BRIEF INTRODUCTION

«Among the CIS countries, Kazakhstan has become a leader in attracting foreign direct investment, as well as in a number of other positions»

President of the Republic of Kazakhstan – Kassym-Zhomart Tokayev
**MINERALS AND ENERGY RESOURCES**

**KAZAKHSTAN TAKES THE 6TH PLACE IN THE WORLD ON MINERALS RESERVES, AS WELL AS:**

1 place — on the explored reserves of zinc, tungsten and barite
2 place — on the explored reserves of silver, lead and chromites
3 place — on the explored reserves of copper and fluorite

**KAZAKHSTAN’S RANKING AMONG THE CIS COUNTRIES ON THE VOLUME OF MINERALS RESERVES:**

1 place — on chrome ores and lead
2 place — on oil, silver, copper, manganese, zinc, nickel and phosphoric raw materials
3 place — on gas, coal, gold and tin
4 place — on the explored reserves of molybdenum
6 place — on the explored reserves of gold
OPPORTUNITIES IN PETROCHEMICAL INDUSTRY

- **Polypropylene** «KPI»: 500 th. tons
- **Polyethylene** «KLPE»: 1,250 mln tonns
- **Polyethylene terephthalate** «Almex Petrochemical»: 430 th. tons
- **Cyclopane** KazhimProduction: 150 th. tonns
- **Polypropylene** «Neftehim LTD»: 70 th. tonns
- **Lubricants** «Hill Corporation»: 30 th. tonns
- **Methanol & Olefins** WestGasOil Pte. LTD: 1,5 mln tonns
- **Urea** KazAzot: 300 th. tonns
- **Polyprolene & ETBE** ShKH: 150 th. tonns
- **Lubricants** Lukoil: 100 th. tonns
- **Base Oil** «Hill Corporation»: 450 th. tonns
- **Urea** UCC: 850 th. tonns

**World Ranking by stocks of raw materials**

- **Oil**: 12
- **Gas**: 15
- **Uranium**: 2
- **Coal**: 8

**Production 2019**

- **Oil**: 90,4 million tons Export 72,4%
- **Gas**: 56,4 bln. m³ Export 34%
- **Uranium**: 22,7 thousand tons Export 100%
- **Coal**: 115,4 million tons Export 31%

**Generation of electricity (renewables)**: 2,2%

Kazakhstan possesses 3.6% of the world’s primary energy reserves.
Kazakhstan is 25th in the World Bank’s Ease of Doing Business Ranking and among the most improving economies.

4 easy steps to start a business in just 5 days (#22)

3 easy steps to register property in just 3 days (#24)

Just 100 days to receive all construction permits (#37)

#4 for enforcing contracts

#7 for minority investors’ protection

THE MOST FAVOURABLE TAX REGIME IN THE REGION*

<table>
<thead>
<tr>
<th>Country</th>
<th>Tax Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kazakhstan</td>
<td>29.4</td>
</tr>
<tr>
<td>Russia</td>
<td>46.3</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>48.17</td>
</tr>
<tr>
<td>China</td>
<td>64.9</td>
</tr>
</tbody>
</table>

Source: World Bank, Doing Business 2020

*total tax and contribution rate (% of profit)
Samruk-Kazyna JSC and the Government of RoK approved the development and financing of two Special Economic Zones - National Industrial Petrochemical Technopark. Located in Atyrau region (Western Kazakhstan);

**TAX INCENTIVES**
- Corporate income tax – 0%
- Land tax – 0%
- Property tax – 0%
- Social Tax (for 5 years) – 0%
- Exemption from the VAT

**EXEMPTION FROM CUSTOMS DUTIES**
For goods
- Imported into the SEZ territory
- Exported* from the SEZ territory to the Customs Union

**NON-FISCAL INCENTIVES**
- Free plot of land for the entire period of existence of a SEZ
- Simplified procedure for employment of foreign labor
**General Information**
- **Period:** 2007 – 2032
- **Location:** Atyrau Region
- **Total Area:** 3475 ha
- **Shareholder:**
  - Ministry of Energy of the Republic of Kazakhstan
  - United Chemical Company LLP

**Location**
- Distance to Atyrau city – 42 km.
- Distance to highway – 5 km
- Railway access to the Russia, China and Central Asian countries.

