

# **2010-2014 State Program of accelerated industrial and innovative development of the Republic of Kazakhstan and cancellation of certain decrees of the President of the Republic of Kazakhstan**

Decree of the President of the Republic of Kazakhstan dated March 19, 2010 # 958

“Kazakhstanskaya pravda” dated March 31, 2010, # 74 (26135);  
“Egemen Kazakhstan” dated March 31, 2010, # 115-116 (25962)

In order to obtain diversification and improve competitive ability of economy of the Republic of Kazakhstan for long-run period **I DECREE:**

1. Confirmation of the 2010-2014 State Program of accelerated industrial and innovative development of the Republic of Kazakhstan (hereinafter referred to as the Program).
2. To the Government of the Republic of Kazakhstan:
  - 1) within a period of one month it shall develop and confirm Industrial Map of Kazakhstan for 2010-2014 and Rational Distribution of Productive Capacity Scheme until 2015;
  - 2) within a period of one month it shall develop and confirm Work Plan of the Government of the Republic of Kazakhstan on realization of the Program;
  - 3) according to the results of half-year period it shall submit information on realization process of the Program before July 20 and January 20 to the Administration of the President of the Republic of Kazakhstan.
3. The Central and Local Executive bodies and also the State bodies, immediate subordinates and executives accountable to the President of the Republic of Kazakhstan shall take measures on realization of the Program.
4. Cancellation of certain decrees of the President of the Republic of Kazakhstan according to the Appendix to the present Decree.
5. The Administration of the President of the Republic of Kazakhstan shall be responsible for control of implementation of the present Decree.
6. The present Decree enters into force since the date of signature.

*The President  
of the Republic of Kazakhstan*

*N. Nazarbayev*

CONFIRMED  
by the Decree of the President  
of the Republic of Kazakhstan  
of March 19, 2010 # 958

## **2010-2014 STATE PROGRAM of accelerated industrial and innovative development of the Republic of Kazakhstan**

Astana, 2010

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### **The Program description**

<b>Name of the Program</b>	<b>2010-2014 STATE PROGRAM of accelerated industrial and innovative development of the Republic of Kazakhstan</b>
<b>Basis of development</b>	<p>1) Clause 1 of the Work plan on realization of instructions of the President of the Republic of Kazakhstan, received on extraordinary XII meeting of NDP "Nur Otan" on May 15, 2009, approved by the decree of the President of the Republic of Kazakhstan of June 2, 2009 # 326;</p> <p>2) Clauses 3 and 4 of the Work plan on realization of instructions of the President of the Republic of Kazakhstan, received on III session of the Parliament of the Republic of Kazakhstan of fourth convocation on September 1, 2009, approved by the order of the Head of Administration of the President of the Republic of Kazakhstan of September 19, 2009 # 01-30.27.</p>

<b>Developer</b>	Ministry of Trade and Economic Development of the Republic of Kazakhstan, Ministry of Industry and Innovative Technologies of the Republic of Kazakhstan
<b>Purpose of the Program</b>	To guarantee stable and well-balanced economic growth by means of diversification and improvement of its competitive ability
<b>Tasks</b>	<p>Development of priority sectors of economy, effecting its diversification and improvement of competitive ability;</p> <p>Strengthening of social efficiency of development of priority sectors of economy and investment projects realization;</p> <p>Creation of positive environment for industrial development;</p> <p>Formation of economic growth centers on the basis of rational territorial organization of economic potential;</p> <p>Guarantee of effective interaction between the Government and business actors in development of priority sectors of economy.</p>
<b>Terms of realization</b>	2010 - 2014
<b>Necessary resources and sources of financing</b>	<p>State budget and finance of enterprises, organizations, including finance of national companies and organizations involving the Government.</p> <p>Amount of financing from Republican and local budgets will be defined while forming respective budgets for the planned period.</p>
<b>Target codes</b>	<p>Increase of:</p> <ul style="list-style-type: none"> <li>GDP for no less than 7 trillions of KZT, approximately for 50 % of GDP in 2008, in real terms the growth of GDP will be 15 %;</li> <li>manufacturing industry ratio in the structure of GDP for the level of no less than 12,5 %;</li> <li>non-primary export ratio for the level of no less than 40 % of total export volume;</li> <li>non-primary export volume for the level of no less than 43 % of volume of combined production of manufacturing industry;</li> <li>labour productivity in manufacturing industry no less than in 1,5 times;</li> <li>labour productivity in agroindustrial complex no less than in 2 times from 3 000 USD for one engaged in agricultural industry;</li> <li>share of Kazakhstan content in acquisitions by State bodies and organizations, National control holding, National holdings and companies – of goods for 60 %, services – up to 90 %;</li> <li>share of innovative active enterprises – up to 10 % of the number of operating enterprises.</li> </ul> <p>Decrease of:</p> <ul style="list-style-type: none"> <li>transportation costs ration in the structure of prime cost of non-primary sector for the level of no less than 8 %;</li> <li>GDP energy-output ratio for no less than 10 % of the level of 2008</li> </ul>

### **Introduction**

2010-2014 State Program of accelerated industrial and innovative development of the Republic of Kazakhstan (hereinafter referred to as the Program) was developed to implement the decree of the Head of State received on extraordinary XII meeting of NDP "Nur Otan" on May 15, 2009, the Messages of the Head of State to people of Kazakhstan "New decade - new economic upturn – new opportunities of Kazakhstan" and also in accordance with the key provisions of the Strategic Development Plan of the Republic of Kazakhstan until 2020, which is the second step in realization of The Development Strategy of Kazakhstan until 2030.

