Investment budget for 2018

2018 Investment program is structured in 3 sections, based on objectives and projects magnitude.

Total investments value allocated for **2018** is **56,908,242 USD,** according below table:

	Budget 2018
Petromidia Refinery, from which:	**44,261,981 USD**
Development	7,315,187 USD
Compliance	11,480,315 USD
Capital Maintenance	25,305,726 USD
Operational Support/Non-Operational	160,753 USD
Petrochemicals, from which:	**6,810,217 USD**
Development	1,224,250 USD
Compliance	1,555,487 USD
Capital Maintenance	4,030,480 USD
Vega Refinery, from which:	**5,836,044 USD**
Development	578,505 USD
Compliance	2,964,477 USD
Capital Maintenance	2,158,035 USD
Operational Support	135,027 USD
Rompetrol Refinery total investments	**56,908,242 USD**

Development

This category includes projects for static and dynamic equipment revamp and modernization, in order to keep in good condition for safe operation of the Refineries units.
From this category, a very important place is held by projects from „Storage and logistics" area, which, consecutive to processing capacity of the refinery increasing to 5mil.tones/year after „2010 Package" implementation, will solve refinery problems regarding storage possibilities, blending and deliveries of the products in order to get a maximum efficiency by a rational use of all components. Projects from this category:

- **New Tanks**

Project scope:

- For crude oil, is to build two tanks, with 85,000 m3 capacity of each, installed in the Petromidia Refinery area, within the boundary between the Briquetting Unit and the existing trough channel. The tanks are with internal floating roof in direct contact with the product, self-supporting aluminum dome.
- For diesel, is to build 2 new 20,000 m3 tanks each in order to increase the storage capacity for Diesel. The tanks will be installed in the Petromidia Refinery area within the boundary of roads 18, 19, 5, 30.
- For gasoline, is to build 2 new 15,000 m3 tanks each in order to increase the storage capacity for Gasoline. The tanks will be installed in the Petromidia Refinery area within the boundary of roads 18, 29, 30, 19.

- For MTBE, is to build a new 10,000 m3 tank in order to increase the storage capacity for imported MTBE.

All new tanks will be designed in double-shell plate construction as hydrostatic tank, vertical and cylindrical, in welded construction. The double shell plate serves as retention dike.
The tanks will be built with all the necessary arrangements for its safe operation and will be provided with all the necessary facilities for their integration in refinery's technological flow for normal or emergency operation, including process and utility pipeline systems, automation equipment, safety systems, utilities and intervention in the event of fire, monitoring systems, etc.
All the projects will start in 2018 with design phase and will continue with project execution phase.

❖ **Modernization of the In Line Blending Unit**
- To make In - Line Blending system, a fully operational, controlled and automated process in order to obtain quality products.
- Optimizing the blends composition to the lowest price of the product, with a greater control over the giveaway and reducing in the same time re-blending operations.
- Implementation and use in DILB of optimization software for additives.
- C97, C98 tanks configuration to DILB software interface (field works mechanical, electrical and instrumentation will be performed in "Rehabilitation of C100 and DV20 tanks and relocation to other storage and delivery paths" project).
- Maintain and assure the In - Line Blending system reliability at the lowest cost possible for at least the next five years.

❖ **New HP pipelines (36 barg) between Refinery (UTM limit-node A) and RPP (node H)**

Project objective:
- To minimize heat losses on steam headers (HP and MP steam)
- To provide proper operational parameters for HP steam to all Petrochemical consumers, in case that HP steam is delivered from UTM

Project scope:
- Transform actual HP main header (1000 m, Dn 350/300) in MP header, from node A Refinery to node H Petrochemicals
- Install a new pipeline for HP main header (1*1400 m, Dn 200) including all the connections to the consumer battery limit (isolating valve) and thermal insulations

Benefits:
- Assure proper HP steam parameters for all consumers:
- Potential loss avoided
- Minimize MP steam heat losses during transportation

❖ **HDPE Unit Restart**

Project scope:
- Operating with pressurised equipment, pipes and lifting equipment with ISCIR authorisation according to legislation.
- HDPE plant restart in total safety conditions.
- Prolonging equipment functionality time according to HG 2139/2004;
- To avoid unexpected shutdown

Business Objective:
- Restating HDPE unit, Rompetrol market will consolidate because of increased production of polymers

Benefits:
- Increasing the range of products as many PP and LDPE customers are also processing HDPE and it will be an advantage for them to supply all their raw materials from a single location

❖ **Revamp Fuel Oil ramp to relocate black products from automated ramp**

Taking into consideration Refinery capacity increasing at 5 milions tons/year, the immediate result of this action will be the quantitative and qualitative increase of the products. Consequently, it is necessary to reconsider the storage possibilities, blending and deliveries of the product in order to get a maximum efficiency by a rational use of all components

The project objective is to upgrade and modernize the old fuel ramp for fuel oil operations loading, which will allow extra 15 kt/month of diesel loadings on Railway Ramp.

