# The construction of new coal processing plant



www.kaznexinvest.kz

**Project overview:** 

**Location:** Karagandy region

**Total cost of the project:** \$ 3 000 mln USD

**Time span:** 2015-2020

#### **Project initiators:**

Kazmunaigaz JSC – the leading company in Kazakhstan dealing with oil refining and sales of petroleum products

JV Arbat LLC has full ownership over the exploitation of Shubarkul coal mine deposit

Razrez Kuznetsky LL Chas full ownership over the exploitation of Verhnesokurskoe coal mine deposit

#### **Project description:**

The construction of new coal processing plant with the purpose of producing fuel and diesel oil by applying Fischer–Tropsch processing method.

#### **Product output:**

Diesel oil

#### **Capacity:**

Up to 500 th.tons of diesel oil per annum

#### **Sources of raw materials:**

Coal mines of JV Arbat LLC as well as Razrez Kuznetsky LLC

Market: Kazakhstan, Custom union, China

### **Financing scheme:**

Kazmunaigaz JSC – 25%

JV Arbat LLC-25%

Razrez Kuznetsky LLC – 25%

Required – up to 25%

# The construction of new power plant consisting of two units 660 MW each



# **Project overview:**

**Location:** Aksu 2 city, Pavlodar region Republic of Kazakhstan

**Total cost of the project:** \$ 2 640 mln USD

Time span: To be considered

# **Project initiator:**

Eurasian Group LLP - one of the largest producers of energy and coal in Kazakhstan. The company generates about 17% of overall volume of Kazakhstani energy and produce about 20 million tons of steam coal annually.

# **Financing scheme:**

- ERG 15%
- KDB 20%
- CDB 50%
- Required 15%

# **Project description:**

Two units with the total capacity 1320 MW (2 x 660 MW), project site has been selected with the possibility of expansion for two more power units 660 MW each.

Each steam boiler will be designed to be direct-flow, balanced rod, supercritical level, reheat, for internal layout in confined spaces. Steam generator shall be capable to work on powdered fuel.

**Fuel:** Ekibastuz coal (KCH-300)

# Level of output voltage:

Counter flow towers with natural circulation

**Inflow of cooling water:** Chanel of discharge of cooling water with existing power plant in Aksu.

# **Source of process water:**

Chemically processed water from channel with existing power plant in Aksu.

Market: Kazakhstan, Custom union, China

# The construction of the HBI plant with the capacity of 1,8 mtpy



# **Project overview:**

#### **Location:**

Rudny city, Kostanay region.

Total cost of the project: \$ 1 770 mln USD

**Time span:** within 4 years

# **Project initiator:**

SSGPO JSC is a subsidiary of ERG LLP - one of the hugest mining and processing of ferrous metal ores manufacturing divisions in Kazakhstan and CIS. Capacity - close to 16 mtpy.

# **Financing scheme:**

ERG - 15%

KDB - 20%

CDB - 50%

Required - 15%

# **Project description:**

Construction of new top-grade concentrate (CCP-2, WMCP-4) plant, construction of new roasting machine for high quality pellet manufacturing for HBI, construction of HBI module with capacity of 1,8 mtpy on the base of existing mineral assets.

# **Feasibility**:

HBI is one of the most advanced direction in modern metallurgical production. HBI usage in steelmaking allows to get the metal that corresponds to the high requirements of mechanical engineering (aviation, shipbuilding, etc.) industries. The project is provided with raw materials, potential sale markets are considered in the feasibility study.

#### **Infrastructure:**

There is the necessity to develop infrastructure for the new roasting machine and HBI module.

# Development of energy potential of Shelek region



# **Project overview:**

#### **Location:**

**Almaty Region** 

# **Total cost of the project:**

\$ 119,45 mln USD

# Time span:

2014-2027

# **Project initiator:**

Samruk Energy is a state holding company on management of the power assets of the country.

