastern Romania.

Constanta is another key centre for the oil sector in Romania not only because of its sea outlet. The city is the entry point for Russian crude oil and gas into Romanian national pipeline system.

At the port of Constanta operates Oil Terminal SA, responsible for the storage, shipping and transit of crude oil, petroleum, petrochemical and liquid chemical products.

The strategic location of the port and the city itself is strengthened by the connection with the Pan-European Transport Corridor VII, behind which stands the Danube river waterway, and Corridor IV.

The port of Constanta has two smaller supporting ports - Midia and Mangalia. The port of Midia, to the north, was built particularly for the needs of Rompetrol's Petromedia refinery.

In Onesti and Darmanesti in Bacau county, eastern Romania, are located the two crude oil processing capacities of Rafo, the third largest refinery in the country. A pipeline from Constanta connects Onesti to the Romanian transportation system of crude oil and petroleum products.

Infrastructure

Port Oil Terminals

The port of Constanta has 156 berthswith a handling capacity of more than 100 million tonnes per year. The total quay length is 29.83 km, and the berth depth ranges between 8.0 and 19 m.

The port of Constanta has an oil terminal comprising seven berths for tankers of up to 165,000 tonnes deadweight (DWT) and bulk-carriers of 220,000 DWT. Berths are connected to the underground oil storages via 15-km pipeline. The crude oil entering the terminal flows to a tank farm, with a storage capacity of 740,000 cu m per year.

The oil terminal in Constanta branches out to the national pipeline system, which transports crude oil and petroleum products to and from local refineries.

In 2013 through the oil terminal of Constanta's port passed 10.035 million tonnes of liquid bulk cargo, up 0.19% on the year.

Port of Constanta



Source: www.portofconstantza.com

Port of Midia



Source: www.portofconstantza.com

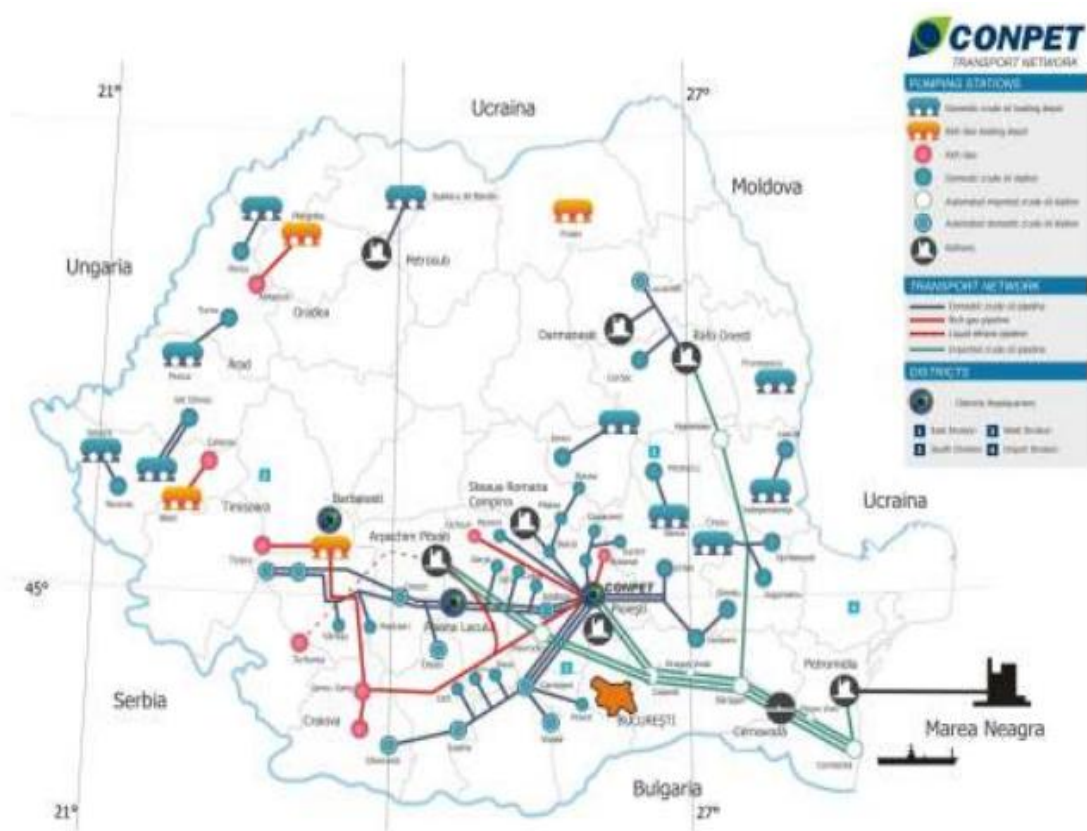
The port of Midia is 25 km to north of Constanta and spreads on 834 ha. Midia has an oil terminal and 14 berths with a total length of 2.24 km. Berths from 1 to 4, designed for crude oil shipments, are 532 m long and 9.0 m deep, while berth 9, handling petroleum products, has a length of 204 m and a depth of 9.0m.

