

**rompetrol**KazMunayGas  
Group  
MemberROMPETROL RAFINARE S.A.  
Bulevardul Navodari, nr. 215  
Pavilion Administrativ  
Navodari, Judetul Constanta  
ROMANIAphone: + (40) 241 50 60 00  
+ (40) 241 50 61 50  
fax: + (40) 241 50 69 30  
office.rafinare@rompetrol.com  
[www.rompetrol-rafinare.ro](http://www.rompetrol-rafinare.ro)  
[www.rompetrol.com](http://www.rompetrol.com)

## 2018 Plan for Production activity Rompetrol Refinery

### Petromidia Refinery

The main assumptions for production plan and sales plan 2018

#### Production Plan for PEM – 2018

**TOTAL THROUGHPUT: 5,445,849 mt out of which: 4,846,000 mt crude oil and 599,849 mt other feedstock out of which 300,000 mt Straight Run Gasoil in Hydrotreaters.**

#### 1. Feedstock

The types of crude oil planned to be processed in 2018 (mt/year):

- REBCO: 3,611,871
- SIBERIAN LIGHT Crude Oil: 1,234,129

Crude unit throughput: 4,846,000 mt/year (14,211 mt/day for 341 processing days).

Density and Sulphur (average value) for Crude unit throughput resulted after PIMS simulation: 0,860 g/cm<sup>3</sup>, 1,23 % wt sulphur content.

#### 2. Commercial Assumptions

##### 2.1 Prices

2.1.1 Crude oil price (Brent Dtd – 50 \$/bbl and Ural RCMB – 49 \$/bbl)

2.1.2 Products (cracks to Brent: Prem Unl 10 ppm FOB Med – 123,3 \$/mt and ULSD 10 ppm FOB Med – 83,8 \$/mt).

2.1.3 2018 Utilities costs are estimated to be 8,24 \$/mt, meaning 44,9 mil \$.

##### 2.2 Structure of products

Product	domestic	export	Total
	mt/year	mt/year	mt/year
Auto Gasoline	283,098	907,504	1,190,602
Jet+Auto Diesel	1,715,380	1,132,225	2,847,605
Fuel oil	142,694	-	142,694
Propylene	140,353	-	140,353
Coke	136,461	121,000	257,462
Sulphur	-	43,557	43,557
Other products	578,205	105,742	683,947

2.2.1 Auto fuels for domestic market (mt/year) – total 1,998,477

2.2.2 Auto fuels for export (mt/year)- total 2,039,729



### 2.2.3 Products to be delivered to Vega refinery (mt/year)

- products to Vega:
  - 176,641 Raffinate
  - 62,428 C5-C6 cut
  - 16,500 Hydrotreated kerosene
  - 2,000 Slurry
  - 129,456 Fuel oil

### 2.2.4 Others:

- Jet A1- 226,600 mt/year (for domestic market)

2018 White Products yield is 85.61 % wt.

Note: Regarding: raffinate, C5-C6 cut, hydrotreated kerosene, slurry and fuel oil, these products will be transferred to Vega Refinery to be processed in order to obtain valuable products.

Auto fuels are sold on domestic market to Rompetrol Downstream (Gasoline Europlus 10 ppm, Gasoline Efix 95, Gasoline Efix S 98, Gasoline RON 98, Diesel Euro 5, Efix Diesel, Efix S 55 Diesel, 55 Diesel).

The other products are sold on domestic market through: Rompetrol Gas, Rompetrol Downstream, Air BP Sales, OMV-Petrom, Heidelbergcement, Electrocarbon, Lafarge, Elsid, Holcim, Mol Romania.

On the export market the products are sold to: KMG Trading (Grecia, Georgia, Bulgaria, Turcia, Liban), Rompetrol Moldova, Rompetrol Georgia, Rompetrol Bulgaria, Rompetrol Ucraina and others.

Auto fuels are sold 49,5 % on domestic market and 50,5 % on export market.

### 3. Unfinished products

The production plan was done without consumption/accumulation of unfinished products.