By sales, it is one of the largest subsidiaries of the Samruk-Kazyna fund.

# **Project description:**

**Stage 1:** The development of the energy potential of the Shelek region, as well as transfer of Kensu river runoff in the Bestyubinsk Reservoir.

**Stage 2:** Construction of a wind power plant in Shelek corridor

# **Production capacity:**

- 31 hydropower plants on the river Shelek with total installed capacity of 339.6 MW
- wind power plants with a total installed capacity of 351 MW

# **Financing scheme:**

Samruk energy – at least 20%

Debt – up to 80%

# Special economic zone (SEZ): Chemical park Taraz

The production of methanol and ammonia



#### **Project overview:**

#### **Location:**

Free industrial zone, Chu region, Zhambyl oblast

# **Total cost of the project:**

\$ 1 575 mln USD

**Time span:** 2015-2022

#### **Project initiator:**

"United Chemical Company JSC" – is a subsidiary company of National Welfare Fund "Samruk Kazyna."

# **Financing scheme:**

SK - 20%

Debt - 70%

Required -10%

#### **Project description:**

One of the major long-term projects that affect the positive activity of the SEZ, as well as representing raw material for the production of a wide range of other chemical products is "Production of methanol and ammonia and products based on them"

#### Market:

**Methanol** – the consumption in 2012 amounted for 752.6 tons. There is currently no production of methanol. Uzbekistan accounts for 99% of the Kazakhstan import of methanol. Moreover, with regard to the available data, the most promising market for exports of methanol is China.

**Ammonia** – the sole producer of the ammonia in Kazakhstan is KAZAZOT JSC. Import accounts for 18 000 tons, proposed domestic consumption is approximately 30 000 tons

#### **Raw materials:**

**Methanol** – 180 mln. tons of natural gas

**Ammonia** – 930 mln. tons of natural gas

# New transportation system of Astana city: Light railways



www.kaznexinvest.kz

**Project overview:** 

**Location:** 

Astana city

**Total cost of the project:** 

\$ 1 300 mln USD

**Time span:** 2015-2017

**Project initiator:** 

Astana LRT LLP is a company incorporated and authorized by the Astana city authority for the implementation of the Project "New Transport System of Astana city".

# **Project description:**

Introduction of a new transportation system of Astana city. The road from Astana International Airport to new railway station, passing through exhibition complex EXPO-2017, IFK Abu Dhabi Plaza

# **Availability of premises:**

The track is 22,4 km (ballast less two-track), stations - 18 units, depot – 1 unit, rolling stock - 16 units

New jobs: 845

# **Financing scheme:**

Local authority - 30%

Debt - 70%

# Aluminium smelter expansion, prebaked anode plant expansion and casthouse expansion

# **Project overview:**

#### **Location:**

Pavlodar city, Pavlodar region

# **Total cost of the project:**

\$ 1 247 mln USD

**Time span:** within 5 years

# **Project initiator:**

«KAS» JSC - Aluminum division of Eurasian Group (ERG), represents sole primary aluminum smelter in the Republic of Kazakhstan with capacity 250 ktpy

# **Financing scheme:**

ERG - 15%

KDB - 20%

CDB - 50%

Required - 15%

# **Project description:**

There is intended construction of 2nd aluminum smelter with 2 phase with capacity of 125 kt primary aluminum per year and expansion of prebaked anode plant to additional capacity of 136 kt prebaked anodes per year (with total capacity of 500 kt primary aluminum per year).

The project provides for operation of reduction cells with prebaked anodes with current strength of 330 kA (PRC-manufactured). According to planning horizon there's necessary to consider an option to use more powerful reduction cells (with current force 400 kA and higher).

The project also provides for expansion of casthouse for increase in output of aluminum alloys up to 125 (250) ktpy.