Compliance

This category includes compulsory investments required by environmental and safety regulations:

❖ **Expire authorization ISCIR for static equipment (ISCIR 2017-2018)**

Project consists in aligning to legislation requirements in terms of safety functionality of the refinery equipment.

In July 2010 occurred new modifications of the existing legislation, namely technical prescriptions C4, C6 and C10, 2010 edition introduced the obligation to prepare Examination, Checks and Investigation (EVI) Programs for all equipment and pressurized pipes older than 12÷18 years in order to perform Technical Checks in Use for Examinations with Technical Character (VTU-IECT).

As of 2004 the Beneficiary was required to prepare Technical Documentation for each pipe and to authorize all pressurized pipes owned. By project implementation, the following benefits are expected:

- Running with the refinery units in safety conditions according to legislation in force, as a result of detailed verifications which will be performed during this evaluation program which will have as a result the technical evaluation of the equipment after specified years of service, as well as repair or elimination of the faults which will appear after the checks;
- Obtaining the functioning authorization for the pressurized equipment, pipes and lifting equipment as per Technical Prescriptions

The project main objective consist in running with the refinery units in safety conditions according to legislation in force, as a result of detailed verifications which will be performed during this evaluation program which will have as a result the technical evaluation of the equipment after N years of service, as well as repair or elimination of the faults which will appear after the checks.

❖ **Replace Low NOx burnes at 130H1,H2,H3, Reformer Catalytic Unit**

Project scope:

- DDE for equipment procurement and erection of a new refinery gas feeding system;
- Design, equipment procurement and erection of a new natural gas system for pilots;
- Sizing, procurement and installation of LOW NOx blowing burners;
- Design, equipment procurement, devices and instrumentation of necessary control system for burning system, including fuel gas (natural gas and refinery) feeding and its integration in DCS
- Equipment erection, performance teste

Benefits:

- Compliance with IPPC Permit related to NOx emissions (max. 150 mg/Nmc flue gases). In case of non-compliance with the conditions of the IPPC Permit the operator is obligated to suspend the operation of the installation until reestablishing the conditions of compliance.
- Compliance with the European Norm EN 746-2 related to fuel gas supply system

❖ **LPG recovery from DCU gases**

Project objective:

- Comply with environmental regulations - Law 278/2013 Art 21 (4) that is amended by Decision 738/2014 regarding the best available techniques (BAT) under Directive 2010/75 / EU of the European Parliament and of the Council on industrial emissions for the refining of mineral oil and gas that the operators have 4 years (from the publication of BAT decision-2014), to reduce the content of organic sulphur compounds in DCU gas before the amine scrubbing, below 20mg/Nm3 for all furnaces (exception SRU, FCC, FH2) at stacks.
- Reducing total sulphur in the fuel gas will result in reduction of SO_2 content in the stack.

Benefits:

- Emissions limits values reduction for SO2 between 5-20 mg/Nm3 for all furnaces (exception SRU, FCC, FH2) at stacks through sulfur reduction in the fuel gases from 150-300 ppm to 25-30 ppm
- Yield recovery

❖ **Vapor recovery system at Auto loading points**

The project main objective consist in compliance with environmental legislation regarding the emissions of volatile organic compounds at a value of 0.15 g/Nmc with benzene monitoring, applicable starting October 2018, according BAT Decision from 2014, 9th October based on 2010/75/UE Directive of European Parliament and the Council regarding industrial emissions for petroleum and gas refining

The project deliverable is vapor recovery installation in Auto Ramp for loading organic solvents SE 30/60, SE 65/80, SE 75/115, n-hexane and naphtha ready for operation connected to the existent skid

The main benefits of projects consist in:

- Decrese loading solvents technological consumption with 0,15% from overall refinery technolocical consumption
- Reducing the emissions in the atmosphere and comply with environmental requirements

❖ **Vapor recovery system at railway loading point**

The project main objective consist in compliance with HG 568/2001 by having Vapor Recovery Unit conected at the truck and rail terminals;

The project deliverable is Vapour recovery installation in CF Ramp for loading organic solvents SE 30/60, SE 65/80, SE 75/115, n-hexane and white spirit ready for operation

The main benefits of projects consist in:

- Decrese loading/unloading technological consumption with 0,1% for the whole Production unit from 1,9%.
- Reducing the emissions in the atmosphere and comply with environmental requirements

❖ **Replacement of 140-C1 and 140-C2 columns**

Scope and interdependencies

- Acquisition of new columns for 140-C1 and 140-C2 according to documentation
- Purchase and installed Agilent 7890B - DHA (Detailed Hydrocarbon Analysis) analyzer for petroleum fraction analysis, turnkey solution Wasson-ECE
- Dismantling and installing 140-C1 and 140-C2 columns on exsting foundations in the Rectification Unit;
- Replacement of the pipelines. Realize the pipelines network for the 140-C1 and 140 - C2 columns of the Rectification plant.
- Removing existing electrical installation of lighting from 140-C1 and 140-C2 columns and mount it on the new columns;
- Purchase and installation instrumentation and control equipment

- The working execution for preparing the route in order to transport the equipment at site and the works necessary for the installation of the columns;
- Obtaining the advice EX for the Rectification Unit.

Benefits

- Obtaining the ISCIR advices for running of the Rectification Unit.
- Replacing existing columns with new columns with performant internals ensure the increasing of the processing efficiency.

Capital Maintenance

❖ **Refinery and Petrochemicals 2018 Shutdown**

Under the planned 2018 Refinery and Petrochemicals Shutdown project will be performed only activities that can be carried with units out of operation.

The main works packages consist of:

- Operational works – Other activities, not related to maintenance repairs or revamp, but are required in order to achieve a good efficiency for Refinery, to prevent any damage or failure of equipment due to corrosion, erosion, deposits (washing, cleaning, inspections of vessels, columns, air coolers and heat exchangers, washing or replacement filters elements, declogging water towers etc.).
- Maintenance preventive programs – All scheduled activities for dynamics, static equipment, instumentation or pipelines that can not be performed during operation
- Inspection and calibration – instrumentation must be inspected and calibrated, and all electrical connections must be verified.
- Implementation of Capital Maintenance projects (equipments that will be replaced only in shutdown period) or Improvement projects (that bring benefits for refinery).
- Adjacent activities as ISCIR projects - works conducted in order to obtain prolongation of authorization for equipment and pipeline;
- Findings from 2017 Shutdown – after inspection conducted in 2017 Shutdown, results a number of repair works that remain under observation. Those works are necessary to be executed in the next shutdown because in 2 years of function and can provoke a failure of equipment.
- Unexpected/found works – works that will appear after we will open the equipment.
- Activities regarding to maintain SAFETY conditions

Benefits of Project

- Maintaining mechanical availability at high level for the following period until 2020 next Refinery General Turnaround;
- Increase operational efficiency of repaired, washed and inspected equipment;
- Recertification of pressure equipment and pipe systems, instrumentation, metrology, electrical systems, in accordance with Romanian laws and prescriptions, it is required by ISCIR prescription every 4 years (max. 5 years with special conditions to be achieved)

❖ **Heat insulation in Vega refinery**

The final objective of the project is to rebuild the thermal insulation on portions where it is degraded or lacking, according to the initial designThe creation of dedicated storage capacity requirements for the MTBE.

Benefits:

- Distribution of steam in the refinery to nominal parameters and safety conditions by bringing thermal insulation to the initial state, including the elimination of losses
- Decreasing operating costs by eliminating the energy losses through the damaged insulation

- Pumping full oil type 40/45 between pumps house, tanks and loading ramp at nominal parameters and safety conditions by bringing the thermal insulation back to the initial condition, including the elimination of losses.