Oil Pipelines and Pipeline Operators

Conpet SA is the Romanian oil pipeline system operator, which is in charge of the transportation of locally-produced and imported crude oil, petroleum and other liquid products to and out of the refineries. Conpet has a pipeline network of 3,800 km, divided into four sub-systems:

- Domestic Pipeline Subsystem (DPLS) is the national crude oil transportation sub-system with a capacity of 10 million tonnes per year and spreading on 1,450 km. It is used for the domestic crude oil transport from the Romanian oilfields in Oltenia and Muntenia counties, both in southern Romania, Ardeal, eastern Romania, and Moldova to the refineries located near Ploiesti, Cimpina in central Romania, Darmanesti, eastern Romania, Onesti and Suplacu de Barcau, western Romania;
- Import Pipeline Subsystem (IPLS) represents the imported oil transportation sub-system with a capacity of 18 million tonnes per year and a length of 1,200 km. It is used for the imported or transit crude oil transportation from the Constanta terminal to the refineries located near Ploiesti, Pitesti, Onesti, eastern Romania, and Midia, southern Romania, or to the barge loading terminal in Cernavoda, on the Danube;
- Petrol and ethane transportation sub-systems with a capacity to carry 314,000 tonnes of petrol per year and 72,000 tonnes of ethane per year. The total length of the pipeline is 1,150 km. It transports liquefied ethane from the station in Turburea, southwestern Romania, to the Arpechim refinery;
- Railroad tankers transportation sub-system. It is used to transport condensate to the Rafo, Petrobrazi, Astra Romana and Arpechim refineries.

Oil Pipelines in Romania



Source: www.conpet.ro

Domestic Pipeline Subsystem (DPLS)



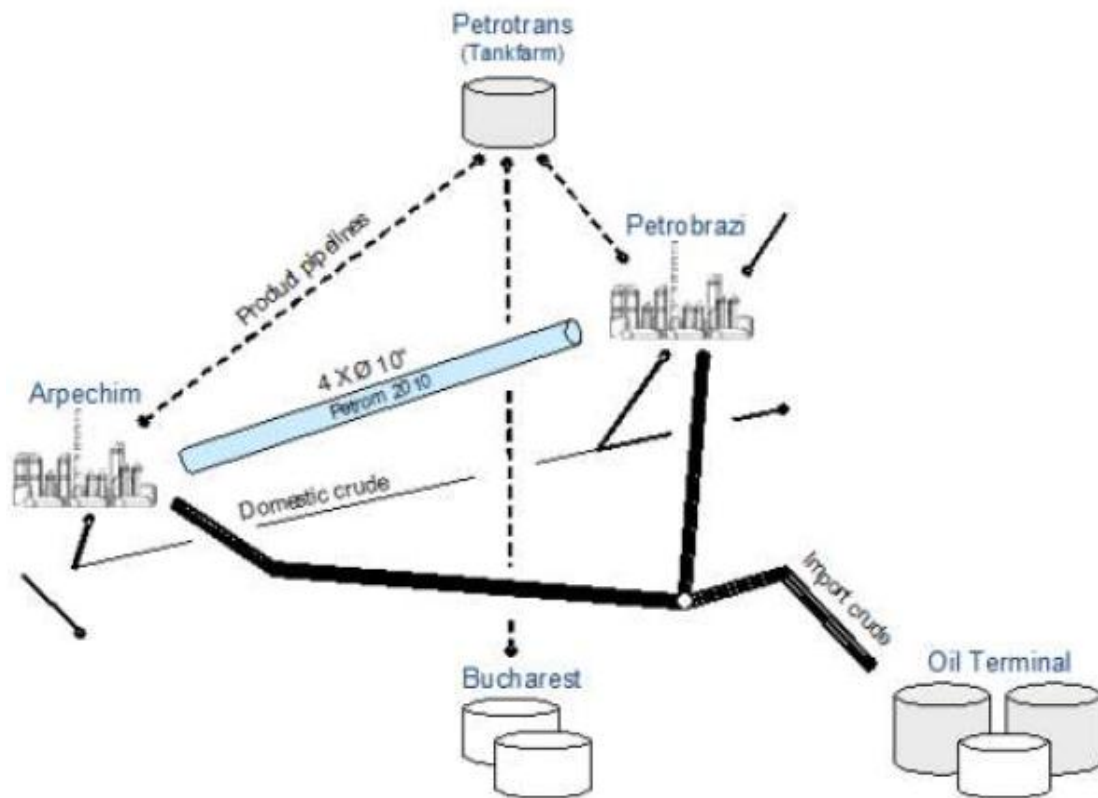
Source: www.conpet.ro

Import Pipeline Subsystem (IPLS)



Source: www.conpet.ro

Arpechim-Petrobrazi Pipeline



Source: www.petrom.com

In 2013 a consortium made of two Romanian and two Serbian companies announced plans to invest EUR 200 mln in the construction of an oil pipeline that will link the southern Romanian city of Pitesti to Serbia's Pancevo. The companies involved in the project are Romania's Conpet SA and Oil Terminal SA and Serbian oil and gas company NIS AD and JP Transnafta, an oil storage operator. The 440 kilometre pipeline will connect an existing pipeline linking the Black Sea port of Constanta and Pitesti, operated by Conpet, with Pancevo. The pipeline, with a capacity of 7.5 million tonnes per year, will feed NIS's refinery in Pancevo and may be later extended to reach the Bosanski Brod refinery in Bosnia and Herzegovina.