The purpose of the Program is to guarantee stable and well-balanced economic growth by means of diversification and improvement of its competitive ability.

The Program is a logical continuation of conducted policy on diversification of economy and it contains the main

provisions of the Industrial-innovation Development Strategy for 2003-2015, the Program "30 corporate leaders of Kazakhstan" and other program documents in the sphere of industrialization.

For the period up to 2015 the main priority of the accelerated industrial policy will be realization of big investment projects in traditional export-orientated sectors of economy with multiplication of new business opportunities for small and medium-sized businesses by means of focused development of Kazakhstan content and following processing.

The initiators of big projects promotion will be JSC National Welfare Fund «Samruk-Kazyna» (hereinafter referred to as - JSC «NWF «Samruk-Kazyna»), strategic companies of fuel-energy and metallurgical sectors of economy and also strategic foreign investors.

Simultaneously there must be formation and/or development of the sectors of economy which are not related to raw materials sector, but oriented on internal and then on regional markets (the countries of the Customs Union and Central Asia).

The Government will support the initiatives of Kazakhstan medium-sized and small businesses focused on transfer of high technologies, attracting foreign investments for creation of modern import-substituting productions with the prospect of their export orientation development.

Development of national innovative infrastructure and support of scientific-technologic projects with prospects of commercialization will continue in order to form the basics of post-industrial economy.

In general, the Governmental support of diversification economy will be provided by realization of system measures of economic policy on macro-and sectoral levels and also selective support measures of specific sectors of economy and projects.

The system measures of economic policy will be concentrated on formation of positive macro-environment and investment climate, improvement measures of productivity and competitive ability of the national economy.

The selective measures will be taken on the basis of combined set of measures of financial and nonfinancial support of priority sectors and projects.

The Government will systematic organize its interaction with business on the basis of formation of effective institutes of cooperation on Republican and regional levels.

Necessary course of the industrialization policy up to 2015 will have internal consistency with resources, infrastructural, institutional and technologic restrictions. System character of the mechanisms involved into the Program, stimulating diversification and technologic modernization of economy, will provide:

- creation of positive macro-environment conditions;
- improvement of business-climate and stimulation of investments flow-in;
- mass technologic modernization and development of national innovative system;
- improvement of human capital quality.

Concentration of the resources of the Government and business for development of priority sectors of economy will be provided with interactive decision making process of the Government and business, using modern information systems of monitoring and specific instruments of realization.

#### **Analysis of the current situation**

The course of industrial- innovative development, started in the beginning of 2000, strategically determined main risks of Kazakhstan economy: what was chosen is the single course on diversification of economy and departure from dependence of raw materials production activity.

For this period the institutional basics of industrialization were created:

- National Fund that guarantees economic stability;
- JSC «NWF «Samruk-Kazyna» that consolidates potential of the State to realize breakthrough areas;
- development institutes that processes diversification;
- dialogue on interaction and coordination of actions of the Government and business.

Within the investment policy the legal framework determining legal and economic foundations of investments stimulation was improved.

These measures allowed proper growth of also non-oil sector of economy and conditions for further development of small and medium-sized businesses in the period of active economic growth relating to the gas and oil producing sector growth.

In spite of certain results, the diversification policy and innovative development were not realized completely because of number of system effects typical for resource economies of countries with developing markets:

the symptoms of "the Dutch disease" of economy arose, leading to redeployment of resources (investment, labor) in raw materials sector;

market mechanism in that period could not detect "overheat" of certain sectors of economy and help the Government to determine "the right" structure of economy;

the diversification policy had no necessary critical mass for its development.

Amounts of the Governmental investments for diversification were not enough and were not properly concentrated that could not lead to some serious structural changes.

As a result, the structure of economy remains oriented on raw materials production activity and the structure of employment characterizes low effectiveness of labor potential realization. In 2008 the agricultural employment was 31,5 % of people and the share of this sector's production in the structure of GDP was only 5,8 %. For the period from 2000 to 2008 the share of processing industry in GDP reduced from 16,5 % to 11,8 % and the share of mining industry increased from 13 % to 18,7 %.

Within the key factor of competitive ability of economy - productivity, in spite of positive dynamics of the previous years, Kazakhstan is behind of average developed countries: according to the data of 2008, labour productiveness at parity of buying capacity in Kazakhstan was 22,6 thousands of USD per man, when in Russia - 33,4, in Japan - 68,2, in the USA - 98,1.

Extensive character of Kazakhstan business growth oriented on fast receiving of profits from the raw materials export did not allow it to significantly change and get to internal market while changing of the world business environment.