**Feedstock**
- **Gas supply**
  - TCO – Dry gas (Tengiz oil field)
  - NCOC- LPG (Kashagan oil field)
- **Raw minerals in the region**
  - 4.5 billions tons of oil
  - 2.0 trillion m³ of natural gas.

**Infrastructure**
- **Completed Utilities**
  - Gas-turbine Power plant - 310 MW
  - Access rail road - 15,6 km.
  - Railway station
  - Access automobile road - 5.3 km.
  - Grid connection-110-kV and 220-kV
  - Power Substation -110/35/10 kV and 220 kV
- **Industrial Infrastructure – under construction**
  - Water treatment system – 15 000 m³/day (1st stage) 46 000 m³/day (2nd stage)
  - Industrial gases – Nitrogen: 7 000 m³ (1st stage) 28 500 m³ (2nd stage)

**Consulting services**
- Development of a conceptual Master-plan, including a market research review, designing of a land-use plan and a SEZ infrastructure plan
INFRASTRUCTURE

COMPLETED INFRASTRUCTURE
(for functioning of the current projects and construction of polypropylene production project)

- Power plant
  Output - 310 MW
- Flyover
  Capacity - 3668 auto/d
- 110 kV & 220 kV Substation and PL’s
  Length: PL 110 kV - 38.5 km, PL 220 kV - 42 km
  Capacity - 12 MW
- Railroad station
  Length - 6.8 km
  Capacity - 2.3 MMT, y.
- Access railway, «Karabatan» st. extension
  Length - 15.4 km
- Access road
  Length - 5.3 km

ON-GOING INFRASTRUCTURE (1st stage - for starting the polypropylene production)

- Water treatment plant
  Capacity - 15 th. m³/d
  Progress - FS developed
- Customs checkpoint
  Area - 260 m²
- Evaporator pond
  Quantity - 2 cells
  (78 ha)
- Fire station
  for 6 cars
- Industrial gases unit
  Output - 35.5 th. nm³/h
  Progress - Detailed design
- Gas station
  3 units
- Solid waste landfill
  Area - 17 ha
- Laundry
  Capacity - 500 kg/d

Private investments

- Gas Separation Unit
  Output - 7 bln. m³/y.
- Water treatment plant extension
  Output - 45 th. m³/d
- Internal railroads
  Length - 1.1 km
- Administration building
  Area - 3 077.4 m²

Other facilities:
- Weighbridge and X-ray unit
- Engineering communications
- Landscaping

OTHER OBJECTS (KARABATAN):
- Parking for 34 and 42 cars
- Landscaping

INFRASTRUCTURE EXTENSION (2nd stage - ensuring the functioning of the polyethylene production and others)

- Gas Separation Unit
- Water treatment plant extension
- Internal railroads
- Administration building
- Other objects (Karabatan):
  - Engineering networks and structures
  - Security video surveillance
  - Lighting

SEZ Area
3 475.9 ha

Technopark site
285 ha

Karabatan site
463.7 ha

Reserve (Karabatan)
336 ha

Completed infrastructure
1 084 ha

Projects
1 084 ha
The government provides support in providing feedstock to strategically important investment projects for the production of petrochemicals with high added value.

Amendments were made to the Law of the Republic of Kazakhstan “On Gas and Gas Supply” in part:

- Granting the right to purchase liquefied petroleum gas to industrial consumers using it as a raw material for the production of petrochemical products, for which state price regulation will be implemented.