Transportation and Warehousing

Petrotrans SA is the sole pipeline transport operator for petroleum products on the internal market. The company, which in August 2014 was in bankruptcy proceedings, also supplies petroleum products by rail.

Oil Terminal SA, in Constanta, imports and exports crude oil and petroleum products. The oil terminal has three storage facilities with a total capacity of 1.7 million cu m, as well as loading and discharging equipment for crude oil and petroleum products at rail platforms with a total length of 30 km.

Oil Terminal Capacity	
Storage Capacity	Volume
Crude oil storage	550,000 tonnes
Petrol storage	220,000 tonnes
Diesel storage	158,000 tonnes
Fuels storage	220,000 tonnes
Chemicals storage	67,000 cu m
Total Storage Capacity	1,700,000 cu m
<i>Source: Oil Terminal SA</i>	

COMPANIES

Major developments

Rompetrol Rafinare SA's Petromidia refinery generated total output of 4.18 million tonnes in 2013, which is a 3.32% growth compared to 2012. The increased production was due to the upgrade in the refinery's capacity, which amounted to 5.0 million tonnes a year.

In the first half of 2014, Petromidia and Vega Refineries processed more than 2.4 million tonnes of raw materials, up 46% year-on-year.

On Apr 12, 2013, Petrotel - Lukoil SA resumed oil production after a major overhaul started in February 2013. The overhaul improved technological processes, boosted the reliability of technical equipment, cut energy consumption and introduced environment-friendly technologies.

In March 2011, OMV Petrom SA decided to permanently shut down Arpechim refinery. The company planned to turn the refinery into a storage centre,

underlining the possibility of negotiations if a buyer appeared. The reasons provided by the company for the decision were the lack of transport connections with the refinery and process inefficiency.

China's companies Baota Petrochemical Group and Junlun Petroleum Co. Ltd showed interest in taking over the Arpechim refinery in November 2013. However, there was no further information on whether the intentions were fulfilled.

OMV Petrom SA posted expenditures for the Arpechim refinery closure, amounting to RON 105 mln in 2013 and RON 116 mln in 2012.

On June 24, 2014, the Prahova County Court approved Astra Romana Refinery SA's insolvency request. Via Insolv Sprl was appointed as the company's judicial administrator.

In 2013, Astra Romana Refinery reported a loss of RON 3.55 mln and sales of RON 2.78 mln.

Major Oil Refineries			
Refinery	Operating capacity in 2013 (million tonnes)	Location	Operational since
Petromidia refinery	5.0	Constanta, southern Romania	1977
Petrobrazi refinery	4.3	Ploiesti, southern Romania	1934
Rafo refinery	3.5	Onesti, eastern Romania	1956
Arpechim refinery*	3.5	Pitesti, southern Romania	1964
Petrotel refinery	2.4	Ploiesti, southern Romania	1927
* OMV Petrom SA closed down the Arpechim refinery in 2011. The company made expenditures for the Arpechim refinery closure amounting to RON 105 mln in 2013 and RON 116 mln in 2012.			
<i>Source: Company websites</i>			

Small Oil Refineries			
Refinery	Operating capacity in 2013 (million tonnes)	Location	Operational since
Astra Romana refinery	0.7	Ploiesti, southern Romania	1880
Vega refinery*	0.45	Ploiesti, southern Romania	1905
Steaua Romana refinery**	0.4	Campina, southern Romania	1895
* On July 23, 2013, Steaua Romana Refinery SA was under insolvency proceedings.			
** On June 24, 2014, Astra Romana Refinery SA was under insolvency proceedings.			
<i>Source: Company website</i>			

Short Profiles of the Leading Five Refineries in Romania

Rompetrol Refineries

Rompetrol Rafinare SA, the refinery unit of Rompetrol Group, operates both Petromidia and Vega refineries. Petromidia is the largest refinery in Romania with an installed capacity of 5.0 million tonnes of crude oil.

Petromidia uses only imported crude oil to produce fuels and other petroleum products.

The refinery has its own port Midia, which grants access to maritime routes and facilitates the transportation of imported crude.

In May 2014, Petromidia produced 465,000 tonnes of raw materials, which was company's largest amount since its construction in 1979. The increased production was due to the upgrade of the refinery's capacity, which amounted to more than 5.0 million tonnes a year.

In August 2013, Rompetrol Rafinare SA announced it completed a USD 53 mln investment in upgrading the coker unit at its Petromedia refinery. Since 2008, total investment in the refinery amounted to USD 600 mln.

Rompetrol Rafinare's Non-consolidated Financial Performance (RON)		
	2013	2012
Balance Sheet		
Non current assets	5,019,533,202	4,509,761,691
Current assets	2,429,046,894	2,854,454,750
Total assets		
Total equity	2,419,266,586	2,143,733,843
Capital	10,145,670,668	10,145,670,668
Total liabilities	5,031,941,487	5,223,057,767
Profit and Loss Account		
Net sales revenue	11,748,666,980	12,323,113,339
Total revenue	11,823,977,539	13,834,199,984
Total expenses	12,048,003,538	14,131,853,484
Net profit/loss	224,025,999	297,653,500
Key Ratios		
ROE	-9.26%	-13.88%
ROA		
Net profit margin	-1.91%	-2.42%
Total liabilities/assets	67.53%	70.90%
Total liabilities/equity	207.99%	243.64%
Fixed assets turnover ratio	2.34	2.73
Total assets turnover ratio	1.58	1.67
<i>Source: Company's annual reports</i>		

Petrobrazi and Arpechim Refineries

Both Petrobrazi and Arpechim refineries are owned by Romanian oil giant Petrom, part of Austrian OMV AG. With operating capacity of 4.5 million tonnes and 3.5 million tonnes of crude oil, respectively, the two refineries comprise the largest refining complex in Romania. Both refineries hold a combined 40% of the total crude processing capacity in the country.

