



**rompetrol**

KazMunayGas  
International  
Group Member

2023

# Rompetrol Rafinare S.A.

2023 BUDGET PRESENTATION

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ROMPETROL RAFINARE SA

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## 1. BUSINESS PLAN EXECUTIVE SUMMARY

### 1.1 Key macroeconomic assumptions

- **Market Refining Margin:** 2023 Market Refining Margin assumed at 46.81 \$/ton.  
*Market margin = weighted average production at market quotation, less (-) raw materials consumed weighted at average market quotation*
- **Key Currencies** have been assumed as per latest market reality & most updated available forecasts, showing an overall depreciation of all key currencies:

EUR/USD	EUR/RON	USD/RON
1.16	5.10	4.41

### 1.2 Petromidia refinery

- 5.68 million tons Total Feedstock Processed, with a run rate of 16.008 ktons/day
- 5.31 million tons crude oil processed during 2023, with a run rate of 14.967 ktons/day (Crude Unit diet – 65% Kebco, 17% Siberian, 18% CPC);
- Diesel: according to the current regulation, during summer and also winter period, the finished diesel which will be placed on the market assumed at bio component content level of 6.5%;
- Gasoline: according to the current regulation, gasoline for internal market will contain a level of 8% bio component;
- Shutdown for 10 days in order to perform decoking of the Coker heater and Catalyst regeneration in the springtime.



### **1.3 Vega refinery**

- Total feedstock processed at a level of 474.5 ktons;
- The total production influenced by Petromidia availability;
- Bitumen unit in operation between March-December, in line with the seasonal market demand.

### **1.4 Petrochemicals**

- 2023 targeted production of 218 ktons;
- PP Unit: normal operation, full integration with PEM refinery, with 10 days of turnaround scheduled in March;
- LDPE: full operation according also with continuous supply of Ethylene, with 10 days of turnaround scheduled in March.



## 2. PETROMIDIA REFINERY

### 2.1 Presentation

Petromidia Refinery is one of the largest and most complex oil refineries in Eastern and Central Europe.

Petromidia Refinery is located on the Black Sea coast, having a competitive advantage due to access at shipping routes and inland waterways.

The crude oil supply is ensured through Midia Harbour, through the Midia Marine Terminal, company part of KMG International NV, pipeline which was given in use in February 2009. The terminal has an annual transfer capacity of 24 million tons of crude oil and ships up to 160,000 dwt can be unloaded. Alternatively, the crude oil supply can be ensured from Constanta Harbour through a 40 km long pipeline.

The crude oil processing capacity of the refinery is of 5 million tons annually. To deliver oil products, our company uses multiple loading/unloading facilities such as: rail carriage, vessel thru Midia Harbour and auto-tanks.

### 2.2 Short history

In 2012 Rompetrol Rafinare completed the last phase of its capacity increase program for the Petromidia Refinery, named "Package 2010", from 3.8 million tons/year, to over 5 million tons/year of crude oil processed. The refinery's capacity increase investment program allows the consolidation and development of Rompetrol's presence in Central and Western Europe.

The main objectives of the "2010 package" were the following:

- to increase the operational capacity of the refinery to 5 million crude oil tons/year;
- to meet the new EU & Romanian fuel specifications standards (Euro 5) (regulation COM(2005)683);
- to increase the Diesel yields with 8% (from 37% to 45%);
- to operate the Refinery according to EU and Romanian environmental requirements (BAT system) (Directive 70/220/EEC);
- to increase the mechanical availability and reliability of the refinery.



The assumed objectives of the “2010 package” were fully realized. From the investments package we can mention:

- The New Hydrogen Plant was put into operation, the advanced plant produces hydrogen with a purity of 99.98%, which is required in order to obtain the cleaner fuels by further processing in hydrotreating units. The Hydrogen Plant is operation starting with 1st of May 2012. The raw material is CH<sub>4</sub> with a throughput of 96,800 tones/year.
- Also, the New Mild Hydrocracking unit was put into operation. The plant is the core project of the package, a complex process that combines hydrotreating and cracking at high pressure and temperatures the heavy gasoil using hydrogen. This hydrocracking process combines the necessity to convert hydrocarbons into valuable products (cracking) with the constrain of lowering sulfur in products (hydrotreating).
- The New Sulfur Recovery unit process more sulfur crudes required in order to obtain more sulfur from fuels. The New unit is able to meet fuels new standards together with limiting the 1,000 mg/Nm<sup>3</sup> SO<sub>2</sub> emissions in air.

Were introduced in Romania starting with October 2012 the new Efix S products:

- Gasoline ALTO RON 101 was replaced by Gasoline RON 98 / Gasoline EFIX S RON 98;
- Diesel ALTO 55 was replaced by Diesel 55 / Diesel EFIX S 55.

### **2.3 YEAR 2022 short overview:**

In 2022, Rompetrol Refinery managed to adapt the operation of the refinery to the optimal structure of valuable products, taking into consideration the flexibility of the refinery to react at market changes.

Total feedstock processed in 2022 was 5,258,229 tons, out of which 4,797,632 tons crude oil and 460,597 tons other raw material, this was influenced by the 37.23 days of planned shutdown starting with 11st of March, in this period all works from DHT Unit (Diesel Hydrotreater) were completed. Starting with April 13, the DHT Unit (Diesel Hydrotreater) was put into operation

In Petromidia was produced 2.35 million tons of Diesel, which represent an yield of 44.65%, also it was achieved a record in the production of JetA1 of 0,34 million tons with an yield of 6.46%.

In 2022, the Energy Intensity Index was 96.25, very close to the previous record of 96.1 from 2018.



After turnaround restarting of all the Refinery units, the equipment operated with a high degree of safety, Petromidia realizing a mechanical availability of 95.53%.

Operation of Petromidia Refinery units is carried out in accordance with the highest performance standards, ensuring at the same time compliance with commitments made regarding environmental protection. From an operational point of view, Total Feedstock processed was 15,409 tons/day of operation.

Petromidia was able to capture the market opportunities with positive impact on gross margin, given the technological and operational flexibility of the refinery.

Starting 2022 Kazakhstan changed the crude's name from Rebco to Kebco, thus the crude exported by Kazakhstan is commercialized under the name of Kazakhstan Export Blend Crude Oil (KEBCO), to differentiate it from oil with Russian origin and to avoid the risks of sanctions.