The initiatives of the Government did not get proper support of business society, because young national business was not strong enough to be an active actor of diversification and start new innovative for Kazakhstan business and compete on the world market attracting the world leading companies as strategic partners.

In pre-crisis period market economy of Kazakhstan was formed evolutionarily. Procyclical development was determined by the dynamics of export- primary sector growth and availability of cheap investment resources on external financial markets.

Specific character of national medium-sized and small businesses in Kazakhstan was determined by its ability to occupy empty spaces guaranteeing fast obtaining of investments (internal non-trade sectors of economy: real estate, trade, local construction engineering, trade- mediatory sector and services).

Therefore, business priorities did not correlate with the Government's priorities on development of manufacturing activities with big added value of products. Those tendencies were also reflected in respective investment projects portfolio of development institutes and second-tier banks. It reflects the objective evolutionary process of national business formation. Crisis, that blew up those "bubbles", makes to search for new markets and innovative products. Optimal way of post-crisis development of Kazakhstan is quickened industrialization.

The world experience witnesses different ways of industrialization: strategies of "catching development", "traditional specialization", "post-industrial development". Considering the structure of the national economy, the "traditional specialization" strategy seems right industrialization strategy for the present stage of industrialization development of Kazakhstan's economy with the emphasis on raw materials sector and following transferring from raw materials manufactures to higher processing.

Stable links between sectors of traditional specialization and the rest of economy allow to form a range of associate fields, which will get possibility of development through their services. That will also form conducive conditions for formation of bunches of small and medium-sized businesses around the manufactures of raw materials sector.

Nowadays, when competition on developing markets grows and it is important to occupy these internal and potential external markets, it is necessary to maximally unlock the potential of the Customs Union with available market of 170 millions of people. Therewith, unique geographical position of Kazakhstan makes it possible for the country to become an effective global mediator in Asia and the CIS (Russia, Central Asia, China, Iran, India). In order to widen available markets with strong presence of Kazakhstan's manufactures, it is necessary to guarantee intensive support of non-primary export of agroindustrial complex, textile industry and tourism.

Simultaneously it is necessary to selectively support the sectors "of economy of the future", which will play the dominant role in the world economy the following 15-20 years.

The main condition of successful realization of the industrialization policy will be the growth of productivity factors and guarantee of competitive ability of the national economy.

Forthcoming industrialization will demand transition from the policy of even development of regions to the pinpoint way of development of cities and territories with big potential of growth and high economical activity.

Effectiveness of the industrialization policy depends on consolidation of efforts of business and the Government on the development of priority sectors of economy and also on formation of effective institutes and mechanisms of their interaction.

### **Purpose, priorities, tasks and principles of the Program**

The purpose is to guarantee stable and well-balanced economic growth by means of diversification and improvement of its competitive ability.

Target codes up to 2015:

Increase of:

GDP for no less than 7 trillions of KZT, approximately for 50 % of GDP in 2008, in real terms the growth of GDP will be 15 %;

manufacturing industry ratio in the structure of GDP for the level of no less than 12,5 %;

non-primary export ratio for the level of no less than 40 % of total export volume;

- non-primary export volume for the level of no less than 43 % of volume of combined production of manufacturing industry;
- labour productivity in manufacturing industry no less than in 1,5 times;
- labour productivity in agroindustrial complex no less than in 2 times from 3 000 USD for one engaged in agricultural industry;
- share of Kazakhstan content in acquisitions by State bodies and organizations, National control holding, National holdings and companies – of goods for 60 %, services – up to 90 %;
- share of innovative active enterprises – up to 10 % of the number of operating enterprises

Decrease of:

- transportation costs ration in the structure of prime cost of non-primary sector for the level of no less than 8 %;
- GDP energy-output ratio for no less than 10 % of the level of 2008.

Priorities:

- increase of productivity factors as the most important condition of competitive ability growth of the national economy;
- emphasis on attracting investments, mainly direct foreign ones, in creation of new export-oriented high-tech productions;
- development and strengthening of the national innovative system;
- decrease of concentration level of economy and strengthening of the role of small and medium-sized businesses in the industrialization process;
- rational extensional organization of economic potential.

Tasks:

- Development of priority sectors of economy, effecting its diversification and improvement of competitive ability;
- Strengthening of social efficiency of development of priority sectors of economy and investment projects realization;
- Creation of positive environment for industrial development;
- Formation of economic growth centers on the basis of rational territorial organization of economic potential;
- Guarantee of effective interaction between the Government and business actors in development of priority sectors of economy.

The Program is based on the following principles:

- orientation on business initiatives;
- support of the "breakthrough" projects and clustered initiatives in non-oil and gas sector;
- optimal distribution of risks between the Government and private sector, clear determination of their roles in the industrialization process;
- multiplication of new business opportunities;
- interativeness relates to the permanent specification in the process of realization of the entry list program depending on the level of working-through projects;
- transparency is the principle of outspokenness of the participants list of the Program, master-plans contents, applicants' requests, measures of Governmental support, monitoring results of realization of the Program;
- equal access means that native and foreign companies, big, middle-sized and small enterprises can equally participate in the Program;
- competitiveness is the basis of effective projects promotion and prevention of use of non-economic methods;
- transferrness (spreading effect) means that the measures of Governmental support relating to development of normative-legal and normative-technical basis (improvement of business- environment) relate to all subjects of economic activity;
- succession means that the most effective measures of the Governmental policy specified in already implementing program documents will be implemented while realization of the present Program.