As Petrom is also a crude oil producer, its refineries work on domestic and imported crude.

Petrobrazi has a well-developed pipeline infrastructure, which delivers Petrom's and imported crude oil into the refineries.

Petrobrazi's conversion processes are vacuum and atmospheric distillation and coking.

Petrobrazi mainly produces motor fuels, A-1 jet fuel, heavy fuel oil, light fuel oil, as well as petrochemical products as benzene, toluene, propylene, sulfur and petroleum coke.

Editor's note: The financial performance of Petrobrazi and Arpechim refineries is not available as refineries' results are consolidated in Petrom reports.

Rafo Refinery

Rafo SA is the company in charge of Rafo refinery, property of Austria-based Petrochemical Holdings GmbH. Rafo is Romania's third largest refinery with an installed capacity of 3.6 million tonnes of crude oil.

The refinery's products are distributed mainly on the Romanian market.

The refinery's activity has been on hold since February 2008 over a two-year modernisation programme, estimated at over EUR 350 mln. Rafo became operational again in 2010.

Rafo Refinery Financial Performance (RON)		
	2013	2012
Balance Sheet		
Non current assets	418,034,203	478,392,934
Current assets	113,941,983	154,095,653
Total assets	531,989,001	632,492,586
Total equity	298,748,439	354,470,485
Capital	2,194,936,967	2,194,936,967
Total liabilities	230,100,726	267,015,625
Profit and Loss Account		
Net sales revenue	81,565,930	30,654,645
Total revenue	131,920,957	83,723,406
Total expenses	178,474,336	138,132,468
Net profit/loss	-46,553,379	-54,409,062
Key Ratios		
ROE	-15.58%	-15.35%
ROA	-8.75%	-8.60%
Net profit margin	-57.07%	-177.49%
Total liabilities/assets	43.25%	42.22%
Total liabilities/equity	77.02%	75.33%
Fixed assets turnover ratio	0.20	0.06
Total assets turnover ratio	0.15	0.05
<i>Source: Company's annual reports</i>		

Petrotel Refinery

Petrotel – Lukoil SA is part of Russian oil giant Lukoil OAO, which is the owner of Romanian refinery Petrotel. The refinery has an installed capacity of 3.5 million tonnes of crude oil, well over the operating capacity of 2.4 mln in 2008.

In 2013, the Petrotel refinery's throughput stood at 2.3 mln tonnes of crude oil. Petrotel works on Urals crude oil, imported from the Russian Federation and produces mainly fuels.

The main conversion processes in the refinery are the catalytic cracking with 18,500 barrels per day and the coking with 10,500 barrels per day.

The refinery transports its products both by road and rail to a network of Lukoil branded filling stations.

Petrotel - Lukoil's Non-consolidated Financial Performance (RON)		
	2013	2012
Balance Sheet		
Non current assets	238,959,375	1,095,847,290
Current assets	1,149,627,652	1,262,048,472
Total assets	1,388,822,000	
Total equity	-2,002,774,462	-730,261,468
Capital	301,526,735	301,526,735
Total liabilities	3,383,272,498	3,014,374,250
Profit and Loss Account		
Net sales revenue	5,510,598,513	6,933,476,358
Total revenue	5,782,310,138	7,509,719,620
Total expenses	6,711,207,745	7,784,163,945
Net profit/loss	-928,897,607	274,444,325
Key Ratios		
ROE	46.38%	37.58%
ROA	-66.88%	-11.64%
Net profit margin	-16.86%	-3.96%
Total liabilities/assets	243.61%	127.82%
Total liabilities/equity	-168.93%	-412.78%
Fixed assets turnover ratio	23.06	6.33
Total assets turnover ratio	3.97	2.94
<i>Source: Company's annual reports</i>		

Employment

Employment in the sector of crude oil refining is fluctuating and strongly depends on the size and the processes of the refinery. Foreign owners, technological upgrades and restructuring of activities led to staff reductions in the larger local refineries. Some of the smaller ones accumulated debts and were shut down due to bankruptcy proceedings, which left their workforce jobless.