THE BOARD OF DIRECTORS:

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Alexey Golovin

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Yedil Utekov

Member
Mihai-Liviu Mihalache

Membru
Nicoleta-Viorica Soisun

Chief Financial Officer
Vasile-Gabriel Manole

Made by:
Process & Engineering Director
Cristian Bolohan

PPO Director
Raluca Lainer

DMCI Director
Cristian Jivu

Utilities Plant Manager
Boris Ionel Bucur

INVESTMENT BUDGET FOR YEAR 2018

Nr. crt.	Project Name	Total Project estimated Budget	2018 Budget_Reforecast (excluding RIS profit)
	Refininig	**$ 259,728,560**	**$ 56,908,242**
	Petromidia	**$ 208,954,631**	**$ 44,261,981**
	Petromidia Development	**$ 110,222,309**	**$ 7,315,187**
1	Modernization of in line blending unit-Implementation	$ 1,998,046	$ 421,915
2	G1 section 1 pumping station modernization	$ 2,075,146	$ 85,648
3	Build 2 new crude oil storage tanks of 85,000 m3 each	$ 54,486,162	$ 457,299
4	Increase railway diesel loading capacity	$ 637,835	$ 500,101
5	Revamp Fuel Oil ramp to relocate black products from automated ramp	$ 2,381,924	$ 2,013,138
6	Design for Optimize loading and storage facilities in the truck delivery terminal	$ 239,250	$ 217,500
7	Build new 10,000m3 MTBE storage	$ 4,903,666	$ 141,298
8	Build new 20,000m3 diesel storage tanks and facilities for gasoline and diesel storage	$ 16,901,379	$ 215,881
9	Build new 15,000m3 gasoline storage	$ 12,920,600	$ 148,639
10	New Reformer component tank 5,000m3	$ 2,799,610	$ 35,273
11	Maximize usage of 185 unit condensate thermal potential	$ 955,327	$ 199,564
12	Swap GFU Debutaniser reboiler from MPS to LPS	$ 337,645	$ 66,720
13	Increase Coker severity by introducing HCGO recycle	$ 372,828	$ 255,233
14	Increase FCC feed preheat 138FE2	$ 1,353,986	$ 182,222
15	100C1 Atmospheric distillation column- increase heat removal from gasoil pumparound	$ 2,156,291	$ 198,521
16	Biodiesel two new tanks (4300m3 and 2700m3)	$ 3,978,632	$ 100,000
17	Improve U122 feed-effluent heat exchange	$ 758,361	$ 83,597
18	Design for Increase delivery capacity of Line 14	$ 239,250	$ 217,500
19	New Condensate pipeline between G291AB (condensate pumps from Petrochemicals) and UTM batte	$ 882,745	$ 740,183
20	New HP pipelines (36 barg) between Ref (UTM limit-node A) and RPP (node H)	$ 1,841,671	$ 1,034,956
	Petromidia Operational	**$ 97,661,122**	**$ 36,786,041**
	Petromidia Operational - Operational Suport	**$ 444,213**	**$ 12,000**
21	Increase loading rate of Hexane vessels	$ 140,250	$ 3,500
22	Install on line waste water parameters monitoring system on WWTP inlet	$ 71,775	$ 5,000
23	Installment of 2 new bottom loading points in Ippa	$ 232,188	$ 3,500
	Petromidia Operational - Compliance	**$ 29,787,929**	**$ 11,468,315**
24	Vary-frequency converters for flow adjustments for pumps motors (instead of recalculating loop) - 30 pieces	$ 709,772	$ 237,427
25	Detailed Design Engineering For Fire-Fighting System Rehabilitation	$ 986,871	$ 411,313
26	Fire-fighting Water Main Replacement, section A and I	$ 1,198,143	$ 73,258
27	De-clogging discharge channel	$ 115,399	$ 7,620
28	Chemical building for G1 Cooling Tower	$ 356,462	$ 17,447
29	P&ID for AFPE	$ 434,808	$ 5,000
30	Expire authorization ISCIR for static equipment's (ISCIR 2017-2018 PEM)	$ 11,453,750	$ 3,898,019
31	Expire authorization ISCIR for static equipment's (ISCIR 2016 PEM)	$ 5,579,579	$ 222
32	Expire authorization ISCIR for equipment's with due date in 2019, ISCIR 2018 PEM	$ 4,895,290	$ 3,796,675
33	Gas pipelines reconditioning	$ 548,381	$ 5,979
34	LPG recovery from DCU gases	$ 2,460,762	$ 306,966
35	Centralized system of warning and alarm in Petromidia Platform	$ 467,148	$ 5,000
36	Pressurization system upgrading in control rooms at Railcar Loading Point, black- white products	$ 470,477	$ 362,410
37	Replace Radio stations and fire fighting warning centrals (SESAM model)	$ 274,431	$ 4,800
38	Lighting improvement (replacing street lighting with LED lamps) 2017	$ 402,000	$ 6,443