### **Primary areas of realization of the Program**

#### **1. Development of priority economy sectors effecting its diversification and improvement of competitive ability**

In the following period the industrialization policy will be focused on advance development of priority non-oil and gas sectors through development of the fields of "traditional specialization", which will be accelerators of industrial - innovative processes.

Efforts of the Government will be concentrated on development of the following priority sectors of economy:

- traditional: oil and gas sector, ore mining and smelting complex, atomic and chemical industry with following transition of rough manufacturing to higher processing;

- based on mineral developers', national companies' and the Government's demands: machinery, building industry, pharmaceuticals;

productions not relating to oil-and-gas and export-oriented sectors: agroindustrial complex, light industry, tourism; sectors "of economy of the future" which will play dominant role in the world economy in following 15-20 years: information and communication technologies, biotechnologies, alternative energetics, space activities.

List of these sectors is not exhaustible, but will be accompanied during the process of realization of the Program.

Successful diversification of economy relates to stable development of the Republic, including the way of optimization of the controlling system of stable development and implementation of "green" policy of low carbonic economy, including the issues of investments attracting, solution of ecological problems, reduction of negative influence of anthropogenic stress on natural ecosystems, strengthening of responsibility of users of natural resources concerning emission reduction in the environment, complex residue utilization.

In the speeding process of diversification of economy the Government will stand against realization of non-effective projects, thus the main criterias of projects selection will be productivity, energy-effectiveness and export-orientation considering opportunity of realization of the Customs Union potential.

### **1.1 Diversification of production in "traditional industries"**

#### **Oil and gas sector**

##### **Brief analysis of the current situation**

In 2009 extraction of oil and gas condensate in the Republic was 76,5 million tons, extraction of gas was 35,6 billion cubic meters. Export of oil and gas condensate was 68,1 million tons.

Oil-processing factories (hereinafter referred to as OPF) in 2009 processed 12,1 million tons of oil.

Following development of oil extraction relates to maritime projects and results of projects on widening of Tengiz and Karachaganak occurrences.

##### **Main tasks**

1. Achievement of stated target codes on extraction of oil and gas condensate and their processing.
2. Meeting the demands of internal market for oil products and gas.
3. Diversification of export routes of oil transportation.

##### **Target codes**

1. Achievement of oil production volume growth shall be up to 85,0 million tons in 2014 (120,4 % to 2008 ), raw gas - up to 54 billion cubic meters (61,4 % to 2008 ).
2. Export of oil in 2014 shall be up to 75 million tons (119,4 % to 2008 ).
3. Growth of oil processing volume on Kazakhstan oil-processing factories (hereinafter referred to as - OPF) in 2014 shall be up to 15,0 million tons (122,1 % to 2008 ) with increase of oil processing depth up to 87-90 % and leading the quality of national oil products to European standards of quality.
4. Transportation of gas on the gas pipeline "Beyneu-Bozoy-Akbulak":  
in 2012 – up to 3,6 billion cubic meters per year;  
in 2013-2014 - up to 5,0 billion cubic meters per year;  
in 2015 and following years - up to 10 billion cubic meters per year.

##### **Primary areas of the branch development**

For the period of 2010 - 2014 extraction of oil and gas condensate in the Republic will grow according to realization of projects of Tengiz occurrence for 1,5 million tons and also for 3,5 million tons according to the beginning of extraction process on Kazakhstan sector of Caspian Sea (Kashagan , etc.) Oil extraction growth will therefore trigger gas extraction growth, because nearly all gas in the Republic is associated.

The main operator of development sphere will be JSC "NC Kazmunaygas" (hereinafter referred to as - Kazmunaygas), which will concentrate on developing of national potential in the sphere of oil and gas extraction by means of direct participation in big projects, arrangement and starting of new occurrences, financing and geological prospecting work.

In order to contribute stable economic growth of the country and improvement of quality of life of Kazakhstan people by means of rational and secure development of hydrocarbon resources of Kazakhstan sector in Caspian Sea and development of accompanying fields of industry of the country for the period of 2010-2014 it is necessary to make appropriate conditions for complex development and extraction process stabilization.

The Governmental policy will be focused on stimulation of development of productions with higher added value, formation of auxiliary, servicing and processing blocks of small and medium-sized enterprises by means of outsourcing and strengthening of local content in big projects and also formation of clusters around big strategic companies by means of consolidation of efforts of servicing and auxiliary enterprises.

This strategy will allow achieving good multiplicative effect of oil and gas sector development on connected fields of internal economy with its active implementation into national production process.

For these purposes there is realization of following investment projects:

Reconstruction of vacuum block of ELLOW-AVT-3 assembly and deferred carbonization assembly of Atyrau OPF (Atyrau oblast) with vacuum block power - 1,8 millions tons/year and deferred carbonization assembly power - 1,0 millions tons/year.