- Establishing a commodity gas pricing mechanism for investment projects that use gas as a raw material producing petrochemical products, according to the formula: \( \text{cost of gas supply} + \text{the minimum rate of marginality for a national operator (7%)}. \)
## Projects

<table>
<thead>
<tr>
<th>Projects</th>
<th>Capacity</th>
<th>Period</th>
<th>Implementation Stage</th>
<th>Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyethylene</td>
<td>1 250 KTA</td>
<td>2018-2025</td>
<td>Feasibility Study</td>
<td>New Strategic Partner</td>
</tr>
<tr>
<td>Polypropylene</td>
<td>500 KTA</td>
<td>2017-2021</td>
<td>Construction</td>
<td>National Operator</td>
</tr>
<tr>
<td>Polymer Production</td>
<td>▪ BOPP – 10 KTA</td>
<td>2012-2015</td>
<td>Operation</td>
<td>Looking for partners/Under Due Diligence</td>
</tr>
<tr>
<td></td>
<td>▪ PE film – 4 KTA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ PP bags – 24 mln. pcs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methanol to Olefins</td>
<td>300 th.tons methanol</td>
<td>2019-2024</td>
<td>Feasibility Study</td>
<td>Looking for partners</td>
</tr>
<tr>
<td></td>
<td>600 th.tons olefins</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urea Production</td>
<td>850 th.tons</td>
<td>2017-2024</td>
<td>Feasibility Study</td>
<td>Identified</td>
</tr>
<tr>
<td>Base oils</td>
<td>450 th.tons Base oils</td>
<td>2017-2022</td>
<td>Deal structuring</td>
<td>Looking for partners</td>
</tr>
<tr>
<td>Production of ammonia</td>
<td>300 th.tons</td>
<td>2019-2023</td>
<td>Exploration</td>
<td>Looking for partners</td>
</tr>
</tbody>
</table>
Construction of a complex for the production of chemical products

Project Participants

Akkim
Akkim, a leading Turkish manufacturer of chemicals, was founded in Yalova in 1977 and has expanded its production activities in many areas over the past 40 years. Akkim is a chemical company serving its customers in 6 continents with a range of products, including chloralkali and its derivatives, peroxydis, methanear, auxiliaries for the textile industry, chemicals for paper and water processing, and concrete additives.

The main tool for promoting entrepreneurship development is the Company’s participation in joint projects with private businesses, based on the principle of public-private partnership to boost business activities and to increase the investment attractiveness of small and medium-sized businesses in the region.

SPK Atyrau
The main goal of the Company is to promote the economic development of Atyrau oblast by consolidating the public and private sectors.

Tuz LLP
Tuz LLP is a plant for the processing of salt in Atyrau oblast. The main activity of the Company is the extraction and processing of sludge salt, the production of low concentrated sodium hypochlorite.

Su Arnsay Kazakhstan Association
The object of the Association is to improve the activities of water supply and drainage enterprises. The main goal of the Association is to represent and protect the rights and legitimate interests of water supply and wastewater disposal enterprises in all government bodies, public and other organizations in the Republic of Kazakhstan and beyond.

Investment attractiveness of the Project

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment amount, US$ thousands</td>
<td>70,000</td>
</tr>
<tr>
<td>Project NPV, US$ thousands</td>
<td>55,646</td>
</tr>
<tr>
<td>IRR, %</td>
<td>22.2%</td>
</tr>
<tr>
<td>EBITDA margin, %</td>
<td>49%</td>
</tr>
<tr>
<td>Payback period, number of years from the start of production</td>
<td>6.1</td>
</tr>
<tr>
<td>Discounted payback period, number of years from the start of production</td>
<td>8.8</td>
</tr>
</tbody>
</table>
Project overview

Construction of a gas chemical facility for processing of natural gas and methanol with special technologies used, where gas is primarily processed into methanol and then methanol is processed into olefins.

Project goal

The construction of a gas chemical complex in the Aktau Sea Port special economic zone to process methanol, which is a product of the processing of natural gas, into olefins.

Commercial products

- AA Grade Methanol: 1,800 thousand tonnes annually.
- Olefins: 600 thousand tonnes per annum (propylene – 360 thousand tonnes, ethylene – 240 thousand tonnes).

Production capacity:

- 1,800 million m³ of natural gas annually +/- 10% depending on gas composition.
- 1,500 thousand tonnes of methanol.

Initiator: WestGasOil LTD, an industrial enterprise in the West Kazakhstan engaged in large-scale gas chemical projects.

Project location: Mangystau Oblast, the city of Aktau.

