



**rompetrol**

KazMunayGas  
International  
Group Member

2021

# Rompetrol Rafinare S.A.

## 2021 BUDGET PRESENTATION



## Table of Contents

<b>1. BUSINESS PLAN EXECUTIVE SUMMARY .....</b>	<b>3</b>
1.1 Key macroeconomic assumptions .....	3
1.2 Petromidia refinery.....	3
1.3 Vega refinery .....	4
1.4 Petrochemicals .....	4
<b>2. PETROMIDIA REFINERY .....</b>	<b>5</b>
2.1 Presentation .....	5
2.2 Short history .....	5
2.3 Marketing strategy .....	7
2.3.1 Portfolio of products .....	7
2.3.2 Competition .....	8
2.3.3 Market assumptios.....	8
2.3.4 Sales .....	10
2.4 Strategy and objectives.....	12
2.5 Production plan .....	13
2.6 Working capital.....	14
<b>3. PETROCHEMICALS DIVISION .....</b>	<b>15</b>
3.1 Company Overview.....	15
3.2 Marketing Strategy .....	15
3.2.1 Product Portfolio.....	15
3.2.2 Market Share .....	17
3.2.3 Market assumptions.....	17
3.2.4 Sales .....	18
3.2.5 Production plan.....	19
<b>4. VEGA REFINERY.....</b>	<b>20</b>
4.1 Company Overview.....	20
4.2 Marketing strategy .....	20
4.2.1 Portfolio of products .....	20



4.2.2	Market share.....	22
4.2.3	Competition .....	22
4.2.4	Market assumptios.....	23
4.2.5	Sales .....	24
4.3	Strategy and objectives:.....	25
4.4	Production Plan .....	25
4.5	Elimination of Acid Tars Vega Refinery Project .....	26
4.5.1	Short description of the project.....	26
4.5.2	Vega Refinery main achievements regarding Acid Tars: .....	26
4.5.3	2021 Budget,.....	27
<b>5.</b>	<b>CONSOLIDATED BUDGET INCOME STATEMENT (Petromidia Refinery, Vega Refinery and Petrochemicals division).....</b>	<b>28</b>
	<b>THE BOARD OF DIRECTORS.....</b>	<b>29</b>



## 1. BUSINESS PLAN EXECUTIVE SUMMARY

### 1.1 Key macroeconomic assumptions

- **Market Refining Margin:** 2021 Market Refining Margin assumed at 11.7 \$/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
1.18	4.84	4.10

### 1.2 Petromidia refinery

- 6.00 million tons Total Feedstock Processed;
- 5.25 million tons crude oil processed during 2021, with a run rate of 14.802ktons/day (Crude Unit diet – 69.3% Ural, 21.5% Siberian, 2.9% CPC, 4.9% Kirkuk, 1.4% Other crude grades & alternative feedstock);
- 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 408.3 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**

- 2021 targeted production of 235 ktons;
- PP Unit: normal operation, 10 days shut down in April full integration with PEM refinery;
- LDPE: full operation according also with continuous supply of Ethylene;
- HDPE Units: will be under a transformation program for the HDPE swing to PP.



## **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.

Petromidia refinery managed adapt in 2020 the operation of the refinery to optimal valuable products structure, considering refining flexibility to react to the market changes:

Total feedstock processed in 2020 was 4,864,005.3 tons, out of which 3,818,714.4 tons crude oil and 1,045,290.9 tons other raw material, this being influenced by the general turnaround from March - April 2020 as well as by the pandemic with the new Coronavirus- Covid19.

The Diesel yield reached at the level of 51.77% in 2020 being a new record in the history of Petromidia as a result of optimizing refinery units and also using the Jet component as a Diesel component according to market demand. The yields for fuels (gas, Diesel, Jet, automotive LPG fuel) reached the level of 74.79% in 2020.

Petromidia Refinery produced 2.52 million tons of Diesel in 2020, 51.77%, the highest yield it has ever reached since its commissioning in 1979.



Energy Intensity Index achieved in 2020 was 99.17 points.

Following the general Turnaround performed in 2020 (March-April 2020) the equipment functioned in 2020 at a high level of safety, featuring a mechanical availability of 96.93%.

The operation of the refinery facilities is carried out in accordance with the highest performance standards ensuring at the same time the fulfilment of the commitments assumed relating to the environmental protection.