Modernization and reconstruction of Shymkent OPF (South-Kazakhstan oblast) with oil processing power - 6,0 millions tons/year.

Modernization and reconstruction of Pavlodar Oil and Gas Plant (Pavlodar oblast) with oil primary processing power - 6,0 millions tons/year.

To improve the processing level and widen Kazakhstan content in oil companies' purchases there are the following measures:

national oil and gas companies will initiate creation of new productions, increasing the level of raw materials processing and share of Kazakhstan content by means of direct participation in newly created productions or guaranteeing of long-term sale of the products by national businessmen;

the contracts with mineral developers will include obligations on organization of processing and connected productions and guaranteeing of priority ranking of purchases of national goods, works and services;

memorandums will be concluded with big private strategic enterprises, aiming at increase of raw materials processing level and purchases of the products of national manufacturers.

### **Sectoral and project measures of Governmental support**

#### **Transport infrastructure provision**

For diversification of hydrocarbonic resources export to external markets and meeting the demands of internal market the following projects will be implemented:

#### **Kazakhstan Caspian System of Transportation (KCST)**

KCST, aimed at oil export from Kashagan and Tengiz occurrences through Caspian Sea and Baku-Tbilisi-Jeykhan system and/or other oil-transport systems to international markets, will consist of:

1. Eskene-Kuryk oil pipeline;

2. Transcaspian systems of the project (TSP), including: the oil-loading terminal on Kazakhstan seaside of Caspian Sea; tankers and ships for transportation of oil and associated operations; the oil-discharge terminal on Azerbaijanian seaside of Caspian Sea; connective constructions with the system Baku-Tbilisi-Jeykhan.

#### **Caspian Pipeline Consortium (CPC)**

The CPC oil pipeline of 1510 km connects "Tengiz" occurrence and oil-terminal on Russian seaside of Black Sea near the port "Novorossisk".

It is assumed to be widening of oil pipeline capacity up to 67,0 million tons of oil per year.

#### **Kazakhstan-China oil pipeline**

Kazakhstan – China oil pipeline includes realization of Atasu-Alashankou and Kenkiyak-Kumkol oil pipeline project. It is assumed to be widening of current power capacity of Kazakhstan-China oil pipeline up to 20 million tons/year.

#### **Atyrau - Samara**

Atyrau – Samara oil pipeline is one of priority directions of oil transportation through the Russian Federation territory in the direction of Black Sea or Baltic Sea.

#### **Gas pipeline "Beyneu-Bozoy-Akbulak"**

In order to meet the demands for gas in south regions of the country and exclude dependence from gas import it is assumed to put into operation the startup complexes of "Beyneu-Bozoy-Akbulak" gas pipeline:

1-st startup complex of the 1-st course - 2011;

2-nd startup complex of the 1-st course - 2013;

2-nd course - 2019.

#### **Formation of service infrastructure**

Creation of integrated multifunctional center of progressive technologies (Caspian energetic hub) will be detailed in order to meet the demands for oil and gas industry of highly qualified personnel and scientific and research resources and also of technological, administrative and commercial services.

#### **Qualified personnel resources provision**

Requirements of personnel of 16 oil and gas industry specialities will be met by means of their training in universities and 18 educational institutions of technical and professional education (hereinafter referred to as – TaPE) in Atyrau, Aktubinsk, West-Kazakhstan, Mangistau, Kyzylorda, South-Kazakhstan oblasts.

Interregional center on training and retraining of personnel for oil and gas industry for 700 students will be put into operation in Atyrau city in 2011.

For further successful development of professional education systems in oil and gas industry, transition to the world educational standards shall take place by means of:

1) development of normative-legal base considering responsibility of companies for professional education of youth and training of Kazakhstan personnel;

2) interaction with social partners by means of their attraction to personnel training and joint use of training centers



of oil companies in process of Kazakhstan personnel training.

Training of oil and gas industry specialists will take place within the framework of the government order and objective educational grants of big foreign oil companies.

#### **Technical regulations implementation**

For security reasons there are the following technical regulations of:

1. gasoline, diesel fuel and black oil fuel;
2. gasoline additives;
3. lubricants and special liquids for transport vehicles;
4. Oil and gas, drilling, geological survey and geophysical equipment;
5. magistral oil pipelines;
6. subsea pipelines and cables.

### **Petroleum chemistry**

#### **Brief analysis of the current situation**

In spite of big volumes of raw hydrocarbons extraction, nowadays in Kazakhstan there is no completed technological cycle of deep processing of raw hydrocarbons getting products with added value.

Raw hydrocarbons processing is limited with separation of oil and gas. 3 oil-processing and 3 gas-processing plants (hereinafter referred to as - GPP), built in Soviet time and not meeting the modern standards, currently work in the country.

Currently with the participation of JSC "National company "Kazmunaygas" (hereinafter referred to as - JSC "NC «Kazmunaygas») basic projects on creation of oil and gas production are ready for the stage of realization.

For realization of interrelated oil and gas production, exclusive economic zone "National industrial oil and gas technopark" was created in Atyrau oblast.