## **2.4 Marketing strategy**

### **2.4.1 Portfolio of products**

Rompetrol Rafinare SA produces a wide range of high-quality petroleum products which are distributed to a great number of customers from natural persons to large entities. Having a vast experience in this field, the company sells a great variety of petroleum products such as:

- Efix Gasoline and Euro plus unleaded Gasoline, Gasoline RON 98 / Gasoline EFIX S RON 98;
- Efix Diesel and Super Euro 5 Diesel, Diesel 55 / Diesel EFIX S 55;
- C5-C6 Gas and Fuel Propane;
- Propane-Propylene mixture;
- Jet fuel;
- Petroleum Coke;
- Sulphur;
- Liquefied petroleum gas GPL, Auto GPL and Commercial Propane-Butane;
- Vacuum distillate;

Rompetrol Rafinare has a unique offer of products that appeal to all types of customers, main concentration to be targeted on large companies, both on the domestic and export markets, ensuring highest profitability and inventory management potential.

The KMG International Group regional expansion in Greece, Georgia, Turkey, Bulgaria, Moldavia or Serbia, as well will ensure the growth of the portfolio of clients.





### 2.4.2 Competition

The main competitors of Rompetrol Rafinare are OMV-Petrom (Petrobrazi refinery), Lukoil (Petrotel refinery) refineries that have developed along with Petromidia Refinery, oil products imported through Oil terminal and distributed in Romanian market.

### 2.4.3 Market assumptions

Proposed assumption for Crude quotations level:

Brent Dated	\$/bbl	90.00
CPC Blend CIF	\$/bbl	81.56
Brent – CPC Differential	\$/bbl	+8.44

### Key Products Market Cracks vs Urals - \$/ton

Market prices inputs for 2023 are collected from external market researcher as JBC, Platts Pira, WoodMac and latest available forward curves as 1F Market Refining Margin:

- JBC base case at 23.3 \$/t for 2023;
- Forward Curve level at 43.7 \$/t
- Platts Pira estimation for 2023 at the level of 66.7 \$/t.

Main fuel cracks (difference between product quotation and crude oil quotation) assumptions for 2023 are based on 50% from JBC Base and 50% of Platts Pira lead to an 1F Market Refining Margin of 46.81 \$/t, keeping for execution year a conservative approach versus all other references and in line with forward curve.



- **1F Market Refining Margin (\$/t) Budget 2023**

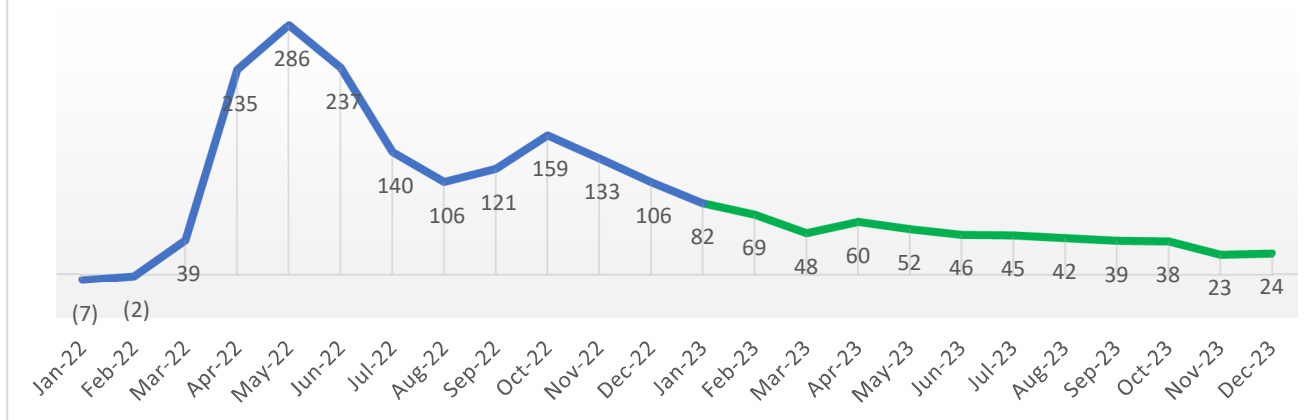
	Market quotation (\$/t)	Production yields (%)
<b>1F market margin</b>	<b>46.81</b>	
<b>Raw materials</b>	<b>669.1</b>	<b>100.0%</b>
CPC	711.0	16.7%
KEBCO	620.2	60.4%
SIBERIAN LIGHT	632.9	16.4%
KIRKUK	617.6	0.0%
BIODIESEL	1,556.5	2.5%
BIOETHANOL	1,214.0	0.7%
METHANE	974.1	1.1%
MTBE	696.1	0.6%
Other raw materials	614.8	1.6%
<b>Production</b>	<b>715.9</b>	<b>100.0%</b>
GASOLINE	863.6	22.9%
DIESEL	808.5	43.7%
JET	850.5	6.0%
NAPHTHA	710.2	1.4%
LPG	537.8	4.8%
PROPYLENNE-PROPANE	994.2	2.5%
FUEL OIL	472.0	3.1%
HEAVY FUEL	467.4	0.1%
SLURRY	534.6	0.0%
COKE	207.9	4.5%
SULPHUR	159.8	0.8%
FCC RESIDUE	710.1	3.9%
Other loss and gas		6.3%

Market Refining Margin (1F) represents the difference between:

- 1) the market prices - international quotations - of all products refined, weighted at the planned level of production yields, and,
- 2) the market prices - international quotations - of all planned feedstock needed to produce the refined products, weighted at the planned diet.