Project investment attractiveness

<table>
<thead>
<tr>
<th>Index</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment, US$ thousands</td>
<td>1,800,000</td>
</tr>
<tr>
<td>Project NPV, US$ thousands</td>
<td>1,068,605</td>
</tr>
<tr>
<td>IRR, %</td>
<td>21,2%</td>
</tr>
<tr>
<td>EBITDA margin, %</td>
<td>63%</td>
</tr>
<tr>
<td>Payback period, years from the production start</td>
<td>6,9</td>
</tr>
<tr>
<td>Discounted payback period, years from the production start</td>
<td>9,7</td>
</tr>
</tbody>
</table>

Construction of a gas chemical complex for the production of methanol

GTM technology developer: Haldor Topsoe

Over decades, Topsoe has been one of the leading providers of methanol production technologies. This position is based on activities and experience in all disciplines important for modern methanol production:
- Topsoe worked out a methanol technology, which is widely used in the modern methanol industry, and Topsoe constantly invests significant efforts in the further development of its methanol technology.
- Topsoe research laboratories work in all catalytic areas related to methanol production.
- Topsoe has developed software enabling to imitate the catalytic reaction stages in reactors of any design. The software development relies on the fundamental and applied research, as well as industrial feedback. The company also put in place basic process equipment, which is part of the methanol plant.
- Topsoe has got broad experience in helping methanol plant owners to analyze performance, troubleshoot, research optimization and upgrading options to increase productivity and/or energy efficiency.
- Topsoe has long-term experience in catalyst development. Today, the company supplies more than 150 different catalysts and is able to develop and produce tailor made catalysts.
- Topsoe provides highly professional technical support aimed at improving the profitability of the methanol plant and maximizing availability and utilization.
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### General Information

- **Name:** Haldor Topsoe
- **Profile:**
  - chemical industry
  - petrochemical industry
  - fuel and oils
  - natural gas
- **Year of establishment:** 1940
- **Location:** Lyngby, Denmark
- **Staff:** 2,340 employees

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**Investment attractiveness of the Project**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment, US$ thousands</td>
<td>166,100</td>
</tr>
<tr>
<td>Project NPV, US$ thousands</td>
<td>127,522</td>
</tr>
<tr>
<td>IRR, %</td>
<td>22.4%</td>
</tr>
<tr>
<td>EBITDA margin, %</td>
<td>43%</td>
</tr>
<tr>
<td>Payback period, years from the production start</td>
<td>6.3</td>
</tr>
<tr>
<td>Discounted payback period, years from the production start</td>
<td>9.3</td>
</tr>
</tbody>
</table>
Processing Industry Projects Support

(1) Fiscal

- **Exemption from VAT on the import of equipment**
  - Investment contract
  - Offset Method
  - According to the approved list

- **VAT refund / Duties exemption**
  - 100% when exporting products to foreign markets
  - 100% duties exemption upon signing an investment contract

(2) Financial Measures

- **Small and Medium Business**
  - Private banks (second-tier banks) under the Economics of Simple Things Program
    - Rate: 5% in KZT
    - Duration: up to 7 years
    - Loan guarantee: from 20 to 50%

- **Project Co-financing**
  - State funds are included in the share of the project up to 50% in KZT

(3) Subsidies and Refunds

1. Providing State Support aimed at increasing Labor Productivity and developing territorial clusters (max amount of support is 40%, but not more than 60 million tenge);
2. The provision of innovative grants for:
   - commercialization of technologies (50%, but not more than 200 million tenge);
   - technological development of existing companies (70% under a License Agreement and 50% for the purchase of equipment, but not more than 400 million tenge);
   - technological development of industries (70% under a License Agreement and 50% for the purchase of equipment, but not more than 500 million tenge);
3. Reimbursement of a portion of the costs related to promoting domestic processed goods in the foreign market;
4. Reimbursement of a portion of the costs related to promoting domestic processed goods, works and services (in the domestic market).
Thank you for your attention!

MINISTRY OF ENERGY
OF THE REPUBLIC
OF KAZAKHSTAN