### 4. Products Specifications / Technical Assumptions

Gasoline production for domestic market contents 5.0% v/v Bio-ethanol according with internal reglementation.

Diesel production for domestic market contents 6.5% v/v Bio-Diesel and Arctic Diesel production for domestic market without Biocomponent on winter time.

During 1st of November 2018 and 24th of November the Refinery will be in total shut down for 24 days. In this period, will be performed Reformer catalyst regeneration,

will be replaced the catalysts for Diesel HT Unit (HDV Unit), New Sulphur Recovery Unit and Delayed Coker heater decoking.

### 5. Operational Results

- Gross Refinery P/L: 297,191 k\$



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- Gross Refinery Margin P/L: 54.57 \$/mt

The table below shows a summary of 2018 PEM-production plan:  
tons/year

<b>Total Feedstock</b>	<b>5,445,849</b>
<b>Crude oil</b>	<b>4,846,000</b>
<b>Other raw materials</b>	<b>599,849</b>
<b>Finished Products</b>	<b>5,306,219</b>
<b>Gasoline</b>	<b>1,367,243</b>
<b>Jet</b>	<b>258,250</b>
<b>Diesel</b>	<b>2,591,355</b>
<b>Fuel oil</b>	<b>147,105</b>
<b>Gases</b>	<b>258,275</b>
<b>Propylene</b>	<b>140,353</b>
<b>LPG</b>	<b>242,619</b>
<b>Petroleum coke</b>	<b>257,462</b>
<b>Sulphur</b>	<b>43,557</b>
<b>Total Loss</b>	<b>139,630</b>