# **Commercial development of Koktenkol tungsten**



#### **Project overview:**

#### **Location:**

Shet district, Karaganda region, Republic of Kazakhstan

# **Total cost of the project:**

\$ 1 000 mln USD

**Time span:** within 5 years

### **Project initiator:**

Dala Mining is private entity established under the Law of Kazakhstan.

The Company focuses major efforts on launching Kazakhstan's first facility conducting commercial production of molybdenum concentrate at Koktenkol Tungsten and Molybdenum Deposit.

#### **Financing scheme:**

Dala Mining - 20% Debt - 70% Required – 10%

#### www.kaznexinvest.kz

# **Project description:**

There are two phases in the project:

1. Construction and operation of Tungsten mining and metallurgical complex.

**Design capacity:** is 2Mtpa of ore (WO3 at 0.3%).

Mining method: open pit mining.

**Processing:** conventional flotation + metallurgy (APT plant). **Products**: sheelite concentrate, ammonium paratungstate, fluorite concentrate.

2. Construction and operation of molybdenum mining and metallurgical complex.

**Design capacity:** 20 Mtpa of ore (Mo at 0.08%).

Mining method: open pit mining.

**Processing:** conventional flotation + metallurgy (roasting in multihearth roaster, sulfuric acid plant, rhenium plant). **Products:** molybdenum sulfide concentrate, copper concentrate, bismuth concentrate, pyrite concentrate, technical grade molybdenum oxide, ammonium perrhenate, sulfuric acid.

# The construction of integrated steel mills with capacity 1 mln



#### **Project overview:**

**Location:** 

South Kazakhstan region

### **Total cost of the project:**

\$ 800 mln USD

**Time span:** 2015-2018

#### **Project initiator:**

«Ferrum - Vtor» LLP is an elektrometallurgical company producing steel and rolled metal products of various sizes and with a capacity of 110 thousand tons per year. The company actively exports its products within the country and as well as abroad. The share of exports in 2014 was 40% of total sales. Currently it employs approximately 350 people.

#### **Financing scheme:**

Ferrum vtor- 10% Debt - 70% Required - 20%

#### **Project description:**

Proposed the construction of an integrated steel mills with capacity 1 mln. tons per year consisting of a sinter plant, blast furnace of 450 cubic meters. m., converter, as well as rolling mills.

**Feasibility:** Kazakhstan has large reserves of iron ore. Explored reserves amount to 8.7 billion. Tons. According to the Statistics Agency, in 2014, Kazakhstan produced about 50 million. Tons of iron ore. There ferroalloy plants and processing plants.

**Markets:** domestic market of Kazakhstan, Turkmenistan, Uzbekistan, Afghanistan. Potentially attractive market for steel billets market is Turkey.

**Investment preferences:** As part of the project is planned to conclude an investment contract under the laws of the Republic of Kazakhstan.

Other measures of the State support: Providing temporary reduction factor for the services of the main rail network; Coordination of construction documents; Visa support of foreign experts

# Industrial development of Shalkiya ore deposit



#### **Project overview:**

#### **Location:**

Shalkiya mine complex, Zhanakorgan district of Kyzyolrda region, Republic of Kazakhstan

# **Total cost of the project:**

\$ 467 mln USD

**Time span:** 2015-2020

#### **Project initiator:**

Tau-Ken Samruk JSC is a vertically integrated national mining company, aimed at improving subsoil use effectiveness in exploration, mining and processing of solid mineral resources.

Tau-Kens Samruk JSC is a member of Samruk-Kazyna JSC holding (group of companies).

### **Financing scheme:**

SK - 20%

Debt - 70%

Required – 10%

#### **Project description:**

The Project aims at the development and processing of leadzinc ores of the Shalkiya deposit in Kyzylorda province of the Republic of Kazakhstan.

The mine expansion of Shalkiya complex up to 4 mln. tonnes per year and the construction of the concentrator in direct proximity to the mine will allow the right rectify the operations of the mine towards the successful production of zinc and lead products.

Moreover, the project is located to one of the largest world zinc importers – China, allowing effective transportation ways of zinc products to the country.