#### **Main task**

Increase of depth and volumes of national raw hydrocarbons processing (oil/gas) and growth of export of products with high added value.

#### **Target codes**

1. Introduction of bitumen production power in the value of 500 thousands tons/year up to 2012.
2. Since 2014 production of aromatic hydrocarbons in the value of benzol - 133 thousands tons/year, paraxylene - 496 thousands tons/year.
3. Since 2015 production of basic oil and gas products in the value of 800 thousands tons/year of polythene and 500 thousands tons/year of polypropene.

#### **Primary areas of the branch development**

Creation of oil and gas production is considered in two directions.

The first directions – creation of oil and gas production on deep processing of raw hydrocarbons for output of basic oil and gas products with high added value using technological interaction products of deep processing, primary processing products with OPF, GPP.

For these purposes there shall be realization of the following investment projects:

Integrated gas chemical complex of basic oil and gas products manufacturing with capacity of 1,3 million tons products per year, considering hydrocarbon gas processing of Tengizskoro occurrence (Atyrau oblast). Terms of realization of the project: 2009 - 2014.

Bituminic Plant on the basis of Aktau Plant of plastic mass (processing of heavy Karazhanbass oil) with capacity of 500 thousand tons of paving bitumen appropriate for Kazakhstan climatic conditions (Mangistau oblast). Terms of realization of the project: 2010 - 2011.

Construction of the complex on Atyrau OPF on aromatic hydrocarbons production, benzol - 133 thousands tons/year, paraxylene - 496 thousands tons/year.

The second direction - construction of enterprises of small and medium-sized businesses in the sphere of auxiliary processing of basic oil and gas products and output of innovative products of industrial and consumer designation with high added value (pipes, membranes, dishes, package, other details of manufacturing and household designation).

#### **Sectoral and project measures of Governmental support**

##### **Infrastructure provision on the FEZ territory**

Construction of objects of infrastructure integrated gas chemical complex (11 physical objects) will be done with support of the Government.

Construction of infrastructure free economic zone (hereinafter referred to as - FEZ), "National industrial oil and gas technopark" (Atyrau oblast) with location of oil and gas enterprises of small and medium-sized businesses will be financed by means of Republican budget.

### **Qualified personnel resources provision**

Up to 700 qualified specialists on technical specialities will be trained.

### **Resources provision**

With the support of the Government the agreement on gas supply for long-run period was signed.

## **Ore mining and smelting branch area**

### **Brief analysis of the current situation**

Share of ore mining and smelting field in total volume of manufacturing production is - 17,5 %. Share of metallic ore extraction - 3,8 %, iron ore extraction - 1,5 %, base metal ores extraction - 2,3 %, share of metallurgical industry - 11,8 %, share of production of finished metallic goods - 1,2 %. The share of metallurgical industry has more than 35 % of total processing industry volume. Practically all metals manufactured in the country and metal products are subjects of export, while products of higher processing are abroad. According to the results of 2008, the products for 13,21 billions USD were exported.

The main problems of ore mining and smelting complex are: source of raw materials exhaust, low complexness of using raw materials, high level runout of the main production facilities, high level of environment pollution and technological inferiority, lack of integrated complexes with full cycle of production from extraction to output of products with high level of market readiness, small capacity and dispersion of internal market, high energy-, labor- and materials consumption of products.

Perspective opportunities of technological development of ore mining and smelting field: 1) in iron industry - production of high quality raw materials for steelmaking (granulated iron and HBI, production of ferro-alloys with colored and rare metals), production of quality steel (pipe and corrosion proof, heat resisting and ovenproof, tool, ball-and-roller, rail and spring-loaded) and widening of gauge materials of heavily alloyed steel; 2) in nonferrous-metals industry - production of fine metals (aluminium, copper, gold, titanium) and their products (rods, wires, rolled metals, shapes and alloys and also jewelry).

### **Main task**

Creation of metallurgical productions with following processing for development of mechanic engineering, building industry and other fields of manufacture and export.

### **Target codes**

1. Increase of gross added value of metallurgical industry shall be no less than 107 % on the basis of deep processing of mineral raw materials and creation of new processing.
2. Increase of volume of high-tech competitive products and export shall be in 2 times to the level of 2008.

### **Primary areas of the branch development**

Governmental policy on development of ore mining and smelting complex of the country will be aimed at realization of the following areas:

organization of manufactures of the main (basic) metals by big enterprises;

organization of final products manufactures of high processing on the basis of main metals by enterprises of small and medium-sized businesses.

There will be also implementation of complex of measures on stimulation of ore and concentrates export share reduction for complex processing of mineral raw materials.