**Operational Director**  
Laurențiu Colțănel

**Refinery Manager**  
Nicolae Nițu

**PPO BU Refining Director**  
Raluca Lainer

PETROMIDIA REFINERY PRODUCTION BUDGET_2018		Brent Did	\$ 50.00	7.567	\$	378.35
			bbl	CF		mt
No. of Days:		Ural	\$ 49.00	7.310	\$	358.19
		Crude Unit		13,211		today
		Total		15,970		
		Yield %	Quantity mt	Price USD/mt		Value (,000\$)
<b>TOTAL FEEDSTOCK :</b>		100	5,445,849	\$ 379.66		\$ 2,067,579
<b>CRUDE OIL/UNIT</b>		88.99	4,846,000	\$ 363.27		\$ 1,760,415
Sour		66.32	3,611,871	\$ 357.85		\$ 1,292,509
REBCO		66.32	3,611,871	\$ 357.85		\$ 1,292,509
Sweet		22.66	1,234,129	\$ 379.14		\$ 467,906
Siberian Light Crude Oil		22.66	1,234,129	\$ 379.14		\$ 467,906
Alternative feedstock		0.00	-	\$ -		\$ -
<b>OTHER FEEDSTOCK :</b>		11.01	599,849	\$ 512.07		\$ 307,164
Naphtha		0.61	33,000	\$ 389.14		\$ 12,842
Light Naphtha type II		0.61	33,000	\$ 389.14		\$ 12,842
Bioethanol feedstock		0.55	29,972	\$ 743.18		\$ 22,275
ETBE		0.04	2,160	\$ 917.80		\$ 1,982
ETBE Feedstock		0.04	2,160	\$ 917.80		\$ 1,982
<b>Gasoline Components</b>		0.53	28,800	\$ 582.22		\$ 16,768
FCC Component		0.00	0	\$ -		\$ -
Refomate		0.26	14,400	\$ 549.92		\$ 7,919
Alkylate		0.26	14,400	\$ 614.53		\$ 8,849
Methanol		0.34	18,721	\$ 266.80		\$ 4,995
Methanol		0.34	18,721	\$ 266.80		\$ 4,995
MTBE		0.53	29,074	\$ 703.96		\$ 20,467
MTBE Feedstock		0.53	29,074	\$ 703.96		\$ 20,467
<b>Chemical grade gas</b>		0.51	27,832	\$ 233.62		\$ 6,502
Diesel Component		0.00	0	\$ -		\$ -
Jet Component		0.00	0	\$ -		\$ -
Pyrolysis Propane		0.51	27,832	\$ 233.62		\$ 6,502
SRGO in Diesel Htr		5.51	300,000	\$ 455.28		\$ 136,583
Biodiesel		1.37	74,600	\$ 881.43		\$ 65,754
Biodiesel Feedstock		1.37	74,600	\$ 881		\$ 65,754
Imported Methane		1.02	55,659	\$ 339.67		\$ 18,905
Imported Methane		1.02	55,659	\$ 339.67		\$ 18,905
Other		0.00	31	\$ 2,933.62		\$ 91
Dyeguard Green		0.00	0.41	\$ 9,835.50		\$ 4
Dyeguard Blue		0.00	2	\$ 3,910.50		\$ 9
KEROPUR DP 5205		0.00	15	\$ 3,021.75		\$ 46
Keropur 3576		0.00	13	\$ 2,426.88		\$ 31
<b>FINISHED PRODUCTS:</b>		97.44	5,306,219	\$ 445.66		\$ 2,364,770
<b>GASOLINE</b>		25.11	1,367,243	\$ 485.69		\$ 664,051
Natural gasoline		1.74	94,990	\$ 475.38		\$ 45,156
Natural Gasoline RON 92		1.74	94,990	\$ 475.38		\$ 45,156
Unleaded Gasoline		20.12	1,095,612	\$ 506.87		\$ 555,334
Efix Gasoline 95		0.61	33,428	\$ 539.20		\$ 18,024
export		0.21	11,369	\$ 535.76		\$ 6,091
intern		0.41	22,059	\$ 540.98		\$ 11,933
EuroPlus Unleaded Gasoline Euro 5		3.38	184,210	\$ 491.16		\$ 90,476
export		3.38	184,210	\$ 491.16		\$ 90,476
intern		0.00	0	\$ -		\$ -
EuroPlus Gasoline BIO		5.97	325,259	\$ 527.90		\$ 171,704
export		1.39	75,460	\$ 515.15		\$ 38,873
intern		4.59	249,799	\$ 531.75		\$ 132,830
Gasoline RON 98 (with bio component)		0.17	9,519	\$ 598.15		\$ 5,694
export		0.00	0	\$ -		\$ -
intern		0.17	9,519	\$ 598.15		\$ 5,694
Gasoline Efix S 98 (with bio component)		0.05	2,546	\$ 589.84		\$ 1,502
export		0.02	825	\$ 566.62		\$ 467
intern		0.03	1,721	\$ 600.97		\$ 1,035
Gasoline Euro Standard		9.49	517,000	\$ 494.63		\$ 255,723
Euro Super 98 Gasoline		0.43	23,650	\$ 516.37		\$ 12,212
Gasoline for chemical use		3.24	176,641	\$ 359.83		\$ 63,560
Naphtha		0.00	0	\$ -		\$ -
Light Naphtha		0.00	0	\$ -		\$ -
Raffinate - for Vega		3.24	176,641	\$ 359.83		\$ 63,560
<b>JET FUEL</b>		4.74	258,250	\$ 530.34		\$ 136,961
Aviation Turbine Fuel Jet A1		4.74	258,250	\$ 530.34		\$ 136,961
export		0.28	15,150	\$ 567.74		\$ 8,601
intern		4.16	226,600	\$ 530.32		\$ 120,171
intern- for VGA		0.30	16,500	\$ 496.27		\$ 8,188
<b>Solvents</b>		0.00	-	\$ -		\$ -
Heavy Solvent		0.00	0	\$ -		\$ -
<b>DIESEL FUEL</b>		47.58	2,591,355	\$ 496.95		\$ 1,287,776
Diesel Fuel		47.55	2,589,355	\$ 497.17		\$ 1,287,355
Diesel Euro 5		19.72	1,073,803	\$ 469.84		\$ 504,514