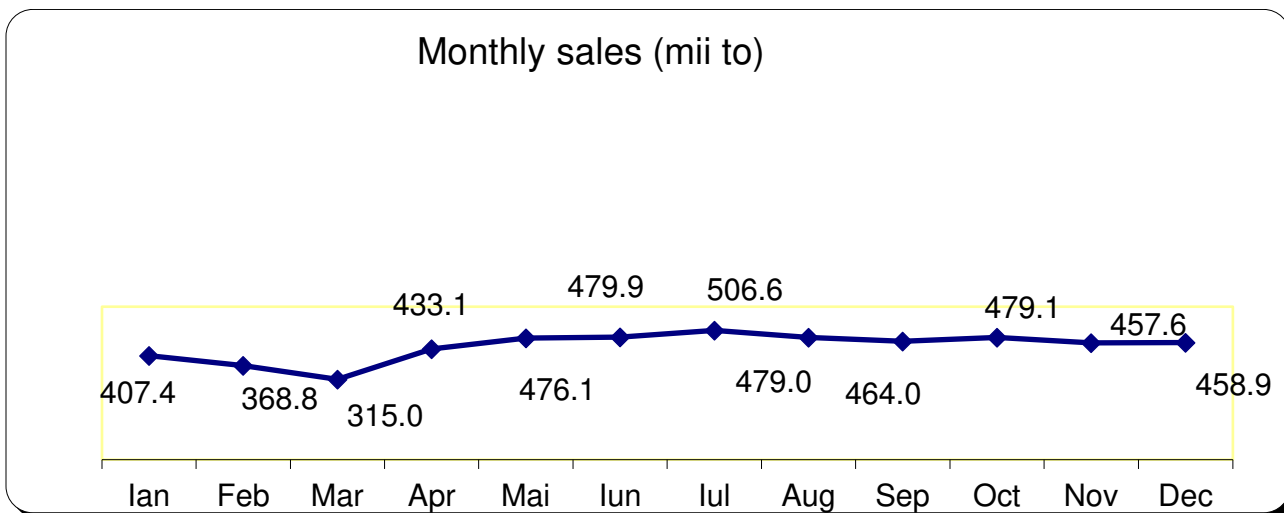
1F Feedstock Mix Quotation - Budget 2023 and Actual 2022



### 2.4.4 Sales

During 2023 sales quantities are influenced by the March 10 days shutdown in Q1 and maximized in the next 3 quarters.

Monthly sales (mii to)





About the market orientation/product placement strategy, within 2023 the company will follow the increase sales as last year for the gasoline and diesel sales in Romania by 11% and increase sales on external market by 5% versus 2022, with a monthly average rate of 313 ktons on the domestic market and 131 ktons on the export market.

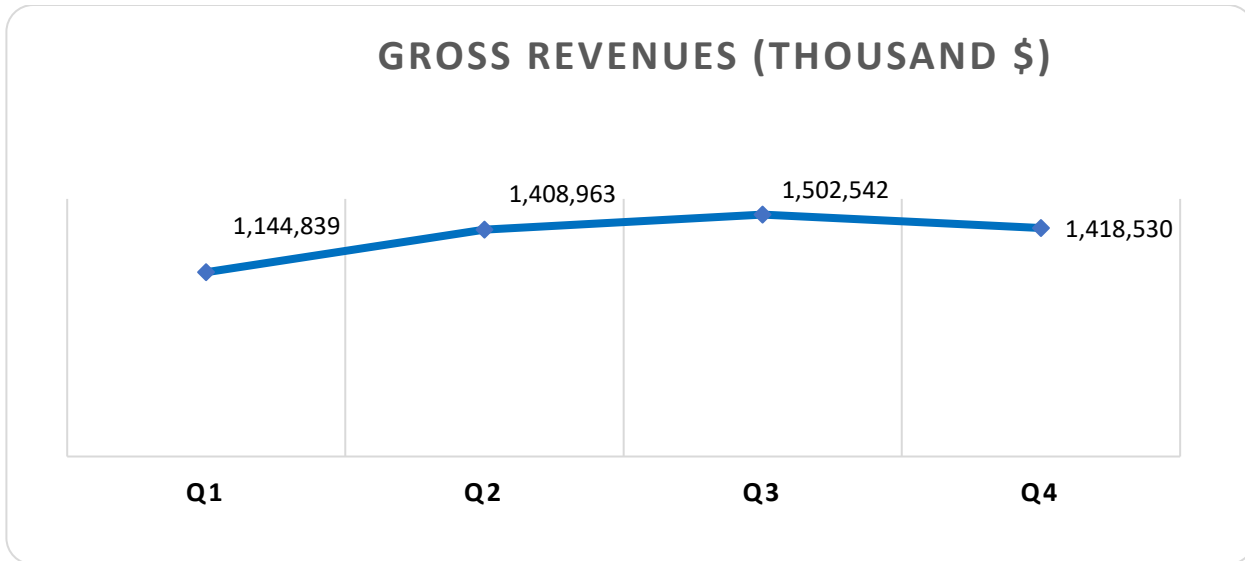
<b>Sales 2023(kto)</b>	<b>Domestic</b>	<b>Export</b>	<b>Total</b>
<b>Total products, out of which:</b>	<b>3,755</b>	<b>1,570</b>	<b>5,325</b>
Gasoline	641	882	1,523
Jet fuel	326	13	339
Diesel fuel	1,913	572	2,485
Light fuel oil			
Fuel oil	174	8	182
Vacuum distillate		-	-
Gases	77		77
Propylene	143		143
Liquified petroleum gas	272		272
Petroleum coke	209	48	257
Sulfur		47	47

Rompetrol Rafinare S.A. - Petromidia Refinery will continue its development strategies in 2023, the final target being the expansion of activities on all levels from production to marketing, as follows:

- Gross revenues of 5.474 billion USD, of which internal market 4.217 billion USD (77%) and external market 1.257 billion USD (23%), as a result of selling 5,325 thousand tons of products;
- Increase of petroleum on sales internal market by 16% as against 2022, year comparable from the volume point of view, and a small increase of petroleum sales on external market.

*Internal & Export market deliveries historical evolution:*

	2015	2016	2017	2018	2019	2020	2021	2022	2023 Budget
Internal market (%)	53%	54%	55%	56%	60%	70%	72%	67%	71%
Export market (%)	47%	46%	45%	44%	40%	30%	28%	33%	29%



The gross revenues also include the value of the products that will be transferred to the Vega Refinery.

## 2.5 Strategy and objectives

The company strategy is to use the Group's distribution channels both on the domestic and external markets in order to increase its market share.

### Major objectives:

- To maintain oil products quality in accordance with the European standards;
- To maximize profitability by targeting increase on the main profitable sales channels (domestic and regional markets);
- To continue the energy efficiency program and technological by implementation projects our internal team, Delfin;
- To decrease processing costs to an optimal level in order to counteract the negative uncontrollable market impact inside the refinery gross margin;
- To increase mechanical availability;
- To comply with the current environmental requirements and to align to the European ones;
- To maintain a high level of safety and work protection.