The subjects for production development aimed at new processing and oriented on export are:

in iron industry – realization of a big project on increase of steel production capacity up to 6 million tons per year and construction of accessory plant with capacity of up to 4 million tons of steel per year (Karaganda oblast). The annual output of ferromanganese silicon production will be increased to 64,8 thousands tons/year, ferrochrome – up to 440 thousands tons/year in five years;

in nonferrous-metals industry - production of primary aluminium will be increased to 125 thousand tons. Construction of a new plant of primary aluminium manufacture with capacity of 250 thousand tons per year (Pavlodar oblast) will begin. In rare-metal and rare-earth fields no less than two joint enterprises with the biggest world corporations-leaders in the sphere of high-tech manufactures will be created to 2014. Therewith, copper concentrate output will be increased to 500 thousand tons (East-Kazakhstan oblast), cathode copper - to 95 thousand tons, spongy titanium – to 16 thousand tons, production of high cleanness quartz – to 16,5 thousand tons, copper-molybdene ore – to 2 500 thousand tons.

Production of tantalum will be increased to 297 tons, beryllium - to 2000 tons up to 2015.

On internal market with phasing output on external markets there will be:

in iron industry - no less than 3 high-tech low-capacity manufactures with products of high added value will be created in Karaganda oblast in Industrial zone. Low-capacity steel production with capacity of no less than 200 thousand tons per year will be created in Kostanay oblast. Annual output of rolled steel production will be increased to 450

thousand tons in Kostanay oblast, granulated iron production of 500 thousand tons per year will be developed as well as 1,4 million tons of HBI per year and up to 100 thousands tons of rail products per year.

in nonferrous-metals industry – the Industrial zone for arrangement of no less than 6 low-capacity manufactures with annual production output up to 15 thousand tons of aluminum wire rod, 20 thousand tons of rolled metal, 10 thousand tons of shape and 50 thousand tons of alloys will be created in Pavlodar oblast. Therewith, cathodic gold output will be increased to 15 tons, gold affintage production will be developed with capacity of 25 tons per year by means of concentrating and processing plants. In the sphere of metallurgical production of high processing 25 small and medium-sized enterprises will be created in East-Kazakhstan, West-Kazakhstan, Karaganda, Aktubinsk and Pavlodar oblasts.

There shall be realization of the following projects:

Kostanay oblast - HBI - 1,4 million tons/year;

Kostanay oblast - rolled section - 75 thousand tons/year;

Kostanay oblast - rolled metal products - 450 thousand tons/year;

Zhambyl oblast - ferromanganese silicon - 64,8 thousand tons/year;

Aktobe oblast - ferrochrome – up to 440 thousand tons/year;

Akmolinsk oblast - ore extraction - 8 million ton/ year, production of gold -15 tons/year;

Pavlodar oblast – copper production concentrate - 500 thousand tons/year; Pavlodar oblast – production of primary aluminium - 125 thousand tons/year;

East-Kazakhstan oblast - copper production concentrate - 500 thousand tons/year, copper smeltery - 25 thousand tons/year;

East-Kazakhstan oblast - production of spongy titanium - 16 thousand tons/year;

East-Kazakhstan oblast - production of cathode copper - 70 thousand tons/year.

Karaganda oblast - production of steel – up to 10 million tons/year;

Aktobe oblast - granulated iron - 500 thousand tons/year;

Pavlodar oblast - raiing - 100 thousand tons/year.

Nevertheless, the projects' portfolio can be changed later considering priorities of the present field development.

#### **Sectoral and project measures of Governmental support**

##### **Energy infrastructure provision**

There will be modernization and increase of capacities of SDPS-2 (Ekibastuz city) and TPP (Pavlodar city).

##### **Transport infrastructure provision**

The issue of increase of railroad capacity on the following stations will be detailed: Aksu-2 (Pavlodar oblast), Don (Chrometau, Aktobe oblast), Zhinishke (Aktobe oblast).

##### **Qualified personnel resources provision**

Demand for personnel in 15 specialities of metallurgical industry in Aktubinsk, East-Kazakhstan, Karaganda, Pavlodar oblasts will be met by means of their training of specialists in universities and 10 educational institutions of TaPE.

System of professional- technical education providing with specialists of secondary technical training for metallurgy and metalwork will be renewed and system of 3 months manufacture internships with individual supervisors will be implemented in manufacturing enterprises.

##### **Administrative barriers removal**

The parts of the law of the Republic of Kazakhstan "On subsurface resources and subsurface resources management" on authorities of the Ministry of industry and new technologies relating to the issue of conformation of mining plan on solid minerals extraction will be changed.

The law on precious metals and stones will be made for the Government regulation of precious metals and stones occurrences exploration, their extraction, production, use and also issues of metal junk and waste materials of precious metals and stones.

##### **Technical regulations implementation**

In order to improve the spheres of metallurgical industry technical regulation, the following parts will be changed: development and implementation of 4 technical regulations on metallurgy and metalwork, 311 state standards of the Republic of Kazakhstan harmonized with international requirements, including 162 of testing methods, 148 of products and also 1 standard of management system. Considered standards will be related to: metals - 156; metallic materials - 85; management system - 1; metallic materials measurement and testing methods - 58. Therewith, it is necessary to modernize national standards on hardness scales in order to produce high-accuracy testing blocks for metrological assurance of metals and metal goods quality measurement.

##### **Development of innovations and assistance to technologic modernization**

Creation of laboratory of the Center of metallurgy and high technologies in East-Kazakhstan oblast specializing on research of permanent magnets, catalytic agents for raw hydrocarbons processing, turbine blades, autocatalysts, end products on the basis of quartz raw materials, tantalum, niobium, beryllium, molybdenum, wolframium will be detailed to 2012 for the purpose of the field scientific-technical development.