The action of attracting other raw materials (e.g. Diesel and Straight Run fuel oil) into processing was also classified under the same strategy, of ensuring an ongoing operation and at a plant loading as good as possible.

The Refinery throughput was 15,299 tons per day related to actually worked time. Petromidia Refinery succeeded to adjust the crude runrate and recipe based on the current market conditions replacing expensive crudes with cheaper grades like Kirkuk and SRFO with positive impact on gross refinery margin, taking into account the technological and operational flexibility of the refinery.

## **2.3 Marketing strategy**

### **2.3.1 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 Rompetrol Group regional expansion in Greece, Georgia, Turkey, Bulgaria, Moldavia, Serbia, as well as in Lebanon will ensure the growth of the portfolio of clients.

### 2.3.2 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.

### 2.3.3 Market assumptions

Proposed assumption for Crude quotations level:

Brent Dated	\$/bbl	40.00
Urals RCMB	\$/bbl	39.71
Urals Differential to Brent	\$/bbl	-0.29

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

Rompetrol Rafinare decided to take a prudent market margin for the 2021 budget, given the big volatility triggered by the disruptive market events worldwide as of 2020:

- In 2021 we doubt there can be much of an average improvement in margins relative to the last five years (though some increase vs 2020 may be possible if the current bottleneck/high storage issue is protracted beyond May);
- There was over-capacity in refining before the crisis; the lower demand makes it worse.

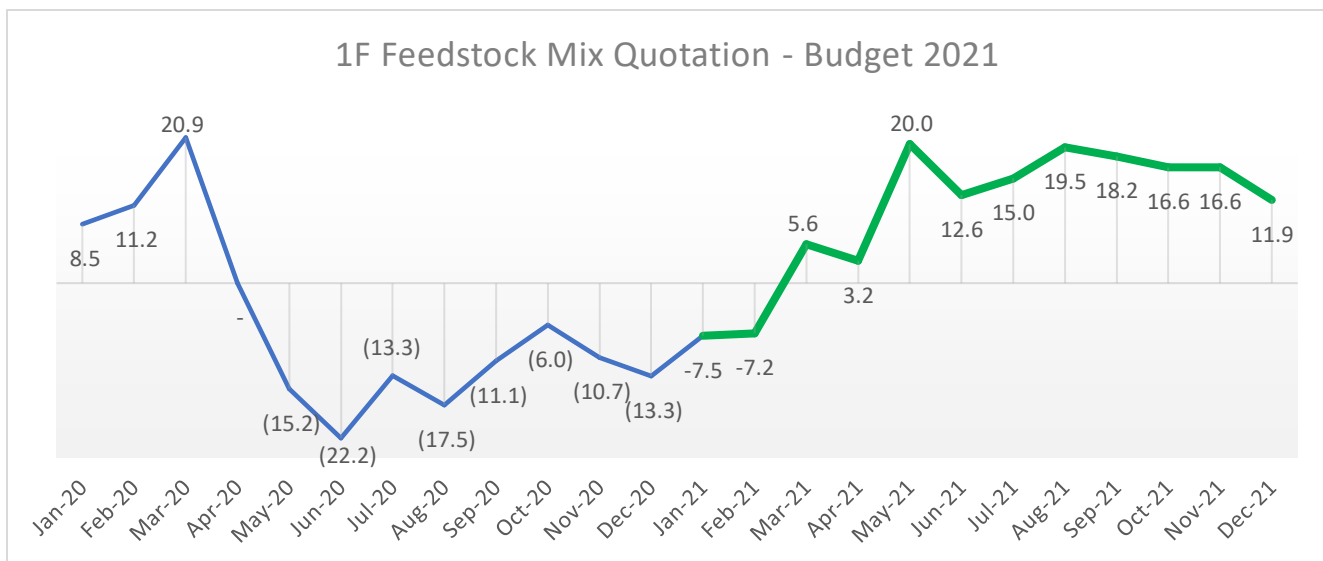
Accounting for previously mentioned individual products assumptions - at 2021-year level mix of feedstock diet and products mix - weighted average level of Market Refining Margin 2021 assumed at a level of 11.7\$/ton processed.