39	Replace Low NOx burnes at 130H1,H2,H3, Reformer Catalytic Unit	$ 2,499,065	$ 2,265,754
40	LOTO implementation in Petromidia	$ 689,196	$ 60,483
41	Replace auto tankers for chemical transport to cooling towers and WWTP	$ 47,850	$ 3,500
	Petromidia Operational - Capital maintenance	**$ 67,873,193**	**$ 25,305,726**
42	Purchasing Power Transformer 110 kV / 6 kV 63 MVA	$ 1,065,731	$ 149,253
43	Rehabilitation of C100 and DV20 tanks and relocation to other storage and delivery paths	$ 4,907,761	$ 217,076
44	100 T3 tank rehabilitation	$ 9,994,304	$ 2,741,408
45	Tank DH24 rehabilitation	$ 2,983,771	$ 12,012
46	S124 slops tank rehabilitation	$ 1,023,353	$ 365,158
47	Rehabilitation tank 120-338 B6	$ 2,915,850	$ 6,784
48	Refinery 2018 Shutdown	$ 10,811,834	$ 9,938,031
49	Refinery 2018 Catalyst Change	$ 2,877,000	$ 2,877,000
50	Replace Refinery static equipment	$ 1,052,311	$ 956,646
51	Replacing the transfer pipes between the furnaces 100 H1/H2 and column 100C	$ 285,930	$ 260,118
52	Replace tube bundles heat exchanger 120S1B, 120S1D and 120S1H, Naphta hydrotreater unit	$ 311,560	$ 283,236
53	Repairs at tanks TL70, V26/1B and V27	$ 684,000	$ 5,000
54	65 steam trap installing and condensate pipelines (low and medium) rehabilitation	$ 503,412	$ 15,983
55	Drainage pumping station automation (5 pumping stations)	$ 146,388	$ 4,800
56	Liquid Nitrogen cryogenical vessels anticorrosion protection	$ 96,661	$ 5,000
57	Purchase reformer recycle hydrogen online analyzer for molecular weight	$ 77,000	$ 10,503
58	Replacement of Convective System 138FH4 CO Boiler, FCC Unit	$ 2,543,282	$ 2,318,438
59	Replacement crossover and inlet system, HPP unit	$ 1,595,926	$ 1,187,616
60	Replace steam heating system at PSI building with alternative heating system	$ 204,930	$ 3,500
61	Replace power meters for our clients	$ 161,696	$ 13,761
62	Rehabilitation of PEM buildings and warehouses	$ 1,163,250	$ 1,750
63	Mounting online analyzers to monitor gaze arse at FCC, FH2 and SRU	$ 369,284	$ 112,600
64	Modernization of VRU system at IPPA and CF Ramp	$ 440,000	$ 10,000
65	Replace the old 6 KV swithces and the releys compartiments in power station SRA2	$ 1,398,921	$ 227,794
66	Replacement of reactor 130R1R2R3	$ 3,113,196	$ 615,350
67	Rehabilitation and reconfiguration of the field equipment's from In Line Blending System	$ 1,281,867	$ 421,942
68	Replacement of stripping column 185C2	$ 764,018	$ 694,561
69	Purchase of XRF chloride analyser	$ 90,000	$ 90,000
70	G3 cooling tower PI system implementation	$ 146,760	$ 14,397
71	RBI software implementation for HB plant	$ 529,349	$ 9,322
72	Replace ignition and surveillance system at 138FH4 CO Boyler, FCC Unit	$ 323,209	$ 288,831
73	Replace pumps 715SP5R and 715SP6R	$ 253,681	$ 26,735
74	Repairs and tank radar installing on S121 Sloap tank	$ 357,390	$ 3,500
75	Rehabilitation tank T103	$ 2,511,323	$ 12,850
76	Rehabilitation M92 tank	$ 4,153,060	$ 8,056
77	Rehabilitation B54 tank	$ 1,629,697	$ 7,222
78	Rehabilitation of fuel oil ramp facilities	$ 936,160	$ 771,250
79	Rehabilitation V19 tank AFPR	$ 186,450	$ 3,500
80	Rehabilitation of degassers and skids in Rail ramp	$ 2,229,980	$ 382,744
81	Replace biological treatment aeration system	$ 140,250	$ 3,500
82	Replace 0.4kv equipment TGD 107/1 si TGD 109/1-Delay Coker Unit and AFPE	$ 278,850	$ 3,500
83	Rehabilitation parking on entry and ADR area from IPPA	$ 462,008	$ 98,022
84	Rehabilitation parking on waiting and exit area from IPPA	$ 462,245	$ 85,080
85	Rehabilitation of extended parking in IPPA area (with crushed stone)	$ 409,551	$ 41,896
	Petromidia Non-Operational	**$ 1,071,200**	**$ 160,753**
	Petromidia Non-Operational - IT	**$ 1,071,200**	**$ 112,400**
86	Upgrade Pims, Orion , Utilities	$ 174,000	$ 15,000
87	ISCIR equipment application	$ 228,000	$ 5,000
88	Implementation soft for weighing automatization on Ob431	$ 60,900	$ 20,000
89	IT non-standard equipments 2018	$ 17,400	$ 17,400

