



rompetrol

KazMuncyGas
International
Group Member

2023

Rompetrol Rafinare S.A.

PRODUCTION PLAN 2023

1. PETROMIDIA REFINERY

ROMPETROL RAFINARE SA

215 Năvodari Blvd. Administrative Building, 905700, Năvodari, Constanța, ROMANIA

fax: + (40) 241 506 930 | phone: + (40) 241 506 207 | email: office.rafinare@rompetrol.com

www.rompetrol.com



**2023 Plan for Production activity
Rompetrol Rafinare**

Petromidia Refinery

The main assumptions for production and sales plan 2023.

Production Plan for PEM – 2023

TOTAL THROUGHPUT: 5,682,972 mt out of which: 5,313,229 mt crude oil, 369,744 mt other feedstock.

1. Feedstock

The types of feedstocks planned to be processed in 2023 (mt/year):

- KEBCO: 3,431,452
- Siberian Light Crude Oil: 934,195
- CPC Crude Oil: 947,582

Crude unit throughput: 5,313,229 mt/year (14,967 mt/day for 355 processing days).

Density and Sulphur (average value) for Crude unit throughput resulted after PIMS simulation: 0.855 g/cm³, 1.15 % wt sulphur content.

2. Commercial Assumptions

2.1. Structure of products

Product	Total
	mt/year
Auto Gasoline	1,302,810
Auto Diesel	2,482,422
Jet A1	339,434
Fuel oil	182,199
Propylene	143,343
Coke	257,450
Sulphur	47,036
Other products	785,573

2.1.1 Auto fuels for domestic market (mt/year) – total 2,335,835

2.1.2 Auto fuels for export (mt/year)- total 1,449,398

**2.1.3** Products to be delivered to Vega Refinery (474,465 mt/year) from which:

- 219,660 Raffinate
- 77,055 C5-C6 cut
- 10,600 Hydrotreated kerosene
- 2,400 Slurry
- 164,750 Fuel oil

2.1.4 Others:

- Jet A1- 315,634 mt/year (for domestic market)

2023 White Products yield is 85.14 % 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, Super Diesel Euro 5, 51 Efix Diesel, 55 Efix S Diesel, 55 Diesel) and also to Socar Romania, Mol Romania, Oscar Downstream.

The other products are sold on domestic market through: Rompetrol Gas, Air BP Sales, OMV-Petrom, Jet Fly, Heidelbergcement, Lafarge, Holcim.

On the export market the products are sold to: KMG Trading (Moldova, Bulgaria, Hungary, Serbia, Greece, Turkey, Georgia, Lebanon, Israel, Egypt), Rompetrol Moldova, Rompetrol Georgia, Rompetrol Bulgaria and others.

Auto fuels are sold 61.7% on domestic market and 38.3% 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 min. 8.0% v/v Bioethanol according with internal reglementation.

Diesel production for domestic market contents min. 6.5% v/v Biodiesel according according with internal reglementation. During Winter period will be produced 55 Extreme Diesel, which is a unique product in Romania having CFPP -35 °C and 55 cetane number, the highest cetane number from Romania market.

In March, it was planned a total Refinery shutdown for 10 days, in order to be executed technological works (eg. heater decoking in Delayed Coker Unit, catalyst regeneration in Platforming Unit and others).



5. Summary of production plan

2023	Tons/year
Total Feedstock	5,682,972
Crude oil	5,313,229
Other raw materials	369,744
Finished Products	5,540,268
Gasoline	1,522,470
Jet	339,434
Diesel	2,484,822
Fuel oil	182,199
Gases	292,040
Propylene	143,343
LPG	271,473
Petroleum coke	257,450
Sulphur	47,036
Total Loss	142,704

Production & Planning Optimization Director

Raluca Lainer

DocuSigned by:

Raluca Lainer

98880918AEFE416...

Operations Director

Andrei Daniel Pârvulescu

DocuSigned by:

Andrei Daniel Pârvulescu

A1399D49FEDB472...