**1F - SALES/PRODUCTION Market Margin @ IP 2021 Supply & Sales Mix**

<b>1F market margin 11.7</b>		
	Market quotation (\$/t)	Production yields (%)
<b>Raw materials</b>	<b>310.3</b>	<b>100.0%</b>
CPC	316.0	2.7%
REBCO	287.2	65.6%
SIBERIAN LIGHT	295.2	20.3%
KIRKUK	288.0	4.6%
BIODIESEL	856.9	2.4%
BIOETHANOL	907.1	0.8%
METHANE	290.0	1.1%
MTBE	590.0	0.6%
Other raw materials	301.0	1.9%
<b>Production</b>	<b>322.0</b>	<b>100.0%</b>
GASOLINE	399.2	23.6%
DIESEL	357.7	45.7%
JET	360.8	4.0%
NAPHTHA	324.9	3.1%
LPG	232.7	5.1%
PROPYLENE-PROPANE	487.2	2.9%
FUEL OIL	226.5	0.1%
HEAVY FUEL	227.0	2.7%
SLURRY	232.2	0.0%
COKE	75.0	4.4%
SULPHUR	37.0	0.8%
FCC RESIDUE	227.4	0.2%
Propane fuel	279.3	0.0%
C5-C6 Cut	324.8	1.2%
Other loss and gas		6.3%

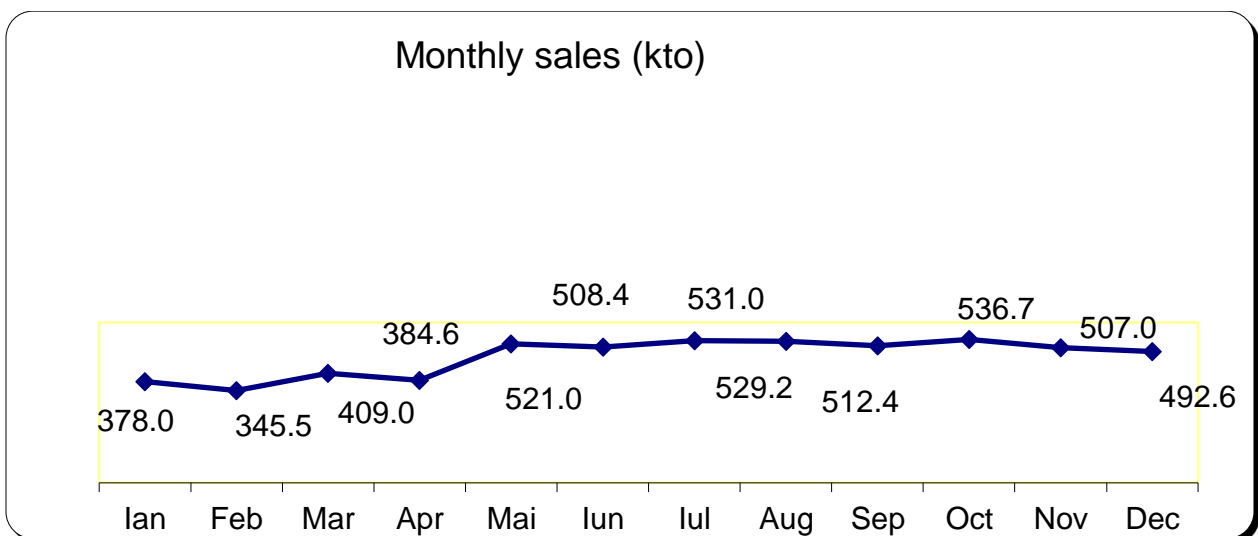
Market Refining Margin (1F) represents the difference between:

- 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 2021**

### 2.3.4 Sales

During 2021 sales quantities are directly influenced by the market margin evolution with lower production/sales in Q1 and maximized in the next 3 quarters when the market margin previews an increase.

**Monthly sales (kto)**



About the market orientation/product placement strategy, within 2021 the company will follow the increase sales as last year for the gasoline and diesel sales in Romania by 17% and increase sales on external market by 31% versus 2020, with a monthly average rate of 304,833 tons on the domestic market and 166,445 tons on the export market.