Number of Employees in the Sector					
	April 2014	2013	2012	2011	2010
Manufacture of coke and refined petroleum products	4,000	4,200	4,700	5,700	6,200
Manufacturing industry total	1,076,200	1,060,200	1,037,000	1,006,200	972,400
Share of total	0.37%	0.40%	0.45%	0.57%	0.64%

Source: Romanian National Institute of Statistics

Gross Average Salary in the Sector (RON)					
	April 2014	2013	2012	2011	2010
Manufacture of coke and refined petroleum products	5,622	5,892	4,877	4,440	4,518
Manufacturing industry total	2,230	2,303	2,131	2,047	1,921

Source: Romanian National Institute of Statistics

Major Refineries Workforce in 2013	
Refinery	Number of Employees
OMV Petrom SA	19,016
Rompetrol Rafinare SA	977
Rafo SA	548
Petrotel - Lukoil SA	468

Source: Companies' annual reports

SUPPLY

The oil market in Romania encompasses:

- ✓ exploration and production – the largest companies being OMV Petrom SA, Romgaz SA and Rompetrol SA;
- ✓ oil pipeline transportation – Conpet SA;
- ✓ oil terminals – Oil Terminal SA;
- ✓ refining – ten refineries, of which nine are operational. Major players are OMV Petrom SA and Rompetrol SA, which operate two refineries each, and Lukoil Romania SRL with one refinery.
- ✓ transportation of petroleum products – Petrotrans SA;
- ✓ production of petrochemicals – OMV Petrom SA and Rompetrol SA have their own petrochemical divisions. Oltchim SA and Azomures SA are other large petrochemical producers.
- ✓ marketing and distribution – all major oil companies in Romania
- ✓ manage own networks of filling stations to distribute petroleum products, coming from their refineries.
- ✓ The regulatory authority in the field of oil is the National Agency for Mineral Resources (NAMR).

Crude oil produced in Romania is sweet and heavy, which requires local refineries to import sour and light crude oil mainly from the Urals and the Caspian Sea.

OMV Petrom SA also imports crude oil from exploration fields in Kazakhstan, Hungary and Moldova, while its local peer Rompetrol SA relies on import from Kazakhstan, Azerbaijan, Turkmenistan and Iraq. Petrotel Lukoil refinery depends on supplies of Russian crude oil.

In line with the emission standards set by the EU directives for fuel quality, Romanian refineries produce fuel products under the Euro 5 standard from January 1, 2009.

In 2013, Romania owned the largest crude oil reserves in SEE, with proven oil stocks amounting to 600 million barrels.

The country's total oil production increased by 4.8% on the year, to 87,000 barrels per day (bbl/d), in 2013. Romania produced 89,000 bbl/d in 2011. Its output was larger than the combined outputs of the rest of the SEE countries in the period 2011-2013.

Romania's Oil Supply						
Indicator	Unit	2013	2012	2011	2010	2009
Proved reserves of crude oil	million barrels	600	600	600	600	600
Oil production	barrels per day	87,000	83,000	89,000	90,000	94,000
Capacity of refineries	barrels per day	N/A	537,277	537,277	516,557	516,557

Source: BP Statistical Review of World Energy, U.S. Energy Information Administration

Production of OMV Petrom SA's Refineries (kilotonnes)			
Product	2013	2012	2011
Gasoline	1,210	946	1,105
Diesel	1,266	1,035	1,184
Kerosene	185	144	195
Heavy Fuel Oils (HFO)	366	350	394
Liquefied petroleum gas (LPG)	221	162	205
Petroleum coke	240	196	216

Source: OMV Petrom SA

Production of Rompetrol Rafinare SA's Petromidia Refinery (million tonnes)			
Product	2013	2012	2011
Gasoline	1.190	1.293	1.258
Diesel	1.915	1.603	1.497
Propylene	0.106	0.121	0.119
Heavy Fuel Oils (HFO)	0.087	0.113	0.150
Sulphur	0.038	0.033	0.033
Petroleum coke	0.209	0.176	0.169
Other products	0.517	0.591	0.586

Source: Rompetrol Rafinare SA

DEMAND

Demand for crude oil in SEE's biggest consumer - Romania, inched down by 0.5% to 215,250 bbl/d in 2013, compared to 2012. However, consumption is expected to rise in the next years, with a pace following the economic recovery of the country.

Oil demand exceeds production, which makes Romania rely on import. In 2013, the estimated petroleum net import was 111,553 bbl/d, down from 114,683 bbl/d in 2012.

The major supplier of petroleum products for Romania is Russia, delivering more than 30% of the total crude oil imports.

Romania's Oil Demand (barrels per day)					
Indicator	2013	2012	2011	2010	2009
Consumption	215,250	216,331	217,000	193,463	201,347
Net imports	111,553	114,683	111,659	86,319	88,648

Source: U.S. Energy Information Administration

In the period 2010-2013 the number of registered motor vehicles grew steadily reaching 5.985 million vehicles in 2013, compared to 5.419 million in 2010. Petrol-fueled cars continued to account for more than 65% of the total number of cars, while 34% of the cars used diesel fuel in 2013.