## 2.6 Production plan

Operational improvements assumed in the Business Plan 2023, as a result of the already implemented Delfin Program:

- Production initiatives, assuring a higher performance in terms of yields and production performance (for example, maximizing valuable products, increasing compared to previous years of refinery gas in the context of exponential energy growth and by increasing the synergy between entities by optimizing the transfer of raw materials).
- Optimizing the processing cost by increasing the transfer of fuel oil to Rompetrol Energy in order to reduce the cost of steam production.

### Key Operational Drivers

		2023
Days of operations	days	355
Feedstock Processed, of which:	ktons	5,683
Crud unit consumption	ktons	5,313
Other feedstock	ktons	370
Feedstock run-rate	t/day	16,008
Crude run-rate	t/day	14,967
Production, of which main:	ktons	5,325
Diesel	ktons	2,485
Gasoline	ktons	1,523
Jet	ktons	339
Propylene	ktons	143
LPG	ktons	272
Fuel oil	ktons	182
Fuel gas	ktons	77
Petroleum coke	ktons	257
Sulphur	ktons	47
White products yield	%	85.14
Technological loss	%	0.81

The operating plan for 2023 involves processing 5,683 thousand tons of raw materials, of which 5,313 thousand tons crude oil and 370 thousand tons of other raw materials.



## 2.7 Working capital

The required working capital funding to be utilized for raw materials purchases will be financed through self-resources and by existing credit line facilities. Average lines utilization per each credit facility as follows:

<b>Borrower</b>	<b>Bank / Facility</b>	<b>Average Year utilization (Million USD)</b>
RRC	Banca Transilvania	36
RRC	Facilitatea A credit Sindicalizat (Unicredit, ING, BCR, Raiffeisenbank)	240
RRC	Facilitatea C credit Sindicalizat (ING, BCR, Raiffeisenbank)	42
RRC	Facilitatea B credit Sindicalizat - Unicredit Tiriac	0
RRC	Facilitatea B credit Sindicalizat - Ing Bank	5
RRC	Facilitatea B credit Sindicalizat - BCR	8
RRC	Facilitatea B credit Sindicalizat - Raiffeisenbank	6
KMGT (RRC lines)	ING Geneva	237
<b>Total Line Utilization</b>		<b>573</b>



## 3. PETROCHEMICALS DIVISION

### 3.1 Company Overview

Petromidia Petrochemical Complex was designed and built in the mid 80s, being the newest facility in Romania at that moment, using Romanian technology and foreign technology (Mitsui, Snamprogetti, Heat Research Corporation, Pullman Kellogg etc.).

Technological flow is focused on the production of olefins (ethylene and propylene), later transformed into polyethylene and polypropylene.

The complex is split in four sections: Pyrolysis, Polypropylene, High Density Polyethylene (HDPE) and Low Density Polyethylene (LDPE). Now, operating with polypropylene (PP), Low Density Polyethylene (LDPE), while the steam cracker unit, the propane-propylene splitter, operates to provide the raw material for polypropylene plant and steam generator.

Favorable location, the high synergy of integration with refinery and upgrading works, make Petrochemicals division one of the most interesting companies in this field in Central and Eastern Europe.

### 3.2 Marketing Strategy

#### 3.2.1 Product Portfolio

The Petrochemicals division activity is organized in several directions:

- production of Polypropylene (PP);
- producing Low Density Polyethylene (LDPE);
- producing High Density Polyethylene (HDPE);
- trading of others petrochemical products;
- ancillary activities (production of steam and brine).

**Polypropylene (PP)** is obtained by homopolymerization or copolymerization of propylene with microsphere or superactive catalysts at high pressure and low temperature.

Production capacity is 90,000 tons per year.

Grades produced are used for injection, blow molding, film, fiber.

- Injection grades use for: garden furniture, kitchen utensils, toys, crates, boxes, batteries, etc.
- Blow grades are used: blown bodies (drums, containers), pipes, etc.





- Film grades are used for: food packaging, clothing, bioriented film , etc.
- Fibers grades are used for: multifilament's and textile fiber with bleach and ultraviolet resistance, etc.

The product can be supplied in bags of 25 Kg, 1,000 Kg big bags, bulk in tankers or CF.

**Low density polyethylene (LDPE)** is based on technology in the polymerization of ethylene at pressures up to 2400 kg/cm<sup>2</sup>G and a temperature of maximum 300°C, in a tubular reactor in the presence of initiators: decanoyl peroxide and oxygen. The reaction is carried out with free radical mechanism and is exothermic.

The production capacity of the plant is 70,000 tones/year of polyethylene.

LDPE grades are used for superfine packaging film, high clarity packaging film with good transparency and luster, agricultural films, protective films, high-strength bags.

The product can be delivered in 25 kg bags, palletized or 1 tons bags (big bags).

**High Density Polyethylene (HDPE)** Mitsui technology consists in two continuous mixing reactor identical size that can be operated in parallel or series.

The production capacity of the plant is 60,000 tons per year of polyethylene.

Produces grades of high density polyethylene which can be processed by injection, blow molding, extrusion. The main applications are: thin film, molded bodies, pipes, drums.

The product can be delivered in 25 kg bags, palletized or 1 tons bags (big bags).

Having in mind market conditions for this product is not opportune, this unit was considered for impairment provision at the end of year 2022.

### 3.2.2 Market Share

Petrochemicals Division continued in 2022 to be the sole producer of polymers in Romania, polypropylene and polyethylene of low and high density. The strategy developed allowed an increase of the market share.

The quality and diversity of products offered, location and route distribution/delivery, technical assistance, made Petrochemicals division a reliable partner in Romania and the Black Sea region.

One of the advantages of the company is determined by its proximity to clients, providing products in Just-In-Time system, also offering technical advice and assisted monitoring of their production cycle.