<b>Sales 2021 (kto)</b>	<b>Domestic</b>	<b>Export</b>	<b>Total</b>
<b>Total products, out of which:</b>	<b>3,658</b>	<b>1,997</b>	<b>5,655</b>
Gasoline	597	893	1,490
Jet fuel	217	32	249
Diesel fuel	2,229	714	2,943
Light fuel oil			
Fuel oil	158	13	171
Vacuum distillate		-	-
Gases	66		66
Propylene	159		159
Liquified petroleum gas	66	223	289
Petroleum coke	167	76	243
Sulfur	-	47	47

Rompetrol Rafinare S.A. - Petromidia Refinery will continue its development strategies in 2021, the final target being the expansion of activities on all levels from production to marketing, as follows:

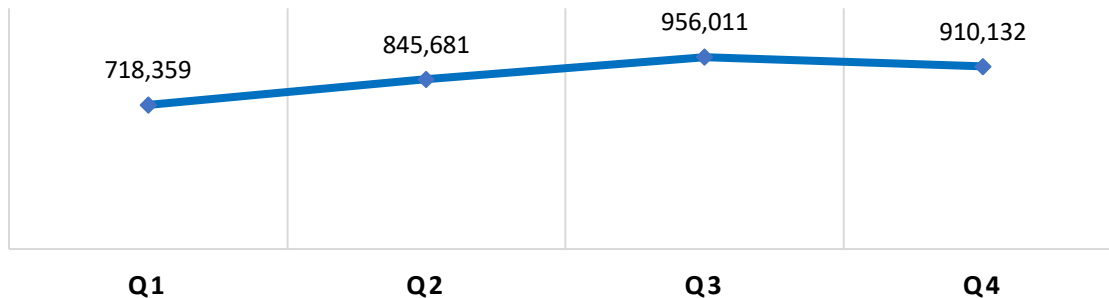
- Gross revenues of 3.430 billion USD, of which internal market 2.747 billion USD (80%) and external market 683 billion USD (20%), as a result of selling 5,655 thousand tons of products;
- Increase of petroleum on sales internal market by 5% as against 2019, year comparable from the volume point of view, and decrease of petroleum sales on external market.

*Internal market deliveries historical evolution:*

	2015	2016	2017	2018	2019	2020	2021 Budget
Internal market (%)	53%	54%	55%	56%	60%	70%	65%
Export market (%)	47%	46%	45%	44%	40%	30%	35%



### GROSS REVENUES (THOUSAND \$)



## 2.4 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.



## 2.5 Production plan

Operational improvements assumed in the Business Plan 2021, as a result of the already implemented Delfin Program I, II & III and additional no cost/low cost initiatives of the New Delfin Program in place:

- Production Initiatives, assuring a higher performance in terms of yields and production performance (e.g. level of Jet Fuel production of 246 ktons assumed within the 2021 Budget; MTBE Yield 2021 performance of 31% vs 20% Yield on the year prior to Delfin implementation), increase Propylene yield, increase the synergy between entities: more fuel oil transfer from Vega to PEM refinery in order to be processed in Delayed Coker Unit and increasing performance on the Technological Loss versus previous years (i.e. 0.79% targeted for 2021 Budget);
- Improving white products yield by implementing the following projects during turnaround 2020: Improve 180C2 Coker fractionator operation and 100C1 Atmospheric distillation column- increase heat removal from gasoil pump around;

### Key Operational Drivers

Days of operations	days	355
Feedstock Processed, of which:	ktons	6,001
Crud unit consumption	ktons	5,255
Other feedstock	ktons	747
Feedstock run-rate	t/day	16,905
Crude run-rate	t/day	14,802
Production, of which main:	ktons	5,652
Diesel	ktons	2,943
Gasoline	ktons	1,489
Jet	ktons	246
Propylene	ktons	159
LPG	ktons	289
Fuel oil	ktons	171
Fuel gas	ktons	66
Petroleum coke	ktons	243
Sulphur	ktons	47
White products yield	%	86.51%
Technological loss	%	0.80%



The operating plan for 2021 involves processing 6,001 thousand tons of raw materials, of which 5,255 thousand tons crude oil and 747 thousand tons of other raw materials.

## 2.6 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	70
RRC	Credit Sindicalizat (Unicredit, ING, BCR, Raiffeisenbank)	215
RRC	Unicredit Tiriace	10
RRC	Ing Bank	8
RRC	BCR	14
RRC	Raiffeisenbank	14
KMGT (RRC lines)	ING Geneva	53
KMGT (RRC lines)	BCP	31
KMGT (RRC lines)	Credit Agricole	67
KMGT (RRC lines)	Natixis	89
KMGT (RRC lines)	MUFG	39
KMGT (RRC lines)	Sberbank	31
<b>Total Line Utilization</b>		<b>641</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).