PETROMIDIA REFINERY PRODUCTION BUDGET_2018		Brent Dtd	\$ 50.00	7.567	\$	378.35
				bbl	CF	mt
No. of Days:		Ural	\$ 49.00	7.310	\$	358.19
		Crude Unit		14,701	to/day	
		Total		15,970		
		Yield %	Quantity mt	Price USD/mt	Value (,000\$)	
	export	18.49	1,006,724	\$ 468.57	\$	471,720
	intern	1.23	67,079	\$ 488.88	\$	32,794
	EURO 5 Diesel (Super Diesel Euro 5)	18.28	995,607	\$ 524.60	\$	522,297
	export	0.00	0	\$ -	\$	-
	intern	18.28	995,607	\$ 524.60	\$	522,297
	EURO 5 Diesel (Winter Diesel)	6.81	370,839	\$ 494.72	\$	183,462
	export	1.24	67,439	\$ 481.26	\$	32,456
	intern	5.57	303,400	\$ 497.71	\$	151,006
	51 EFIX Diesel	1.50	81,452	\$ 510.60	\$	41,589
	export	0.71	38,800	\$ 493.15	\$	19,134
	intern	0.78	42,652	\$ 526.47	\$	22,455
	51 EFIX Winter Diesel	0.28	15,336	\$ 505.36	\$	7,750
	export	0.00	0	\$ -	\$	-
	intern	0.28	15,336	\$ 505.36	\$	7,750
	55 Diesel	0.75	40,872	\$ 532.99	\$	21,784
	export	0.00	0	\$ -	\$	-
	intern	0.75	40,872	\$ 532.99	\$	21,784
	55 EFIX S Diesel	0.21	11,447	\$ 520.54	\$	5,959
	export	0.08	4,112	\$ 494.04	\$	2,032
	intern	0.13	7,334	\$ 535.39	\$	3,927
	Heating Oil	0.00	-	\$ -	\$	-
	Slurry	0.04	2,000	\$ 210.37	\$	421
	LIGHT FUEL OIL	0.00	-	\$ -	\$	-
	Light Fuel Oil type 3	0.00	-	\$ -	\$	-
	FUEL OIL	2.70	147,105	\$ 201.30	\$	29,612
	Fuel Oil	2.70	147,105	\$ 201.30	\$	29,612
	Heavy Fuel Oil-vega - Type I	2.38	129,456	\$ 195.03	\$	25,248
	FCC residues -exp.	0.24	13,238	\$ 268.35	\$	3,552
	Fuel Oil-UTM+export	0.08	4,411	\$ 184.21	\$	813
	Vacuum distillate/VGO	0.00	-	\$ -	\$	-
	VGO	0.00	-	\$ -	\$	-
	GASES	4.74	258,275	\$ 255.51	\$	65,991
	Chemical grade gas	1.15	62,488	\$ 354.84	\$	22,173
	Propane fuel	0.00	60	\$ 369.08	\$	22
	export	0.00	0	\$ -	\$	-
	intern	0.00	60	\$ 369.08	\$	22
	C5-C6 Cut	1.15	62,428	\$ 354.82	\$	22,151
	Hexane Concentrate	0.00	0	\$ -	\$	-
	Fuel gas	3.60	195,788	\$ 223.80	\$	43,818
	Fuel gas	3.60	195,788	\$ 223.80	\$	43,818
	PROPYLENE	2.58	140,353	\$ 595.68	\$	83,606
	Propylene	2.58	140,353	\$ 595.68	\$	83,606
	Propylene	2.58	140,353	\$ 595.68	\$	83,606
	LIQUIFIED PETROLEUM GAS	4.46	242,619	\$ 270.01	\$	65,510
	Liquified petroleum gas	2.51	136,877	\$ 292.15	\$	39,989
	Liquified petroleum gas	1.50	81,905	\$ 274.48	\$	22,482
	export	0.00	0	\$ -	\$	-
	intern	1.50	81,905	\$ 274.48	\$	22,482
	Bottled LPG for Domestic Use	0.00	0	\$ -	\$	-
	Automotive LPG	1.01	54,973	\$ 318.48	\$	17,508
	Butan-Butylene Cut	0.00	0	\$ -	\$	-
	MTBE Raffinate	0.00	0	\$ -	\$	-
	Propane-butane Commercial	1.94	105,742	\$ 241.35	\$	25,521
	export - vesels	0.00	0	\$ -	\$	-
	export - NA	0.92	50,366	\$ 221.66	\$	11,164
	export -others	1.02	55,376	\$ 259.25	\$	14,356
	PETROLEUM COKE	4.73	257,462	\$ 111.28	\$	28,650
	Petroleum Coke	4.73	257,462	\$ 111.28	\$	28,650
	Sorted Petroleum Coke for Domestic Use	0.31	16,800	\$ 130.00	\$	2,184
	Green Petroleum Coke Type 4	4.42	240,662	\$ 109.97	\$	26,466
	export	2.22	121,000	\$ 105.00	\$	12,705
	intern	2.20	119,661	\$ 115.00	\$	13,761
	SULPHUR	0.80	43,557	\$ 60.00	\$	2,613
	Petroleum Sulphur	0.80	43,557	\$ 60.00	\$	2,613
	Petroleum Sulphur	0.80	43,557	\$ 60.00	\$	2,613
	export	0.80	43,557	\$ 60.00	\$	2,613
	intern	0.00	0	\$ -	\$	-
	TOTAL UNFINISHED PRODUCTS:	0.00	0	\$ -	\$	-
	TOTAL LOSS	2.56	139,630			
	LOSS	2.56	139,630			
	Loss	2.56	139,630			
	Coke/Catalyst	1.17	63,699			