### 3.2.3 Market assumptions

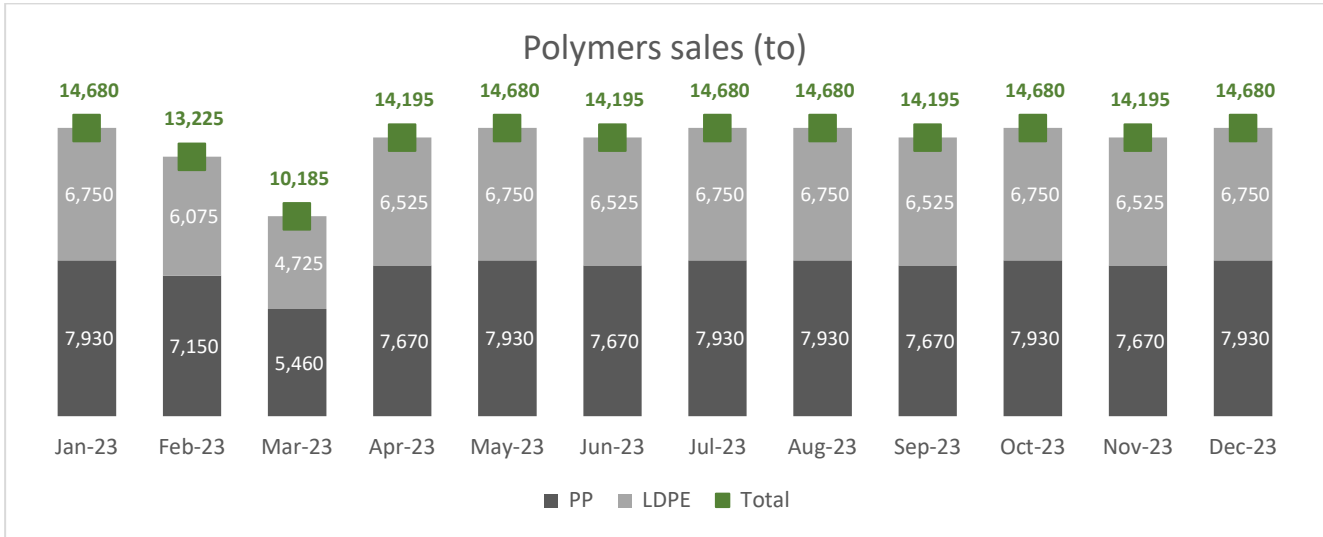
For 2023 budget, the following unit market assumptions for main products have been considered:

- Ethylene price was estimated at an average value of 1,491 \$/t, taking into account the average prices from the previous year;
- The estimated selling price for low-density polyethylene was determined based on an average crack (the difference between the raw materials and the selling price) of 515 \$/t for the domestic market and 475 \$/t for export;
- The estimated selling price for polypropylene was determined based on an average crack (the difference between the raw materials and the selling price) of 775 \$/t for the domestic market and 725 \$/t for export.



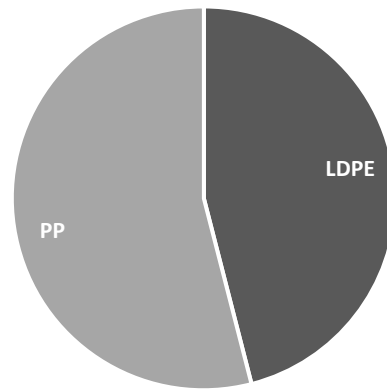
### 3.2.4 Sales

Total sales of Polymers in 2023 are planned to reach 168,270 tons, of which 90,870 tons of Polypropylene, representing 54%, and 77,400 tons of Low Density Polyethylene representing 46%, according with plants production capacity.



For the internal market it is planned to be delivered 85,683 tons i.e. 53% of Polypropylene and 47% of Low Density Polyethylene.

	Channel	Quantity	%
<b>PP</b>	Intern	45,435	50%
	Export	45,435	50%
<b>LDPE</b>	Intern	40,248	52%
	Export	37,152	48%





### 3.2.5 Production plan

- 10 days turnaround scheduled in March;
- PP production – 260 tons/day\*(n-0.5);
- LDPE production – 225 tons/day\*(n-1);
- Production grade:
  - PP
    - *normal grade (raffia, injection) 61%*
    - *special grade (thermoforming, fibers, spunbond, film) 39%*
  - LDPE
    - *normal grade (film) 99.5%*
    - *special grade (for UV film) 0.5%*

Days of Operation PP Unit	days	350
Days of Operation LDPE	days	344
Days of Operation HDPE	days	0

Feedstock Processed, of which:	ktons	223
Propane-Propylene	ktons	143
Ethylene	ktons	79
-----		
Production	ktons	218
PP	ktons	91
LDPE	ktons	77
HDPE	ktons	0
Propane	ktons	28
Propylene P	ktons	21
-----		
PP unit run-rate	t/day	260
LDPE Unit run-rate	t/day	225



## 4. VEGA REFINERY

### 4.1 Company Overview

Rompetrol Refinery - Vega Ploiesti is a refinery that focuses on obtaining niche **special products: normal hexane, ecological solvents, heating oil, fuel oil, bitumen**, etc.

In 2022 Vega Refinery managed to achieve operational performances such as:

- lowest technological consumption ever reached: 0.62% wt;
- lowest energy consumption per throughput : 2.34 GJ/to.

In 2023 Vega Refinery will only process alternative raw materials (such as **naphtha gasoline, C5-C6 cut, slurry, jet and fuel oil**), the only units that will be functional are: Hexane, Rectification, De-aromatization, AFP, Vacuum Distillation and Bitumen.

### 4.2 Marketing strategy

#### 4.2.1 Portfolio of products

Vega Refinery obtains the following range of **special products**:

- Solvents: Ecological Solvents–Rompetrol SE, Light Solvents and Normal Hexane;
- White spirit;
- Fuel Oil;
- Bitumen: Bitumen and polymer modified bitumen.

*Ecological solvents* are obtained in De-aromatization unit using Haltermann technology (the most important manufacturer of solvents and special products in Europe).

These new products for domestic and export markets are distinguished primarily by their special qualities, being a range of solvents:

- colourless, with vapor pressures higher or lower depending on the distillation range, which allows to obtain high quality paints;
- with a low content of olefins which allows these solvents to have good stability in time;



- slight smell, with a low degree of toxicity, low content of aromatic hydrocarbons, especially benzene, and low-sulphur, therefore these solvents are in the range of organic products with high degree of dearomatization.

These solvents may be used without limitation in all industries from the chemical industry to the food, pharmaceutical and cosmetics industries also as cleaning agents in textile, leather and shoes industries. Solvent is used in order to obtain varnishes, paints and adhesives, it's a composite in polish and also is used as degreasing agent in the machine building industry, in chemical reaction media, is a component for the petrochemical industry, as well in rubber processing, allowing an organic and safe use.

*Normal Hexane* is used in polypropylene production and vegetable oil extraction in the food industry. The new quality of n-hexane obtain by Vega Refinery allows a diversification of applications, including: manufacturing and refining of fats, palm and coconut oils which result in products with low content of protein, and respectively defatted cereal germs.

*White Spirit* is used as solvent in varnishes and dyes industry, in rubber processing and in insecticide conditioning.