### 3.2.2 Market Share

Petrochemicals Division continued in 2021 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

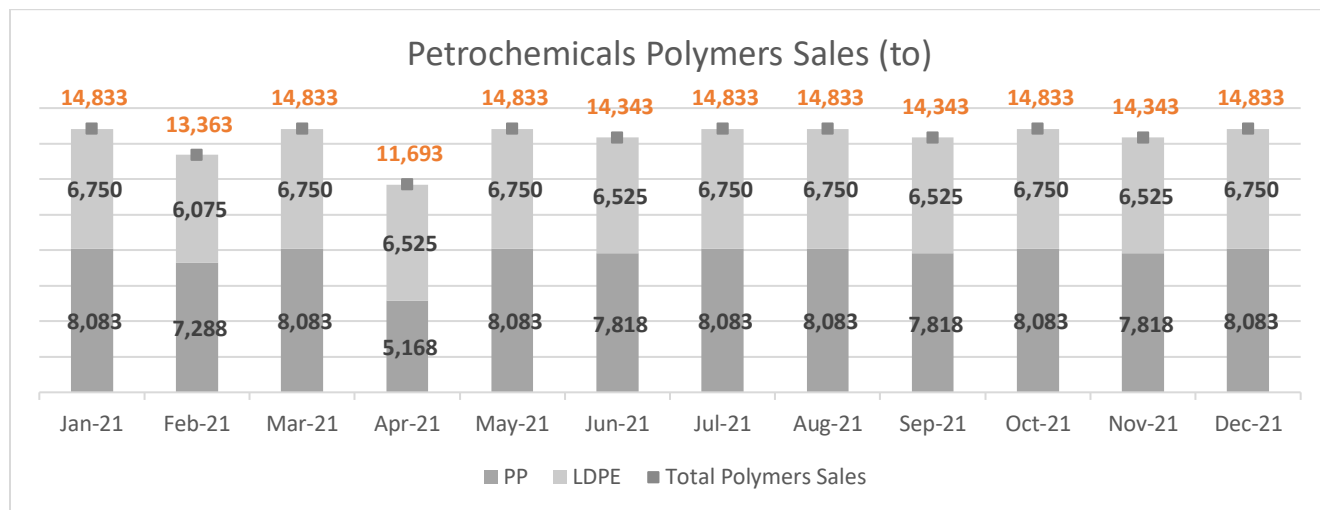
In the 2021 budget, the following unit market quotations assumptions for main products have been thus taken:

- **Propane-Propylene** price aligned to 1.4 x Naphtha (as per last 5 years average index);
- **Ethylene** price was assumed according with the new supply contract at Low Density Polyethylene quotations minus 250 \$/t, thus eliminating the basis risk (ethylene supply quot in USD vs. LDPE quot in EUR);
- **Low Density Polyethylene** price assumed as average of last year Rompetrol Rafinare prices;
- **Polypropylene** price was determined according the last year average crack (the difference between the raw materials and sales price) 406 \$/t for internal market and 305 \$/t for export.



### 3.2.4 Sales

Total sales of Polymers in 2021 are planned to reach 171,910 tons, of which 92,485 tons of Polypropylene, representing 53.8%, and 79,425 tons of Low Density Polyethylene representing 46.2%, according with plants production capacity.



For the internal market it is planned to be delivered 81,585 tons i.e. 50.4% of Polypropylene and 44.1% of Low Density Polyethylene.

	Chanel	Quantity	%
PP	Intern	46,585	50.4%
	Export	45,900	49.6%
LDPE	Intern	35,000	44.1%
	Export	44,425	55.9%





### 3.2.5 Production plan

- **PP production** – 265 tons/day\*(n-0.5);
- **LDPE production** – 225 tons/day\*(n-1);
- **Swing HDPE into PP production** in order to improve Petrochemicals financial indicators - **project under development;**
- Production grade:
  - PP
    - *normal grade (raffie, injection) 73%*
    - *special grade (thermoforming, fibers, spunbond, film) 27%*
  - LDPE
    - *normal grade (film) 99.5%*
    - *special grade (for UV film) 0.5%*

Days of Operation PP Unit	days	349
Days of Operation LDPE	days	353
Days of Operation HDPE	days	0
<hr/>		
Feedstock Processed, of which:	ktons	240.1
Propane-Propylene	ktons	158.9
Ethylene	ktons	81.3
<hr/>		
Production	ktons	235.4
PP	ktons	92.5
LDPE	ktons	79.4
HDPE	ktons	-
Propane	ktons	31.5
Propylene P	ktons	32.0
<hr/>		
PP unit run-rate	t/day	265
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 2020 Vega Refinery managed to achieve operational performances such as:

- historical record for bitumen production of 123 ktons;
- lowest technological consumption ever reached: 0.75% wt.