PETROMIDIA REFINERY PRODUCTION BUDGET_2018		Brent Dtd	\$ 50.00	7,567	\$ 378.35
			bbl	GF	mt
		Ural	\$ 49.00	7,310	\$ 358.19
		Crude Unit		14,211	to/day
		Total		14,970	
	No. of Days:			341	
		Yield %	Quantity mt	Price USD/mt	Value (,000\$)
	Hydrogen purge gas	0.51	27,829		
	Technological Loss	0.88	48,101		
	GROSS REFINERY P/L				\$ 297,191
	GROSS REFINERY MARGIN				\$ 54.57
	GROSS REFINERY P/L, excluding fuel gas				\$ 253,373
	GROSS REFINERY MARGIN				\$ 46.53
	Gasoline & Diesel		3,779,957		
	Export		2,024,579		
	Intern		1,755,378		
	Gasoline intern		283,098		
	Diesel intern with biocomponent		1,405,201		
	white products, %		85.61		

**MEMBERS OF THE BOARD OF DIRECTORS:**

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Catalin Dumitru

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Yedil Utekov

Member  
Alexey Golovin

Member  
Nicoleta-Viorica Soisun

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Chief Financial Officer  
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PPO BU Refining Director  
Raluca Lainer

Refinery Manager  
Nicolae Nitu

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## Production Plan 2018

### Rompetrol Rafinare

#### Vega Refinery

#### The main assumptions for production plan and sales plan 2018

##### 1. Feedstock

Vega refinery will process raw material from Petromidia Refinery. The total feedstock for 2018 will be **387,095** tonnes in the following structure:

- o C5-C6 cut – 62,428 tonnes
- o raffinate – 176,641 tonnes
- o hydrotreated kerosene – 16,500 tonnes
- o slurry – 2,000 tonnes
- o fuel oil – 129,456 tonnes
- o polymer for bitumen – 55 tonnes
- o dyeguard blue – 15 tonnes

##### 2. Structure of products

FINITE PRODUCTS	domestic	export	TOTAL
	mt/year	mt/year	mt/year
Ecological solvents	825	47,044	47,869
n-Hexane	4,188	78,416	82,604
Naphtha gasoline	1,200	104,413	105,613
White spirit	9,461	4,522	13,983
Heating oils	8,768	-	8,768
Fuel oil	19,276	5,150	24,426
Bitumen	99,569	-	99,569
<b>TOTAL</b>	<b>143,286</b>	<b>239,545</b>	<b>382,831</b>

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Vega refinery is the only east European producer of N-hexane, used in polypropylene production and extraction of vegetable oils in food industry.

Vega refinery is also the only romanian producer of Ecological Solvents – Rompetrol SE, products with lower sulphur and aromatics content and lower toxicity level.