90	Replace HVAC system Petromidia Data Center	$ 60,900	$ 20,000
91	Upgrade electric infrastructure Petromidia Data Center	$ 30,000	$ 30,000
92	Implementation of electronic permit to work	$ 500,000	$ 5,000
	Petromidia Non-Operational - ADMINISTRATIVE	**$ 1,291,531**	**$ 48,353**
93	Radio studio rehabilitation	$ 29,281	$ 18,353
94	Buildings thermal rehabilitattion and alternative heating sources	$ 1,262,250	$ 30,000
	Petrochemicals	**$ 23,843,259**	**$ 6,810,217**
	Petrochemical Development	**$ 5,699,739**	**$ 1,224,250**
95	HDPE Restart	$ 5,699,739	$ 1,224,250
	Petrochemicals Operational	**$ 18,143,519**	**$ 5,585,967**
	Petrochemicals Operational - Compliance	**$ 10,672,373**	**$ 1,555,486**
96	Restoring the storage capacity and operability of the warehouse for acids and bases	$ 552,582	$ 10,140
97	Expire authorization ISCIR for static equipment's (ISCIR 2016-2017 PET)	$ 8,209,590	$ 6,105
98	Expire authorization ISCIR for static equipment's (ISCIR 2018 PET)	$ 2,462,783	$ 1,479,528
99	EQUIPMENT SUPPORT STRUCTURE PP - EXPERTISE AND CONSOLIDATION/ REPAIR PROJECT	$ 98,187	$ 59,713
	Petrochemicals Operational - Capital maintenance	**$ 7,471,146**	**$ 4,030,480**
100	Petrochemicals 2018 Shut Down	$ 1,508,997	$ 1,380,906
101	Purchase heat exchange 324E201, PP Unit	$ 486,719	$ 442,563
102	C 121A-corroded wall replacement, replacement superheater SI IV , NDT-verification of remaining elements, replacind plug pipes of superheaters (abturated during the reparations)	$ 1,544,334	$ 10,000
103	Purchase a pair of screws mixers Z 502A,B	$ 624,448	$ 452,775
104	Purchase complete gear box for motor - reducers extruders Z501A,B	$ 628,452	$ 506,756
105	Replace tubes for Intercoolers E103 and E104, LDPE Unit	$ 418,072	$ 209,597
106	Bottom valves replacement of vessels V108A-E and V107, LDPE plant	$ 709,286	$ 7,674
107	Tehnical Expertise for F911	$ 437,778	$ 18,789
108	Monitoring and diagnosis system for K 101 si K 102 hypercompresors in LDPE plant	$ 1,113,061	$ 1,001,420
	VEGA	**$ 26,930,670**	**$ 5,836,044**
	VEGA Development	**$ 1,449,250**	**$ 578,505**
109	Design for New Bitument Unit	$ 239,250	$ 117,500
110	Jet working point in Vega	$ 1,210,000	$ 461,005
	VEGA Operational	**$ 25,481,420**	**$ 5,257,539**
	VEGA Operational - Operational Suport	**$ 216,598**	**$ 135,026**
111	Install a weighing scale at the bitumen loading point New Ramp	$ 108,299	$ 67,513
112	Install a weighing scale at the bitumen loading point Old Ramp	$ 108,299	$ 67,513
	VEGA Operational - Compliance	**$ 17,862,215**	**$ 2,964,477**
113	Mount floating membranes on hexane tank T7, Vega Platform	$ 827,033	$ 15,446
114	Mount floating membranes on hexane tank T8, Vega Platform	$ 793,587	$ 15,446
115	Mount floating membranes on hexane tank A64, Vega Platform	$ 775,946	$ 12,825
116	Mount floating membranes on hexane tank A65, Vega Platform	$ 772,023	$ 12,825