In 2021 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 Rompetrol 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;
- financial consulting for tax incentives provided by legislation;
- territorial coverage at national level.

In 2021 bitumen sales are estimated to 120,421 tonnes, by 2% lower 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:

- Hungary, Poland and Bulgaria for naphtha;
- Germany, Poland and Hungary for ecological solvents;
- Bulgaria for heating oils, gasoil and white spirit;
- Austria, Bulgaria, Poland and Hungary for n-hexane.

Other markets:

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

Naphtha sales represent 27% of total sales for 2021.

### 4.2.3 Competition

Competitors on domestic market:

- OMV Petrom –Brazi Refinery– for fuel oil and heating oil;
- MOL Ungaria, Basell Polonia, Eni Italia, Haifa Israel – for hexane, SBP, white spirit;
- Sargent Marine SRL Agigea, Transbitum SRL Mangalia, MOL Ungaria, Total SRL - Ozun, Lotus Polonia, Burgas Bulgaria, Lotos Asphalt – Terminal Sabauani, Gazprom – Rafinaria Pancevo Serbia, Orlen Asphalt – Terminal Floresti, Rafinaria Trzebinia Polonia– for bitumen.



#### 4.2.4 Market assumptions

In the 2021 budget Rompetrol Rafinare decided to take a prudent approach through usage of an historical level of the market proposed:

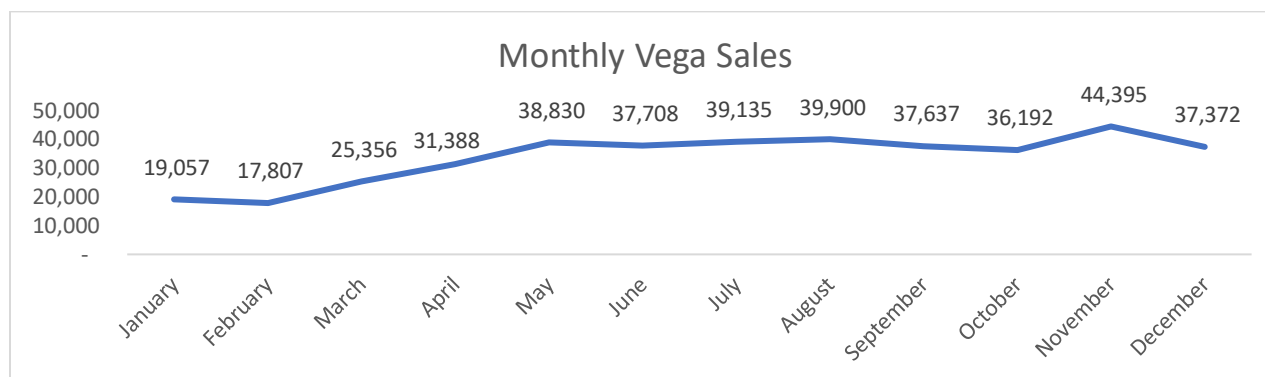
- **Naphtha** Market quotations, used for sales of normal Hexane, level assumed in line with the average unit market crack level of the last past year;
- **Jet** Market quotation used for sales of White spirit, level assumed in line with the average unit market crack level of the last past years;
- **Gasoil 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 2021</i>	<i>Sales prices (USD/to)</i>		
	<b>Domestic</b>	<b>Export</b>	<b>Average</b>
<i>Naphtha gasoline</i>	289.91	309.55	302.87
<i>Hexane</i>	493.44	484.79	485.09
<i>Ecological Solvents</i>	525.25	361.18	362.55
<i>White spirit</i>	430.06	532.91	485.59
<i>Gasoil &amp; Heating Oils</i>	406.56	0.00	406.56
<i>Light liquid fuel</i>	314.31	0.00	314.31
<i>Bitumen</i>	357.80	291.70	357.25
<i>Fuel oil</i>	255.85	0.00	255.85
<b>Total</b>	<b>334.42</b>	<b>393.91</b>	<b>364.51</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 2021</b>	<b>Domestic</b>	<b>Export</b>	<b>Total</b>
<b>Total products, out of which:</b>	<b>200,048</b>	<b>204,728</b>	<b>404,776</b>
<i>Naphtha gasoline</i>	37,529	72,829	110,358
<i>Hexane</i>	2,866	79,275	82,141
<i>Ecological Solvents</i>	400	47,365	47,765
<i>White spirit</i>	3,630	4,259	7,889
<i>Gasoil &amp; Heating Oils</i>	3,146	0	3,146
<i>Light liquid fuel</i>	6,330	0	6,330
<i>Bitumen</i>	119,421	1,000	120,421
<i>Fuel oil</i>	26,726	0	26,726