Total volume of petroleum products estimated to be delivered in 2018 is 385,331 tonnes, out of which:

- 46% domestic market;
- 54% export market.

On the export market the products are sold in India, Turkey, Ukraine, Moldova, Serbia, Hungary, Uzbekistan, Germany, Bulgaria, Poland, Austria and Italy.

### 3. Products Specifications

The finished products for Vega Refinery are produced according to Quality Specific Standards that are in use at the moment and comply with the internal and international standards for these products.

The table below shows a summary of 2018 VEGA-production plan:

<b>Raw materials</b>	<b>387.095</b>
Crude oil	-
Other feedstock	387.095
<b>Finite products</b>	<b>382.831</b>
Ecological solvents	47.869
n-Hexane	82.604
Naphtha gasoline	105.613
White spirit	13.983
Gasoil	3.971
Light liquid fuel	4.797
Fuel oil	24.426
Bitumen	99.569
<b>Consumption</b>	<b>4.263</b>





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#### 4. Operational results

- Gross Refinery P/L: 39,015 k\$
- Gross Refinery Margin P/L: 100.8 \$/mt

**Operational Director**  
Laurentiu Coltanel

**Refinery Manager**  
Nicolae Nitu

**PPO BU Refining Director**  
Raluca Lainer

VEGA REFINERY  
PRODUCTION BUDGET\_ 2018

No. of days	1,861 today		TOTAL 2018	
	365			Total 18
	Efficiency %	Qty (000 mt)	Price USD/mt	Value (000 USD)
<b>RAW MATERIALS:</b>	100.00	387.895	352.81	\$ 136,572.879
<b>OTHER RAW MATERIALS :</b>	100.00	187.093	352.81	\$ 136,572.879
Gasoline	61.76	239.869	487.33	\$ 97,388.795
CS-C6 Cut	16.13	62.428	403.66	\$ 25,199.654
Raffinate type IV	45.53	176.641	408.63	\$ 72,180.642
Petroleum	4.26	16.508	534.94	\$ 8,826.444
JET MEDIA	4.26	16.508	534.94	\$ 8,826.444
Used oil				
Gas oil	8.52	2.088	243.43	\$ 496.863
Slurry	0.52	2.090	243.43	\$ 496.863
Fuel Oil	33.48	129.471	229.48	\$ 29,718.388
Deeguard Blue	0.00	0.015	3,851.25	\$ 56.371
Fuel Oil -Media	33.44	129.456	229.07	\$ 29,653.917
Polymer SBS	8.01	8.055	3,069.15	\$ 148,189
Other raw materials	0.00	0.000	-	\$ -
<b>FINITE PRODUCTS :</b>	98.99	382.837	418.65	\$ 175,586.810
<b>GASOLINE :</b>	68.99	236.886	596.89	\$ 119,480.95
Rompetrol SE	12.37	47.869	496.90	\$ 23,786.19
Rompetrol SE 30/50	11.80	45.669	491.87	\$ 22,463.00
export	11.80	45.669	491.87	\$ 22,463.00
intern	0.00	0.000	-	\$ -
Rompetrol SE 65/30	0.28	1.100	588.99	\$ 647.84
export	0.21	0.825	563.95	\$ 465.26
intern	0.07	0.275	663.95	\$ 182.59
Rompetrol SE 35/80				
Rompetrol SE 25/115	0.28	1.100	613.95	\$ 675.34
export	0.14	0.550	563.95	\$ 318.17
intern	0.14	0.550	663.95	\$ 365.17
Naphtha gasoline	27.28	105.613	448.77	\$ 46,551.37
Light Naphtha type II - export	18.45	71.413	445.77	\$ 31,833.73
Boxina Naphtha - transfer Media	8.53	33.000	428.95	\$ 14,155.22