117	VEGA Vapor recovery system at railway loading point	$ 1,907,601	$ 449,740
118	Safety Package in Refinery Platform Vega	$ 465,647	$ 202,909
119	Replacement of 140-C1 and 140-C2 coloumns	$ 1,529,204	$ 1,215,621
120	Wastewater tank filling system	$ 373,849	$ 27,449
121	Expertise (PEVIT) for pressure equipments and metallic pipes authorized (ISCIR 2017)	$ 589,319	$ 71,822
122	Expertise (PEVIT) for pressure equipments and metallic pipes authorized (ISCIR 2018)	$ 868,734	$ 753,874
123	New Boiler at heating station Vega	$ 1,689,632	$ 174,915
124	Install mobile and adjustable bridge in unloading fuel oil ramp	$ 238,990	$ 3,106
125	Purchased incinerator in Bitumen unit	$ 6,474,600	$ 5,000
126	Vapor recovery system at Auto loading points	$ 556,050	$ 3,500
	VEGA Operational - Capital maintenance	**$ 7,619,205**	**$ 2,158,035**
127	Replacement plates heat exchanger with welded plates heat exchanger.	$ 155,487	$ 129,847
128	Replacement of the General Distribution Switchboards in Vega Refining electrical stations (PT2)	$ 418,748	$ 6,637
129	Replacing heat exchangers from the Heating Station (S6,S7,S9)	$ 187,991	$ 42,172
130	Replacing feeders the 20 Kv in the Vega Refinery	$ 224,249	$ 9,500
131	Consolidation CF ramp	$ 137,238	$ 106,958
132	Rehabilitate tanks A58	$ 813,273	$ 8,534
133	Rehabilitate tank A63	$ 772,069	$ 95,167
134	Replacement of the high pressure motor-compressor assemblies (Resita 1, Resita 2, Resita 3)	$ 232,650	$ 3,500
135	Replacement of the low pressure motor-compressor assemblies (K1, K2)	$ 104,851	$ 83,501
136	Replace the heating system from electric stations	$ 54,538	$ 34,705
137	Vega Corlatesti sewerage system pipe line replacing	$ 297,335	$ 92,242
138	Replace pump in Bitumen Unit	$ 153,580	$ 133,675
139	SCADA electric	$ 139,260	$ 1,000
140	Vega Shut Down 2017	$ 2,959,092	$ 34,803
141	Vega Shut Down 2018 (for mounting 140C1-C2)	$ 968,845	$ 493,191
142	Purchase a pump for asphalt mass evacuation from VD unit	$ 342,990	$ 166,877
143	CT new building consolidation	$ 73,816	$ 3,404
144	Rehabilitation of Vega Buildings (2018-2023)	$ 1,265,000	$ 3,500
145	Rehabilitation of Vega Roads 2018-2021	$ 251,111	$ 7,374
146	Replace on-line analizer for flue gases CT Vega	$ 143,550	$ 10,000
147	Replaced heater in VD unit	$ 1,900,800	$ 5,000
148	Heat insulation in VEGA refinery	$ 497,913	$ 470,766
149	Replace heat exchangers 101-S1 and 101-S2 Vega DV Unit	$ 191,400	$ 202,164
150	Rehabilitation of Vega Roads	$ 234,783	$ 13,518

THE BOARD OF DIRECTORS:

Chairman
Cătălin Dumitru

Member
Alexey Golovin

Member and General Manager
Yedil Utekov

Member
Mihai-Liviu Mihalache

Member
Nicoleta-Viorica Soisun

Chief Financial Officer
Vasile-Gabriel Manole

Process & Engineering Director
Cristian Bolohan

PPO Director
Raluca Lainer

DMCI Director
Cristian Jivu

Utilities Plant Manager
Boris Ionel Bucur