Number of Registered Motor Vehicles in Romania				
Type of Vehicle	2013	2012	2011	2010
Cars	4,693,651	4,485,148	4,322,951	4,307,290
Utility vehicles	616,205	569,288	521,327	486,373
Trailers and semi-trailers	284,197	268,809	253,620	239,360
Motorcycles and mopeds	101,500	95,326	89,956	85,043
Other	289,532	292,202	294,800	300,923
Total	5,985,085	5,710,773	5,482,654	5,418,989

Source: Direction of Driving Licenses Regime and Vehicles Registration

OMV Petrom SA's Fuel Prices (as of Sept 11, 2014)	
Type of fuel	RON/litre
OMV MaxxMotion Diesel	6.840
OMV Diesel	6.510
OMV MaxxMotion 95	6.420
OMV MaxxMotion 100	7.060

Source: OMV Petrom SA

Romp petrol SA's Fuel Prices		
Type of fuel	RON/litre	As of:
Alto 101	6.880	May 24, 2014
Alto 55	6.720	Sept 10, 2014
Efix	6.190	Jul 20, 2014
Efix 95	6.220	Sept 4, 2014
Premium E4	6.860	Sept 4, 2014

Source: www.pretbenzina.ro

Lukoil Romania SRL's Fuel Prices (as of Sept 11, 2014)	
Type of fuel	RON/litre
Ecto Plus 95	6.280
Euroluk 95	6.170
Ecto Sport 98	6.820
Euro L Diesel	6.210
Ecto Super Diesel	6.640
GPL Auto	3.020

Source: Lukoil Romania SRL

Main clients

The main clients of local refineries are the end customers of fuels in Romania and the neighboring countries, and the local petrochemical sector, which buys petroleum products for raw materials.

INVESTMENTS

The reflux of foreign capital to Romania in the first half of 2014 washed out the country's Foreign Direct Investments (FDI) to EUR 1.192 bln, down 10.3% from a year earlier, according to National Bank of Romania.

In 2013 FDI in Romania went up to EUR 2.710 bln from EUR 1.613 bln in 2012 and EUR 1.815 bln in 2011.

After the privatization, investors from Austria, the Russian Federation and Kazakhstan substituted the state as owners of the largest crude oil processing capacities in the country. Oil majors like OMV AG, Lukoil OAO and Rompetrol Group annually spent millions of euro on modernisation projects and capacity upgrades of their refineries.

Rompetrol SA

In January 2014, the company announced its plans to invest USD 350 mln in the next three years in a cogeneration plant and new filling stations in Romania.

Between 2008 and 2012 Rompetrol SA earmarked EUR 80 mln in increasing the environmental protection at Petromidia platform:

Index		Before modernisation	After modernisation
Capacity	million tonnes/year	3.8	5
elson Index		8.3	10.5
Diesel	million tonnes/year	1.5	2.5
Petrol	million tonnes/year	1.3	1.4
Jet	million tonnes/year	0.15	0.3
EII (Solomon)	%	120	84

OMV Petrom SA

OMV Petrom SA intends to invest up to RON 60 bln by 2030.

The company plans to spend EUR 3.7 mln on the construction of its Institute for Research and Technological Design in Campina, southern Romania, in 2014. The construction is expected to be completed by the beginning of 2015.

Petrotel – Lukoil SA

Russian oil company Lukoil OAO planned to invest USD 51 mln in modernising Petrotel refinery in Ploiesti in 2013 so as to abide by the EU norms in regards to the quality of oil products and environment.

On April 12, 2013, Petrotel-Lukoil resumed oil production after a major overhaul started in February 2013.

Others

Rafo SA planned to borrow for upgrades a total of EUR 390 mln from foreign lenders and its majority shareholder, Austria's Petrochemical Holding GmbH, in 2012. The Austrian company had to provide EUR 10 mln of the total sum.

ASSOCIATED INDUSTRIES & FACTORS

Upstream Oil Industry

In October 2013 Romania's National Agency for Mineral Resources (NAMR) announced plans to launch tenders for 28 onshore and eight Black Sea offshore oil fields. NAMR leased out 20 oil fields in such tenders in 2010.

NAMR reported for the discovery of more than 500 oil and gas fields in Romania by 2009. According to their estimations the rate of undiscovered reserves stands at 20% to 25% of the total reserves in the country.

Midstream Oil Industry

The midstream industry in Romania comprises:

- Conpet SA, in Ploiesti, southern Romania, is the operator of domestic oil pipeline system, carrying locally-produced and imported crude oil.
- Petrotrans SA, Ploiesti, is the sole pipeline transport operator for petroleum products on the internal market.
- Oil Terminal SA, in Constanta, southeastern Romania, has three storage facilities and serves both as an entry and an exit point for crude oil and petroleum products in Romania.

Downstream Oil Industry

The downstream industry puts the refined petroleum products to the market. The end customers are filling stations that retail fuels and petrochemical plants, which use some of the petroleum products as raw materials.

Petrom, Rompetrol and Petrotel have the largest networks of filling stations in Romania. Rompetrol is the market leader with over 747 filling stations countrywide at end-2013. The company sells fuels under its main brand Rompetrol. OMV Petrom SA, majority-owned by Austria's OMV AG, retails fuel through OMV chain of filling stations. In 2013, the company operated 545 filling stations. Petrotel – Lukoil SA operated 301 filling stations in Romania in 2013.