Naphtha gasoline- export	0.31	1.200	468.47	\$ 562.17
n-Hexan	21.34	82.604	594.93	\$ 49,143.65
export	20.26	78.416	593.12	\$ 46,509.91
intern	0.08	0.300	713.47	\$ 214.04
Petrochemicals	1.00	3.888	622.43	\$ 2,419.69
<b>WHITE SPIRIT</b>	1.70	6.587	754.94	\$ 4,972.61
Refined white spirit	1.70	6.587	754.94	\$ 4,972.61
export	1.17	4.522	755.13	\$ 3,414.54
intern	0.53	2.065	754.52	\$ 1,558.08
White spirit	0.00	0.000	-	\$ -
export	0.00	0.000	-	\$ -
intern	0.00	0.000	-	\$ -
<b>PETROLEUM</b>	1.91	7.396	635.05	\$ 4,696.72
Liquid fuel for non-industrial use type P-intern	1.91	7.396	635.05	\$ 4,696.72
<b>GASOIL</b>	1.03	3.971	564.94	\$ 2,243.18
Rompetrol Color Extra 1	1.03	3.971	564.94	\$ 2,243.18
export				
intern	1.03	3.971	564.94	\$ 2,243.18
<b>LIGHT LIQUID FUEL</b>	1.34	4.797	639.35	\$ 3,047.58
Light liquid fuel type 3	0.46	1.797	578.29	\$ 1,039.44
export				
intern	0.46	1.797	578.29	\$ 1,039.44
Rompetrol Color Economic 3	0.78	3.000	516.02	\$ 1,548.06
<b>FUEL OIL</b>	6.31	24.416	347.85	\$ 8,496.49
Fuel Oil	6.31	24.416	347.85	\$ 8,496.49
Fuel Oil 40-45	4.98	19.278	352.98	\$ 6,804.04
Fuel Oil 40-45 -export	1.33	5.150	328.63	\$ 1,692.45
<b>BITUMEN</b>	18.72	95.569	332.43	\$ 31,189.35
Road Bitumen	18.46	93.549	331.44	\$ 30,629.95
Bitumen type D 24.40				
Bitumen type D 50/70	21.77	84.269	331.05	\$ 27,897.22
Bitumen type D 70/100	1.78	6.950	330.93	\$ 2,303.40
Bitumen type D 100/120				
Bitumen type D 160/220	1.91	7.400	330.99	\$ 2,449.34
Modified Bitumen	4.26	1.899	479.40	\$ 479.40
Road bitumen type EUROBITUM	0.26	1.000	479.40	\$ 479.40
Road bitumen type EUROBITUM				
Bitumen for waterproofing				
Bitumen for Pipe protection				
<b>OILS</b>				
<b>OTHER PRODUCTS</b>	0.00	0.000		\$ -
<b>UNFINISHED PRODUCTS</b>	0.00	0.000		\$ 0.00
<b>TOTAL CONSUMPTION :</b>	130	4,263		\$ 8.80
<b>CONSUMPTION</b>	130	4,263		\$ 8.80
Consumption	130	4,263		\$ 8.80
Technological consumption	1.10	4.263		\$ 0.00
Fuel oil for combustion	0.00	0.000		\$ 0.00
<b>GROSS REFINERY PL</b>				\$ 39,014.7
<b>GROSS REFINERY MARGIN</b>				100.8

MEMBERS OF THE BOARD OF DIRECTORS:

Chairman  
Catalin Dumitru

Member and General Manager  
Yedli Utekov

Member  
Alexey Golovin

Member  
Nicoleta-Viorica Soisun

Member  
Mihal-Liviu Mihalache

Chief Financial Officer  
Vasile-Gabriel Manole

PPO BU Refining Director  
Raluca Lainer

Refinery Manager  
Nicolae Nitu



**rompetrol**

KazMunayGas  
Group  
Member

ROMPETROL RAFINARE S.A.  
Bulevardul Navodari, nr. 215  
Pavilion Administrativ,  
Navodari, Judetul Constanta,  
ROMANIA

phone: + (40) 241 50 60 00  
+ (40) 241 50 61 50  
fax: + (40) 241 50 69 30  
office.rafinare@rompetrol.com  
[www.rompetrol-rafinare.ro](http://www.rompetrol-rafinare.ro)  
[www.rompetrol.com](http://www.rompetrol.com)