Refinery Manager

Zhanaidar Zhandeldinov

DocuSigned by:

Zhanaidar Zhandeldinov

88510CC500D4422...



rompetrol

KazMuncyGas
International
Group Member

2023

Rompetrol Rafinare S.A.

PRODUCTION PLAN 2023

2. VEGA REFINERY

ROMPETROL RAFINARE SA

215 Năvodari Blvd. Administrative Building, 905700, Năvodari, Constanța, ROMANIA

fax: + (40) 241 506 930 | phone: + (40) 241 506 207 | email: office.rafinare@rompetrol.com

www.rompetrol.com

**Production Plan 2023**
Rompetrol Refinement**Vega Refinery****The main assumptions for production plan and sales plan 2023****1. Feedstock**

Vega refinery will process raw material from Petromidia Refinery. The total feedstock for 2023 will be **474,477** tonnes in the following structure:

- C5-C6 cut – 77,055 tonnes
- raffinate – 219,660 tonnes
- hydrotreated kerosene – 10,600 tonnes
- slurry – 2,400 tonnes
- fuel oil – 164,750 tonnes
- marker (OMM Blue) – 12 tonnes

2. Structure of products

FINITE PRODUCTS	domestic	export	TOTAL
	,000 mt/year	,000 mt/year	,000 mt/year
Ecological solvents	0.600	50.423	51.023
n-Hexane	3.827	95.999	99.826
Naphtha gasoline	36.000	107.920	143.920
White spirit	2.650	2.221	4.871
Heating oil	15.045	-	15.045
Fuel oil	13.721	-	13.721
Bitumen	143.216	-	143.216
TOTAL	215.059	256.563	471.622

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.



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 2023 VEGA-production plan:

Raw materials	474.477
Crude oil	-
Other feedstock	474.477
Finite products	471.622
Ecological solvents	51.023
n-Hexane	99.826
Naphtha gasoline	143.920
White spirit	4.871
Gasoil	6.035
Light liquid fuel	9.010
Fuel oil	13.721
Bitumen	143.216
Consumption	2.855

Production and Planning Optimization Director

Raluca Lainer

DocuSigned by:
Raluca Lainer
98880918AEFE416...

Operations Director

Andrei Daniel Parvulescu

DocuSigned by:
Andrei Daniel Parvulescu
A1399D49FEDB472...

Vega Production Manager

Razvan Cristea

DocuSigned by:
Razvan Cristea
34BD53D387D147B...



rompetrol

KazMuncyGas
International
Group Member

2023

Rompetrol Rafinare S.A.

PRODUCTION PLAN 2023

3. PETROCHEMICALS DIVISION

ROMPETROL RAFINARE SA

215 Năvodari Blvd. Administrative Building, 905700, Năvodari, Constanța, ROMANIA

fax: + (40) 241 506 930 | phone: + (40) 241 506 207 | email: office.rafinare@rompetrol.com

www.rompetrol.com



2023 Plan for Production activity

Rompetrol Refinery

PETROCHEMICALS DIVISION

The main assumptions for production plan and sales plan 2023

Production Plan for PETROCHEMICALS AREA – 2023

POLYMERS PRODUCTION: 168,270 mt, out of which:

- PP : 90,870 mt,
- LDPE : 77,400 mt,

PROPYLENE TYPE P PRODUCTION: 21,124 mt

Feedstock

Raw materials planned to be processed in 2023 (mt/year):

- Propane-propylene mixture : 143,343 mt from FCC
- Ethylene : 79,180 mt

Assumptions for 2023 PETROCHEMICAL AREA-production plan:

Total Feedstock	222,523
Propane-propylene mixture	143,343
Ethylene	79,180
Polymers production	168,270
PP	90,870
LDPE	77,400
Propylene type P production	21,124

Production & Planning Optimization Director

Raluca Lainer

DocuSigned by:

Raluca Lainer

98880918AEFE416...

DocuSigned by:

Andrei Daniel Pârvolescu

A1399D49FEDB472...

DocuSigned by:

Traian Stanica

E301A6AC42A54D5...

Operation Director

Andrei Daniel Pârvolescu

Petrochemical Production Manager

Traian Stănică