### 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 ~ 4 ktons/month** starting with March 2020;
- **Fuel oil from Vega refinery to PEM of ~ 12 ktons/year;**
- **Bitumen and Vacuum Distillation unit in operation** between March-December due to seasonal market demand.

Days of operations	days	365
Capacity Utilization	%	123.72%
Feedstock Run-rate	ktons/day	1.119
Feedstock Processed	ktons	408
Production, of which:	ktons	405
Naphtha	ktons	110
Bitumen	ktons	120
Hexane	ktons	82
Fuel Oil	ktons	27
Solvents	ktons	48
Technological Loss	%	0.86%



## 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.

### 4.5.3 2021 Budget

**The amount estimated for** rehabilitation and remediation of the area where the lagoons containing acid tars and oil residues is 22.81 mil USD.

Important works to be carried out during 2021:

- Closing acid tar B 18 which involves the installation of the lid (encapsulation);
- Completion of excavation and treatment of acid tar and contaminated soil for B16 and B17;
- Waterproofing acid tar B17 and installation of lid (encapsulation);
- Waterproofing acid tar 16;
- Start of excavation and treatment works for acid tars 19, 20 and 7-12.



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

Budget Income Statement for 2021*					
(Thousand USD)					
Description	Year 2021	Q1	Q2	Q3	Q4
<b>GROSS REVENUES</b>	<b>3,562,470</b>	<b>747,578</b>	<b>879,563</b>	<b>990,512</b>	<b>944,817</b>
<b>SALES TAXES</b>	<b>(1,304,706)</b>	<b>(302,945)</b>	<b>(316,267)</b>	<b>(356,856)</b>	<b>(328,638)</b>
<b>Net revenues</b>	<b>2,257,765</b>	<b>444,633</b>	<b>563,296</b>	<b>633,656</b>	<b>616,180</b>
<b>COST OF SALES</b>	<b>(2,238,175)</b>	<b>(471,606)</b>	<b>(554,269)</b>	<b>(608,740)</b>	<b>(603,560)</b>
<b>GROSS MARGIN</b>	<b>19,589</b>	<b>(26,973)</b>	<b>9,026</b>	<b>24,916</b>	<b>12,619</b>
<b>SELLING, GENERAL &amp; ADMINISTRATION</b>	<b>(52,247)</b>	<b>(11,891)</b>	<b>(12,467)</b>	<b>(12,687)</b>	<b>(15,202)</b>
<b>ADJUSTMENT Depreciation &amp; Amortization</b>	<b>96,986</b>	<b>24,688</b>	<b>24,253</b>	<b>24,082</b>	<b>23,963</b>
<b>EBITDA</b>	<b>64,328</b>	<b>(14,176)</b>	<b>20,812</b>	<b>36,311</b>	<b>21,380</b>
<b>PROVISIONS</b>	<b>21,685</b>	<b>(334)</b>	<b>(334)</b>	<b>(228)</b>	<b>22,582</b>
<b>EBIT/Operating Profit/(Loss)</b>	<b>(10,973)</b>	<b>(39,198)</b>	<b>(3,775)</b>	<b>12,001</b>	<b>19,999</b>
<b>Interest &amp; commissions, net</b>	<b>(40,966)</b>	<b>(9,469)</b>	<b>(9,944)</b>	<b>(9,336)</b>	<b>(12,218)</b>
<b>PROFIT/(LOSS) Before Income Tax</b>	<b>(51,940)</b>	<b>(48,666)</b>	<b>(13,719)</b>	<b>2,665</b>	<b>7,781</b>
<b>Deferred tax</b>	<b>(8,810)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(8,810)</b>
<b>NET PROFIT/(LOSS)</b>	<b>(60,750)</b>	<b>(48,666)</b>	<b>(13,719)</b>	<b>2,665</b>	<b>(1,029)</b>

\* Internal Plan 2021 for approved by board of directors Rompetrol Rafinare



Income and expenses budget of Rompetrol Rafinare S.A. for 2021 will be subject to approval at the Ordinary General Assembly of Shareholders scheduled for April 28, 2021.