The fuel group includes:

- Heating fuel: Rompetrol Calor extra 1 and Rompetrol Calor Economic 3;
- Liquid fuel: liquid fuel type 3 (CLU).

Heating fuel have a quality that is up to European standards, being at the level of any product in its class Heating Oil, which sells in the Western countries. These products are delivered directly to end users, the service being offered by Rompetrol Downstream SRL, member of ***KMG International Group***.

The advantages of these products are:

- compliance with European quality standards;
- burn a long time;
- produce a high quantity of heat;
- produce fewer emissions;
- have anti-ageing features against plant depreciation;
- distribution to end users;
- territorial coverage at national level.

In 2023 bitumen sales are estimated to 143,216 tonnes, by 40% higher than the previous year, in 2020 Vega refinery reached historical record bitumen sales, of 122,666 tonnes.

The hydro-isolation bitumen is used in the fabrication process of bituminous cement and for waterproofing works in constructions. The Citom is used as bitumen coating for metal pipes to protect them against corrosion.



### 4.2.2 Market share

Vega Refinery is **the only Romanian producer of** Ecological Solvents – Rompetrol SE and Bitumen.

Vega is also the only producer of normal Hexane in Eastern Europe, this product is used in polypropylene production and vegetable oil extraction in the food industry.

The markets and products that are sold in UE are:

- Austria, Spain, Hungary, Poland, Bulgaria, Slovakia and Czech Republic for naphtha;
- Germany, Italy, Netherlands, Poland and Hungary for ecological solvents;
- Bulgaria for white spirit;
- Bulgaria, Czech Republic, Poland, France, Italy, Germany, Belgium and Hungary for n-hexane.

Other markets:

- Ukraine, Serbia, Turkey and Moldova Republic for naphtha, ecological solvents and white spirit;
- Serbia, Macedonia, Moldova Republic, Turkey, India, Ukraine, Kazakhstan, Maroc, Pakistan and Uzbekistan for n-hexane.

### 4.2.3 Competition

Competitors on domestic market:

- OMV Petrom –Brazi Refinery– for fuel oil and heating oil;
- MOL Hungary, Basell Poland, PKN Orlen Poland, Eni Italy, Haifa Israel – for hexane, SBP, white spirit;
- Bitholder SRL Agigea, Transbitum SRL Mangalia, MOL Hungary, Total SRL - Ozun, Lotus Poland, Burgas Bulgaria, Guven Asphalt Floresti, Rafinaria Trzebinia Poland, Hellenic Petroleum Greece – for bitumen.



#### 4.2.4 Market assumptions

In the 2023 budget Rompetrol Rafinare decided to take a prudent approach through usage of an historical level of the market proposed:

- **Naphtha** Market quotations, used for sales of normal Hexane, level assumed in line with the average unit market crack level of the last past year;
- **Jet** Market quotation used for sales of White spirit, level assumed in line with the average unit market crack level of the last past years;
- **Gasoil 0.1** market quotations used for sales of Calor, level assumed in line with the average unit market crack level of the last past years;
- **Heavy Fuel Oil** market quotation used for sales of Bitumen, level assumed in line with the average unit market crack level of the last past years.

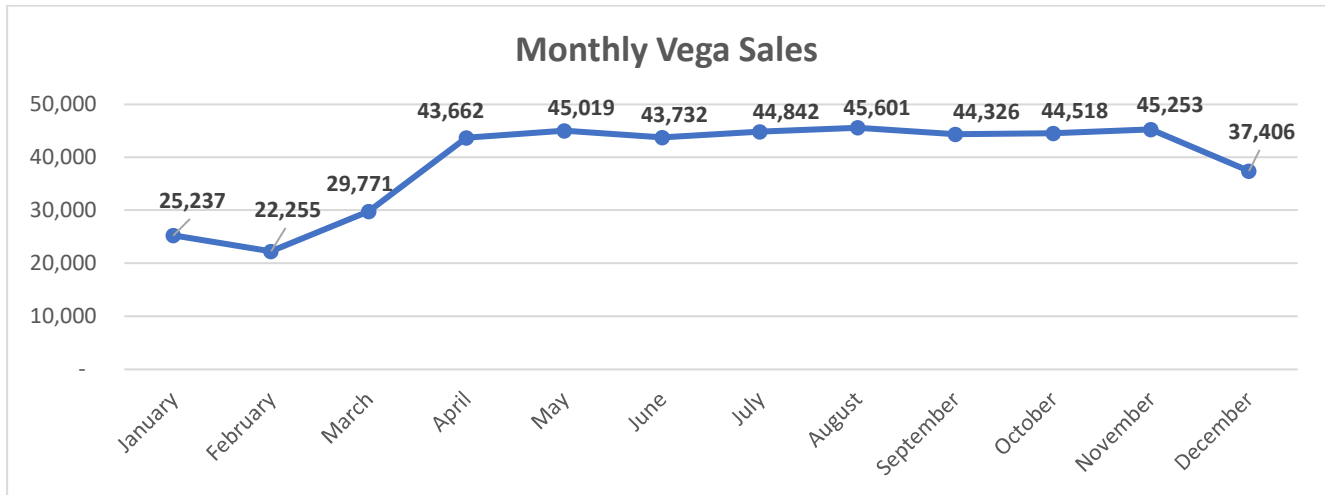
<i>Sales prices 2023</i>	<i>Sales prices (USD/to)</i>		
	<b>Domestic</b>	<b>Export</b>	<b>Average</b>
<i>Naphtha gasoline</i>	675,76	693,11	688,77
<i>Hexane</i>	914,06	855,66	857,89
<i>Ecological Solvents</i>	1.010,76	746,48	749,59
<i>White spirit</i>	1.033,86	1.026,73	1.030,61
<i>Gasoil &amp; Heating Oils</i>	819,94	0,00	819,94
<i>Light liquid fuel</i>	698,28	0,00	698,28
<i>Bitumen</i>	601,04	0,00	601,04
<i>Fuel oil</i>	562,00	0,00	562,00
<b>Total</b>	<b>633,32</b>	<b>767,31</b>	<b>706,21</b>





### 4.2.5 Sales

Bitumen sales are influenced by weather due to seasonal market demand and sales are considered between March – December.