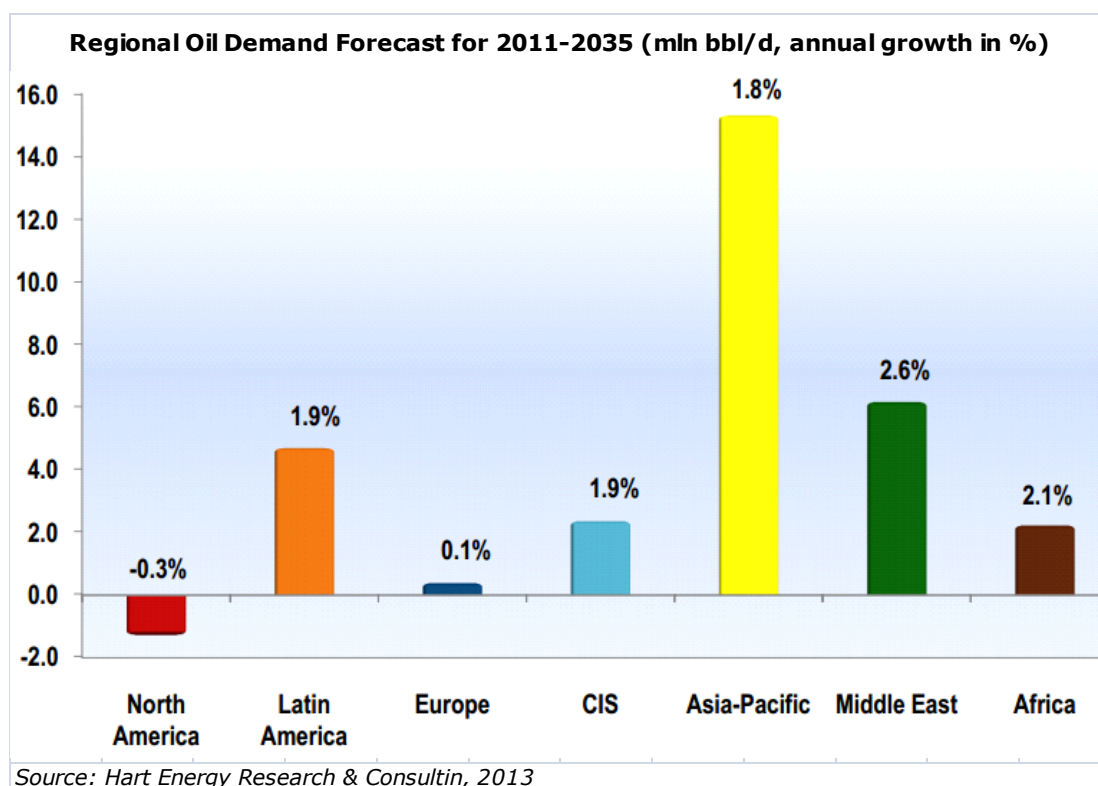
FORECASTS

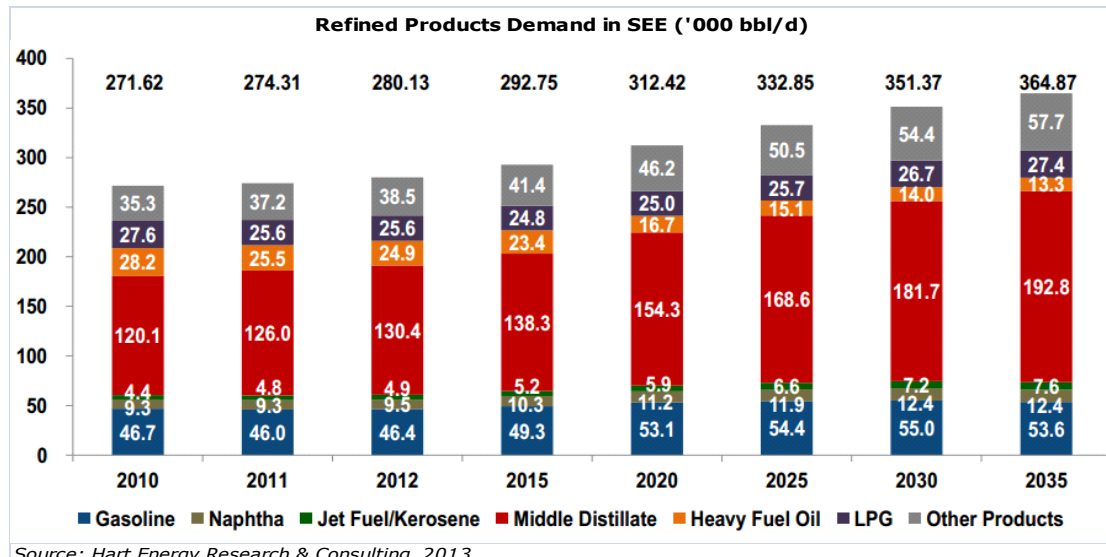
Forecasts of U.S. energy industry publisher Hart Energy reveal that oil demand in Europe will increase by an average annual change of 0.1% in the period 2011-2035, while developing markets' oil consumption will grow with faster rates. The annual growth in Europe is the lowest, compared to the rest of the world.

The consumption of refined products in SEE countries is estimated at 292,750 bbl/d in 2015, up 7.78% compared to 2010, and by 2035, demand in the region will amount to 364,870 bbl/d. In the period 2015-2035, refined oil products demand will rise by an average annual growth of 1.23%, with diesel slicing the

biggest share of the refined products consumption. For 2015, total consumption of diesel in SEE will be 35.6% higher than the consumption of petrol, according to the forecast.

Kerosene marks steady, albeit slight, annual growth in the period 2010-2035 and its consumption in 2035 will be 72.7% higher than in 2010.