All works currently conducted by the Tau-Ken Samruk JSC in regards to the Shalkiya project are aimed at increasing effectiveness of production processes and mine production capacity, improving tradability characteristics of products, and optimizing required capital structure, which will increase general investment attractiveness of the project.

#### **Infrastructure:**

The Project assumes the additional facilitation of the required infrastructure

# Special economic zone (SEZ): Chemical park Taraz The production of potash



**Project overview:** 

**Location:** 

Free industrial zone, Chu region, Zhambyl oblast

**Total cost of the project:** 

\$ 268 mln USD

**Time span:** 2015-2020

**Project initiator:** 

"United Chemical Company JSC" – is a subsidiary company of National Welfare Fund "Samruk Kazyna."

Project description: www.kaznexinvest.kz

Construction of plant on potash production

**Production capacity:** 

up to 300 th.tons of potash per annum

Market:

Custom union, PRC, domestic market of the country

**Raw materials:** 

Potash deposits of the West-Kazakhstan region

**Financing scheme:** 

SK - 20%

Debt - 70%

Required -10%

# The construction of HPP cascade: Kyzylkungei and Kyzylbulak



www.kaznexinvest.kz

**Project overview:** 

**Location:** 

**Almaty Region** 

**Total cost of the project:** 

\$ 256 mln USD

**Time span:** 2015-2017

**Project initiator:** 

Samruk Energy is a state holding company on management of the power assets of the country.

By sales, it is one of the largest subsidiaries of the Samruk-Kazyna fund.

# **Project description:**

The construction of HPP cascade Kyzylkungei and Kyzylbulak base on the river Koksu

# **Production capacity:**

- Kyzylkungei HPP cascade with the total capacity of 150 MW
- Kyzylbulak HPP cascade with the total capacity of 40 MW

# **Financing scheme:**

Samruk Energy – at least 20%

Debt - 80%

# **Industrial production park**



### **Project overview:**

#### **Location:**

Taraz city, Zhambyl city, Kazakhstan

# **Total cost of the project:**

\$ 250 mln USD

**Time span:** 2015-2017

# **Project initiator:**

TMZ LLP is a subsidiary company of "SAT&Company" JSC, the main activity is the production of ferroalloy products. Additionally, LLP "TMZ" produces electrode, the repair mass,

as well as the deals with the processing of slag.

# **Financing scheme:**

TMZ LLP - 10%

Debt - 70%

Required - 20%

# **Project description:**

The Project assumes the development and modernization of existing plant of "TMZ" LLP, as well as the introduction of innovative and energy-saving technologies, preservation and increase of the existing range of products, and the introduction of new products in the following areas:

- Ferroalloy production;
- Coal processing production;
- Chemical industry;
- Processing of chemical and metallurgical slag for the construction industry.

### **Land procurement:**

The Project is facilitated with particular amount of land, however, in a course of realization of the project, additional land might be of need.

#### **Infrastructure:**

The Project is facilitated with necessary infrastructure

# Construction of the Turgusun HPP-2, 3 based on Turgusun river



#### **Project overview:**

**Location:** 

East-Kazakhstan Oblast, Zyryanovsk region

# **Total cost of the project:**

\$ 300 mln USD

Time span:

**Turgusun HPP-2:** 2016-2020

**Turgusun HPP-3:** 

**Phase 1:** 2019-2021 **Phase 2:** 2021-2023

#### **Project initiator:**

Turgusun 1 - the company was established in order to implement a number of investment projects (HPP) in East Kazakhstan Oblast

#### **Financing scheme:**

Turgusun 1 - 20% Debt - 80%

#### **Project description:**

Construction of **Turgusun HPP-2**:

- Installed capacity of channel type hydropower plants approximately of 18-20 MW
- Rockfill height of dam is 25 -30 meters
- Final capacity of 64 million kWh per year

Construction of **Turgusun HPP-3** is planned in two phases:

#### Phase 1:

- Commissioning in 2021, with a capacity of 25 MW
- HPP layout Derivative dam-type dam-rockfill height of 30 meters;

#### Phase 2:

- Commissioning in 2023, with a total installed capacity of 90 MW
- Rockfill dam with a height of 90 meters.
- Total capacity after completion of both stages is 288 million kWh per year

# **Skiing resort Tabagan**



#### www.kaznexinvest.kz

# **Project overview:**

#### **Location:**

located within 20 minutes from the center of Almaty, in one of the most beautiful and exciting sightseeing places of the Kazakhstan

# **Total cost of the project:**

US \$ 56 million

**Time span:** 2014—2015 years

# **Project initiator:**

Turgusun 1 - the company was established in order to implement a number of investment projects (HPP) in East Kazakhstan Oblast

**Financing scheme:** 75% shares

Payback period: 5 years

#### **Project description:**

Development of tourist infrastructure of the city and Republic.

Construction of an all-season complex, notable for its sizes and uniqueness.

In 2005, nature and landscape of the Almaty oblast Allowed starting construction of a unique all-season complex with a wide range of rendered services. Prior any construction works, there were only 2 ski resorts with minimum activities for rest. So far, Tabagan allowed extending infrastructure next to the Beskainar village; new work places are created. There are two hotels, 20 cottages, 3 skiing sloaps, small cable ways, spa area and many more

# Gondola cableway:

Tabagan has great prospects with regard to undeveloped land spots, owned by Contact-Tour LLP; development of those land spots will allow extending ski runs and conquer Pioneer Peak at 3000 m above the sea level. Use of the gondola cableway will allow joining neighboring ski resorts, such as: Chimbulak, Alma-Tau and increase number of clients. Tabagan management and staff goal is to introduce Tabagan in the world travel services market.

# Construction and operation of the container terminal



www.kaznexinvest.kz

# **Project overview:**

#### **Location:**

located within 20 minutes from the center of Almaty, in one of the most beautiful and exciting sightseeing places of the Kazakhstan

# **Total cost of the project:**

US \$ 46,8 million

**Time span:** 2014—2016 years

# **Project initiator:**

DostykTransTerminal JCS

New jobs: 240

# **Project description:**

Construction and operation of multi-purpose cargo and transshipment terminal at the station. Green avenue for handling containers and cargo railroad of transport narrow gauge railway in China railroad transport a broad gauge railway of Kazakhstan and/or transported by road for onward transportation of goods through the territory of Kazakhstan and transit to Europe and other countries.

#### **Current status:**

Own plot with total area of 100 hectares. Which is located on the free development of the territory, 12 km west of Dostyk between the existing mainline railway line and highway in China. Permission to connect to the train tracks along the narrow and wide track of the owners of the railway tracks.

# Reconstruction and expansion of combined heat and power plant of CHPP -



# **Project overview:**

#### **Location:**

Zhambyl region, Taraz city

# **Total cost of the project:**

US \$ 193,8 million

**Time span:** 2013—2016 years

# **Designed capacity:**

- the electric 125 MWt
- the thermal 482,5 Gcal/hour annual holiday of the electric power - 765 million kWh annual holiday of heat power -623 thousand Gcal

#### **Project initiator:**

JSC "Tarazenergotsentr»/ Akimat of Zhambyl region

# **Project description:**

Reconstruction of generating capacities and auxiliary constructions for increase of efficiency of the enterprise

**Infrastructure and resources:** the project is provided with necessary infrastructure and resources

**Equipments/technologies:** The project provided the first use in Kazakhstan of steam-gas installation for development electro and heat power

Raw materials: Natural gas

**Current state of the project:** The feasibility report of the project is developed, the CHPP-4 is basic heat source Taraz

**Possible measures of the state support:** Guarantee of sale of heat power, joint financing through JSC NK SPK Taraz, a payment for management etc..