<b>Sales 2023</b>	<b>Domestic</b>	<b>Export</b>	<b>Total</b>
<b>Total products, out of which:</b>	<b>215,059</b>	<b>256,563</b>	<b>471,662</b>
<i>Naphtha gasoline</i>	36,000	107,920	143,920
<i>Hexane</i>	3,827	95,999	99,826
<i>Ecological Solvents</i>	600	50,423	51,023
<i>White spirit</i>	2,650	2,221	4,871
<i>Gasoil &amp; Heating Oils</i>	6,035	0	6,035
<i>Light liquid fuel</i>	9,010	0	9,010
<i>Bitumen</i>	143,216	0	143,216
<i>Fuel oil</i>	13,721	0	13,721



### 4.3 Strategy and objectives:

- To maximize the gross margin for the niche products to bring added value to the business
- Developing near abroad markets for niche products to obtain higher premium price;
- To increase Bitumen production, starting 2015 (production 80 ktons) Vega refinery develop programs in order to achieve 140 ktons/year, while in 2020 managing to reach a level of 123 ktons;
- Higher recovery hexane level due to good quality of Raffinate feedstock received from Petromidia refinery;
- To continue the investment program in order to: reduce the consumption of utilities, technology and to follow the foresights of environmental standards.

### 4.4 Production Plan

#### Key Highlights:

- **Naphtha from Vega refinery to PEM of - 3 ktons/month** starting with January 2023;
- **Fuel oil from Vega refinery to PEM of - 7 ktons/year;**
- **Bitumen and Vacuum Distillation unit in operation** between March-December due to seasonal market demand.

Days of operations	days	365
Capacity Utilization	%	132.1%
Feedstock Run-rate	ktons/day	1.300
Feedstock Processed	ktons	474
Production, of which:	ktons	472
Naphtha	ktons	144
Bitumen	ktons	143
Hexane	ktons	100
Fuel Oil	ktons	14
Solvents	ktons	51
Technological Loss	%	0.60%



## 4.5 Elimination of Acid Tars Vega Refinery Project

### 4.5.1 Short description of the project

The objective of Rompetrol Refinery S.A. according to the Environmental Agreement no.1/18.02.2015, revised in 14.01.2021, is to rehabilitate the acid tars in VEGA Refinery, and to restore the field for industrial use:

- according with best available techniques (BAT),
- maximum limitation of the risks associated to the health of the population and the environment, Complying with the BATNEEC (Best Available Technique Not Entailing Excessive Cost) principle.

Inside the lagoons were stored acid tars and oil residues collected in the period prior to the privatization of the Vega Ploiesti Refinery (1905 - 1999), with the risk of the presence of unexploded ammunition from the Second World War (UXO).

The project consists of a series of activities and works that involve emptying the lagoons **7-12, 13-15, 16, 17, 18, 19, 20**, treatment of waste and contaminated soil through the Solidification / Stabilization process. The waste treated through Solidification/Stabilization will be re-introduced and stored in successive layers inside the waterproofed lagoons through the encapsulation process called "sarcophagus". The emptied lagoons to the level where respects the requirements specified in the Environmental Agreement will be rehabilitate, in the sense of filling them with material from common pits.

Subsequent use of the site will take into consideration the specific conditions and restrictions imposed by the existence of the covered landfill, depending on the stability of the land and the degree of risk it may present to the environment and human health.

The post-closure destination will take into account the fact that the vegetation and its subsequent use correspond to those allowed in the authorization documents. At the date of execution of the project, ROMPETROL RAFINARE S.A. has not made a decision on the subsequent use of the land, which will be handed over at the grass stage.

### 4.5.2 Vega Refinery main achievements regarding Acid Tars:

**May 1999** - privatization contract, through art. 8.8, Rompetrol S.A., 52 / 5000, as the new majority shareholder of Vega S.A.

*„ undertakes to comply, in accordance with the Romanian legislation in force, the minimum accepted environmental objectives, established by Ploiești Environmental Protection Agency presented in Annex no.6".*



These objectives included "liquidation of acid tar lagoons and land rehabilitation" in Vega refinery.

**2006** – has been stopped storage of acid tars, according to the legislation applicable to non-compliant landfills, based on HG 349/2005. According to this government decision, the lagoons classified as a non-compliant landfill of hazardous industrial waste.

**2015** Company obtained the Environmental Agreement based on the studies carried out for the closure of the deposit consisting of the 14 acid tars lagoons; project duration: 4 years; estimated budget: 77 million Euros;

**Nov 2017** Prahova Environmental Protection Agency initiated the procedure for suspending the Integrated Environmental Authorization for Vega Refinery due to the fact that the Remediation Project has not started.

**2018 – 2020** The activities described in stage I of the project - finalized; Stage II of the work project – started, which consists in the effective treatment and remediation activity ( Lagoon 18 finalized, L16&17 – work in progress)

**2021** Revised Environmental Agreement issued by Authorities; the company carries out the activities according to the legal requirements.

**2022** – Revised Integrated Environmental Authorization;

- Finalised procedure of Environmental Agreement;
- Finishing of the works lagoon 17 (waste treatment, contaminated soil, waterproofing, installation of leakage monitoring sensor system);
- Commissioning of wells 5 (21.5 m<sup>3</sup>/h) and 8 (14.4 m<sup>3</sup>/h).

### 4.5.3 2023 Budget

**The amount estimated for** rehabilitation and remediation of the area where the lagoons containing acid tars and oil residues is 35.87 mil USD.

Important works to be carried out during 2023:

- Contracting the realization of the Technical Project of Closure and Post-closure Monitoring in order to establish the Fund for closing the waste deposit according to the obligations of the revised Environmental Integrated Permit for Vega Refinery;
- Elaboration of a technical project for closing a non-compliant warehouse;
- Creation of a fund for waste deposit closure;
- Continuation of treatment works for the remaining lagoons.