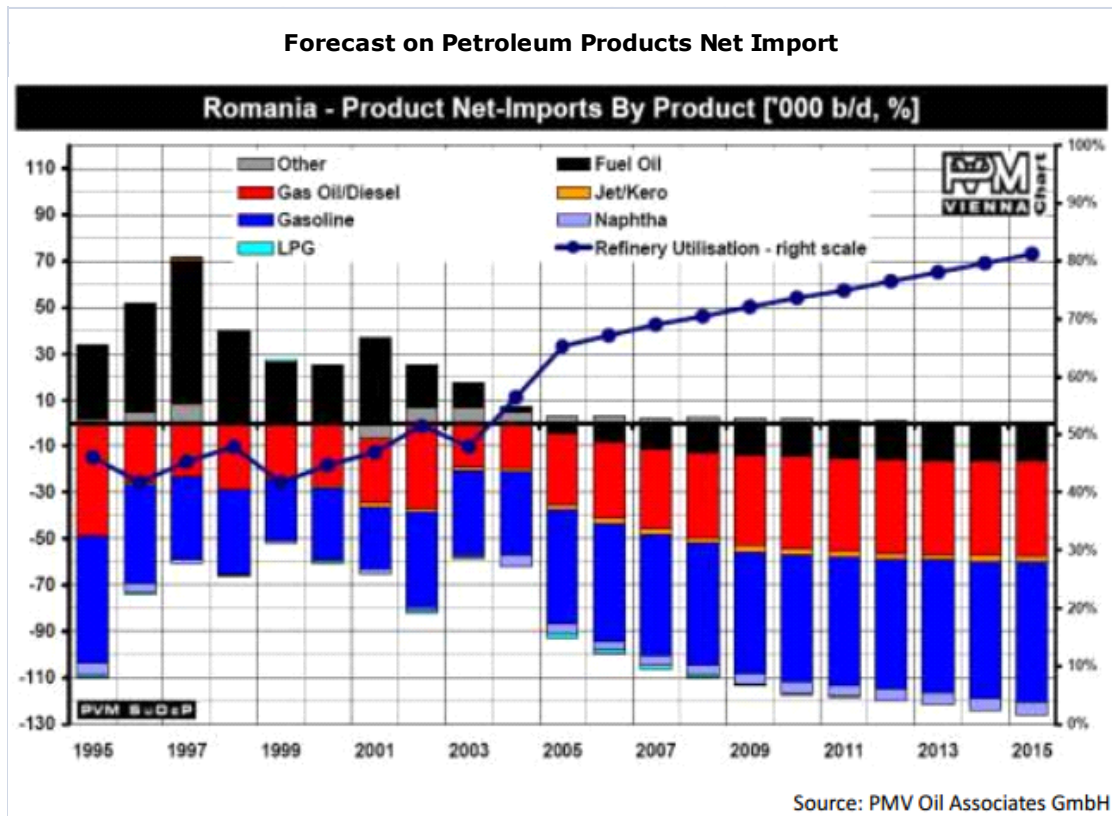
The European Commission Directorate - General for Energy and Transport predicts in its European Energy and Transport – Trends to 2030 report that the input to Romanian refineries will increase to 21,265 kilotonnes of oil equivalent (ktoe) in 2030.

The net imports of crude oil will rise to 8,785 ktoe in 2030 on oil production staying around 6,000 ktoe per annum over the years to 2030.

The report also forecasts the Romanian gross inland oil consumption to rise by 40.8% to 14,949 ktoe by 2030, compared to 2010.

Forecast on Romanian Oil Sector by 2030 (ktoe)				
Year	2015	2020	2025	2030
Fuel Input to Refineries	17,142	18,880	20,289	21,265
Oil Production	6,183	6,172	6,167	6,164
Gross Inland Consumption of Oil	11,915	13,190	14,228	14,949
Net Imports of Oil	5,732	7,018	8,061	8,785
Final Energy Demand for Oil	8,957	10,199	11,182	11,855

Source: PRIMES; European Energy and Transport - Trend to 2030



SWOT ANALYSIS

Strengths

- + Romania has the largest refining capacity in SEE;
- + Most of the refineries in Romania are strategically located in the centre of the country in proximity to each other, which shortens pipeline and logistics routes;
- + High installation capacities that allow processing additional quantities of crude oil;
- + Foreign owners, who are willing to invest in the refineries' development;
- + Refineries are part of integrated oil companies with well-managed upstream and downstream activities;
- + Export-oriented production

Weaknesses

- Smaller refineries require substantial funding to stay operational
- Oil pipeline network between refineries is still underdeveloped
- Relatively low capacity utilisation rates of refineries
- Deteriorating refining margins

Opportunities

- ❖ Romanian refineries could process additional quantities of crude oil when the Pitesti - Pancevo pipeline project is completed;
- ❖ Smaller refineries to specialise in the production of specific petroleum or petrochemical products;
- ❖ Focus on the processing of domestically-produced crude oil;

Threats

- ❖ Romania's strong potential to produce bio-fuels;
- ❖ Decreasing domestic oil production will put the refineries to the pressure of buying crude oil from outside;
- ❖ Smaller refineries are faced to shut-downs due to the country's over-capacity in refining;
- ❖ Failure to comply with the strict EU's environmental standards will lead to closure of refineries;
- ❖ Rise in prices of crude oil will have a negative impact on Romanian oil imports.

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