## 2018 Plan for Production activity Rompetrol Refinery

### PETROCHEMICALS AREA

The main assumptions for production plan and sales plan 2018

### Production Plan for PETROCHEMICALS AREA – 2018

**POLYMERS PRODUCTION: 205,180 mt, out of which:**

- PP : 86,410 mt,
- LDPE : 72,600 mt,
- HDPE : 46,170 mt

**PROPYLENE TYPE P PRODUCTION: 23,177 mt**

#### **Feedstock**

Raw materials planned to be processed in 2018 (mt/year):

- Propane-propylene mixture : 140,214 mt from FCC
- Ethylene : 122,041 mt

#### **1. Commercial Assumptions**

##### **2.1 Prices**

###### **2.1.1 Raw materials prices:**

- Propane-propylene mixture 696 \$/mt;
- Ethylene 1118 \$/mt

###### **2.1.2 Products**

- PP 1236 \$/mt (crack 540 \$/mt)
- LDPE 1375 \$/mt (crack 257 \$/mt)
- HDPE 1456 \$/mt (crack 338 \$/mt)
- Propylene type P 966 \$/mt

**2.1.3 Utilities costs are estimated to be 122.4 \$/ product mt, meaning 27.948 mil \$.**



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Pavilion Administrativ,  
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ROMANIA

phone: + (40) 241 50 60 00  
+ (40) 241 50 61 50  
fax: + (40) 241 50 69 30  
office.rafinare@rompetrol.com  
[www.rompetrol-rafinare.ro](http://www.rompetrol-rafinare.ro)  
[www.rompetrol.com](http://www.rompetrol.com)

## 2.2 Sales (mt/year)

Polymers Sale	tone/year				
	205180	Domestic		Export	
PP	86,410	34,200	39.6%	52,210	60.4%
LDPE	72,600	25,820	35.6%	46,780	64.4%
HDPE	46,170	8,541	18.5%	37,629	81.5%
<b>Propylene type P sale</b>	<b>22,500</b>	<b>22,500</b>	<b>100.0%</b>		

The table below shows a summary of 2018 PETROCHEMICAL AREA-production plan:

tone/year	
<b>Total Feedstock</b>	<b>262,255</b>
Propane-propylene mixture	140,214
Ethylene	122,041
<b>Polymers production</b>	<b>205,180</b>
PP	86,410
LDPE	72,600
HDPE	46,170
<b>Propylene type P production</b>	<b>23,177</b>

**Operational Director**  
Laurențiu Colțănel

**Petrochemical Area Manager**  
Traian Stănică

**PPO BU Refining Director**  
Raluca Lainer



**PETROMICALS AREA**

**Production Budget\_2018**

tons/year

<b>Total Feedstock</b>	<b>262,255</b>
Propane-propylene mixture	140,214
Ethylene	122,041
<b>Polymers production</b>	<b>205,180</b>
PP	86,410
LDPE	72,600
HDPE	46,170
<b>Propylene type P production</b>	<b>23,177</b>

tons/year

<b>Polymers Sale</b>	<b>205,180</b>	<b>Domestic</b>		<b>Export</b>	
PP	86,410	34,200	39.6%	52,210	60.4%
LDPE	72,600	25,820	35.6%	46,780	64.4%
HDPE	46,170	8,541	18.5%	37,629	81.5%
<b>Propylene type P sale</b>	<b>22,500</b>	22,500	100%		

**THE BOARD OF DIRECTORS:**

**Chairman**

**Cătălin Dumitru**



**Member and General Manager**

**Yedil Utekov**



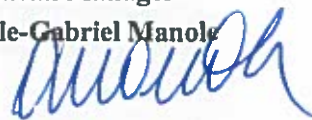
**Interim Member**

**Alexey Golovin**



**Financial Manager**

**Vasile-Gabriel Manole**



**Member**

**Nicoleta-Viorica Soisun**



**PPO BU Refining Director**

**Raluca Lainer**



**Member**

**Mihai-Liviu Mihalache**



**Petrochemicals Area Manager**

**Traian Stănică**