*As of 31 December 2022, the Company recognized an environmental provision of RON 426.9 million (96.8 million USD) for the rehabilitation of Vega lagoons, and as the rehabilitation works are executed, the value of the provision will be updated considering its reduction with the value of the executed works respectively 35.87 million USD in 2023 (provision reversal).*



## 5. CONSOLIDATED BUDGET INCOME STATEMENT (Petromidia Refinery, Vega Refinery and Petrochemicals division)

Budget Income Statement for 2023*					
(Thousand USD)					
Description	Year 2023	Q1	Q2	Q3	Q4
<b>GROSS REVENUES</b>	5,703,268	1,189,691	1,466,943	1,564,158	1,482,476
<b>SALES TAXES</b>	(1,137,788)	(230,371)	(278,629)	(324,773)	(304,015)
<b>Net revenues</b>	4,565,480	959,320	1,188,313	1,239,385	1,178,462
<b>COST OF SALES</b>	(4,498,965)	(930,484)	(1,153,458)	(1,212,703)	(1,202,320)
<b>GROSS MARGIN</b>	66,515	28,836	34,855	26,682	(23,858)
<b>SELLING, GENERAL &amp; ADMINISTRATION</b>	(50,754)	(11,449)	(12,103)	(12,524)	(14,677)
<b>ADJUSTMENT Depreciation &amp; Amortization</b>	86,689	21,520	21,445	21,663	22,060
<b>EBITDA</b>	102,451	38,907	44,197	35,821	(16,474)
<b>PROVISIONS</b>	35,859	(12)	0	0	35,871
<b>EBIT/Operating Profit/(Loss)</b>	51,621	17,375	22,752	14,158	(2,664)
<b>Interest &amp; commissions, net</b>	(49,365)	(11,328)	(11,289)	(11,538)	(15,210)
<b>PROFIT/(LOSS) Before Income Tax</b>	2,256	6,048	11,462	2,620	(17,874)
<b>Deferred tax</b>	(1.354)	0	0	0	(1.354)
<b>NET PROFIT/(LOSS)</b>	903	6.048	11.462	2.620	(19.228)

\* Budget 2023 is recommended by Board of Directors Rompetrol Rafinare



Income and expenses budget of Rompetrol Rafinare S.A. for 2023 will be subject to approval at the Ordinary General Assembly of Shareholders scheduled for April 27, 2023.

## THE BOARD OF DIRECTORS:

**Chairman  
Yedil Utekov**

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*Yedil Utekov*

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**Member  
Askar Abilov**

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*Askar Abilov*

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**Member and General Manager  
Felix Crudu-Tesloveanu**

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*Felix Crudu-Tesloveanu*

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**Member  
Bogdan-Catalin Steriopol**

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**Member  
Nicolae Bogdan Codruț Stănescu**

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**Finance Manager  
Ramona-Georgiana Galateanu**

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*Ramona-Georgiana Galateanu*

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**Planning and Performance Management Director  
Alexandru Stăvărache**

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*Stavarche*

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**Romp petrol Rafinare  
Income Statement**

USD

	BUDGET*
	Year, 2023
<b>GROSS REVENUES</b>	<b>5,703,268,359</b>
SALES TAXES	(1,137,787,904)
<b>Net revenues</b>	<b>4,565,480,455</b>
<b>Purchases</b>	<b>(3,906,247,037)</b>
Purchases - crude oil and equivalents	(3,377,565,818)
Purchases - other raw materials	(527,950,501)
Purchases - auxiliary materials	(730,717)
Purchases - petrochemical products finished goods	-
Customs duties and commissions	-
<b>Change in inventories Purchases</b>	<b>(19,220,914)</b>
<b>= Gross Margin</b>	<b>640,012,504</b>
<b>Variable logistics Costs</b>	<b>(41,083,252)</b>
Variable logistics Costs Inbound	(27,053,529)
Variable logistics Costs Outbound	(14,029,723)
<b>= Contribution</b>	<b>598,929,252</b>
<b>Conversion&amp;Service Costs Cash</b>	<b>(464,367,456)</b>
Utilities	(321,511,675)
Maintenance	(27,329,295)
Staff costs	(32,200,868)
Other expenses	(83,325,617.34)
Depreciation Conversion	(84,220,790)
<b>Change in inventories Production</b>	<b>2,134,678</b>
Add back Capitalised Expenses to Capex	10,000
<b>= Gross Profit</b>	<b>52,485,683</b>
<b>Selling &amp; Distribution Cash</b>	<b>(9,403,679)</b>
Staff costs	(1,808,991)
Rent	(38,482)
Utilities	(2,434,333)
Maintenance	(1,046,515)
Insurance	(344,050)
IT&C	(194,106)
Other selling & distribution Cash	(3,537,201)
Depreciation Selling & Distribution	(593,212)
<b>General &amp; Admin Cash</b>	<b>(24,851,521)</b>
Staff costs and salary related taxes	(5,119,467)
Rent	(12,712)
Utilities	(1,440,727)
Maintenance	(562,283)
Security services (only ADMIN - Global Security Sistem)	(315,798)
Insurance	(388,861)
Local Taxes (impozitul pe cladire - ADMIN + other taxes)	(846,076)
IT&C	(915,804)
Consulting & professional fees & Management fees	(10,029,527)
Sponsorships	(9,000)
Environmental services	(12,489)
Marketing	(12,782)
Fire protection services (Buoy, tank farm, other)	(274,040)
Other general & admin Cash	(4,911,954.47)
Depreciation General & Admin	(1,875,367)
<b>Other operating revenues/expenses</b>	<b>-</b>
Add back Depreciation	86,689,370
<b>= EBITDA</b>	<b>102,451,274</b>
<b>Provisions</b>	<b>35,859,283</b>
<b>= EBIT/Operating Profit/(Loss)</b>	<b>51,621,187</b>
<b>Interest &amp; commissions, net</b>	<b>(49,364,903)</b>
<b>= EBT</b>	<b>2,256,284</b>
<b>Profit tax (Deferred tax)</b>	<b>(1,353,770)</b>
<b>Minority interest</b>	<b>-</b>
<b>= Net profit/(Loss)</b>	<b>902,513</b>

\* The company estimate the solidarity tax based on the budget, 60% of estimated profit. This will be calculated based on the legislation in force and the financial statements corresponding to the year 2023.

**THE BOARD OF DIRECTORS:**

**Chairman**  
**Yedil Utekov**

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*Yedil Utekov*

**Member**  
**Askar Abilov**

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*Askar Abilov*

**Member and General Manager**  
**Felix Crudu-Tesloveanu**

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*Felix Crudu-Tesloveanu*

**Member**  
**Bogdan-Catalin Steriopol**

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*Bogdan-Catalin Steriopol*

**Member**  
**Nicolae Bogdan Codruț Stănescu**

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*Nicolae Bogdan Codruț Stănescu*

**Prepared by:**

**Financial Manager**  
**Ramona-Georgiana Galateanu**

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*Ramona-Georgiana Galateanu*

**Planning and Performance Management Director**  
**Alexandru Stavarache**

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*Stavarache*

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