## THE BOARD OF DIRECTORS:

### Chairman

**Yedil Utekov**

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*Yedil Utekov*

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### Member

**Alexey Golovin**

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*Alexey Golovin*

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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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*Nicolae Bogdan Codrut Stanescu*

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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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*Alexandru Stăvărache*

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**Rompetrol Rafinare**  
**Income Statement**

USD

	BUDGET*
	Year, 2021
<b>GROSS REVENUES</b>	<b>3,562,470,088</b>
SALES TAXES	(1,304,705,524)
<b>Net revenues</b>	<b>2,257,764,564</b>
<b>Purchases</b>	<b>(1,913,305,271)</b>
Purchases - crude oil and equivalents	(1,493,396,719)
Purchases - other raw materials	(413,671,363)
Purchases - auxiliary materials	(6,237,190)
<b>Change in inventories Purchases</b>	<b>(10,601,880)</b>
<b>= Gross Margin</b>	<b>333,857,413</b>
<b>Variable logistics Costs</b>	<b>(36,059,080)</b>
Variable logistics Costs Inbound	(20,720,160)
Variable logistics Costs Outbound	(15,338,920)
<b>= Contribution</b>	<b>297,798,333</b>
<b>Conversion&amp;Service Costs Cash</b>	<b>(196,400,570)</b>
Utilities	(99,212,764)
Maintenance	(21,962,953)
Staff costs	(26,271,099)
Other expenses	(48,953,754.51)
Depreciation Conversion	(94,443,977)
<b>Change in inventories Production</b>	<b>(2,713,379)</b>
Add back Capitalised Expenses to Capex	10,000
<b>= Gross Profit</b>	<b>4,250,406</b>
<b>Selling &amp; Distribution Cash</b>	<b>(7,680,651)</b>
Staff costs	(1,642,854)
Rent	(40,079)
Utilities	(510,663)
Maintenance	(899,179)
Insurance	(325,500)
IT&C	(371,158)
Other selling & distribution Cash	(3,891,218)
Depreciation Selling & Distribution	(447,997)
<b>General &amp; Admin Cash</b>	<b>(26,685,964)</b>
Staff costs and salary related taxes	(4,154,499)
Rent	(7,711)
Utilities	(491,812)
Maintenance	(477,776)
Security services (only ADMIN - Global Security Sistem)	(250,225)
Insurance	(29,254)
Local Taxes (impozitul pe cladire - ADMIN + other taxes)	(877,150)
IT&C	(1,584,298)
Consulting & professional fees & Management fees	(14,432,065)
Sponsorships	(12,000)
Environmental services	(4,252)
Marketing	(25,285)
Fire protection services (Buoy, tank farm, other)	(186,979)
Other general & admin Cash	(4,152,656.51)
Depreciation General & Admin	(2,093,890)
<b>Other operating revenues/expenses</b>	<b>-</b>
Add back Depreciation	96,985,864
<b>= EBITDA</b>	<b>64,327,768</b>
<b>Provisions</b>	<b>21,684,780</b>
<b>= EBIT/Operating Profit/(Loss)</b>	<b>(10,973,315)</b>
<b>Interest &amp; commissions, net</b>	<b>(40,966,388)</b>
<b>=EBT</b>	<b>(51,939,703)</b>
<b>Profit tax (Deferred tax)</b>	<b>(8,810,000)</b>
<b>Minority interest</b>	<b>-</b>
<b>= Net profit/(Loss)</b>	<b>(60,749,703)</b>

\* Internal Plan 2021 for approved by board of directors

**THE BOARD OF DIRECTORS:**

**Chairman**  
**Yedil Utekov**

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*Yedil Utekov*

**Member**  
**Alexey Golovin**

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*Alexey Golovin*

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

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*Felix Crudu-Tesloveanu*

**Member**  
**Bogdan-Catalin Sterio**

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*Bogdan-Catalin Steriopol*

**Member**  
**Nicolae Bogdan Codrut Stanescu**

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*Nicolae Bogdan Codrut Stanescu*

**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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