System monitoring of enterprises, analysis and control of processes of metallurgy and metalwork products' added value formation will be made.

Innovative grants will be appropriated for increase of business innovative activity: for modernization of metallurgy and metalwork enterprises providing increase of labour productiveness for 20 % and more comparing to the present level; for scientific researches and experimental development works (hereinafter referred to as - SREDW) in order to decrease energy and resource intensity manufactures and also for concessional financing of equipment leasing.

#### **Creation of attractive terms for direct investments**

Stimulation of SREDW development by means of tax base reduction on corporate income tax for 150 % of expenses for SREDW results implementation.

For the purpose of national content development while realization of projects with participation of the Government, national manufacturers will be ensured with priority right to metal products supply for projects data realization.

Therewith, national metallurgy and metalwork processers will have opportunity to gain raw materials on commodity market of the Republic of Kazakhstan, while big manufacturers of raw materials will have opportunity to make quota delivery of raw materials on the commodity market.

Support of the field development will also be provided by means of priority purchase of goods, works and services by the field enterprises, mineral developers, national companies and governmental bodies.

Measures for stimulation of metals realization on internal market will be taken in order to gain products of high processing.

Measures for disincentiveness of ore and concentrates export will be taken in order to process raw materials in the country.

#### **Resources provision**

Raw-material base of operating mining enterprises will be widened with special attention to searching and development of ore occurrences for nonferrous-metals industry and searching of strategical types of natural resources in East, Central and North Kazakhstan. National companies will be supported with limited resource base while purchasing mining assets overseas.

There shall be development and implementation of effective technologies on processing of unbalanced and hard-cleaning ore, concentrates, waste piles and also on use of secondary raw materials - metal junk and waste of black and colored metals.

JSC "OGC "Tau-Ken Samruk" will serve the interests of the Government in ore mining and smelting complex relating to acquisition of alienate rights to subsurface resources management and participation in development of natural resources occurrences.

### **Chemical industry**

#### **Brief analysis of the current situation**

Gross volume of chemical industry in the world is about 2 trillion USD. Share of Kazakhstan production in the world manufacture - 0,04 %, in volume of manufacture industry of the country - 1,61 %, in volume of processing industry of the country - 4,84 %.

According to the results of 2008 volume of export products of the field was 101 billion KZT or about 0,84 billion USD, of import products - 92 billion KZT or 0,76 billion USD.

The problems of the field development are low level of raw materials processing; non-conformity of products to the requirements of international standards; lag in technology of the field; wear of fixed assets (more than 80 %); low coefficient of fixed assets renewal(1-1,5 % per year); lack of basic manufactures for further processing production; deficit of qualified personnel.

At the present time there are no engineering companies able to provide full complex of engineering services on projection of competitive chemical manufactures (analytical researches, pre-project and project documentation, engineering equipment, technologies, control for construction and activities support) in Kazakhstan.

#### **Main task**

Development of priority competitive manufactures of chemical industry aimed at production of high-tech, export-oriented and innovative products with high added value.

#### **Target codes**

1. Increase of chemical production volume in 2 times.
2. Increase of high processed chemical products export in 2 times.

#### **Primary areas of the branch development**

Organization of complex processing of raw materials for the purpose of high processed chemical production will be made in the following areas:

organic chemistry products: organization of polythene production with capacity of 800 thousand tons per year and

polypropene production with capacity of 500 thousand tons per year in Atyrau oblast and also high processing manufacture (considered in the Section "Petroleum chemistry");

inorganic chemistry products: organization of mineral fertilizers manufacture, including nitrogen-phosphoric - no less than 1 million tons/year; potassic (including non- chloride) - no less than 250 thousand tons/year, complex - no less than 200 thousand tons/year; sodium hydrate of membranous method - no less than 30 thousand tons/year; increase of dipping acid production;

special chemicals and consumer chemistry: organization of explosive agents manufacture - no less than 15 thousand tons/year; synthetic detergents manufacture - no less than 60 thousand tons/year; biopreparations and humates manufacture - no less than 600 tons/year; phosphorus-containing fertilizers manufacture of acid-free technologies - no less than 100 thousand tons/year.

Production of polymeric constructional materials, agricultural chemistry products, antipyrenes, flotation agents, household cleaning products, fuel additions and other low- and medium-tonnage high-technology products for building, chemical, textile industries, agriculture, mechanic engineering and other sectors of economy will be also organized.

There shall be realization of the following projects:

production of sodium hydrate of membranous method - 30 thousand tons/year and other products - chlorine, sodium hypochlorite (Pavlodar oblast);

dipping acid production (Akmolinsk oblast);

nitrogen-phosphate fertilizer production - no less than 1 million tons/year (Ushbas and Geres occurrences in South-Kazakhstan oblast);

construction of mining and concentrating factory and sulfuric plant with capacity of 650 thousand tons/year (Zhambyl oblast).

The mentioned list of projects is not final. An additional portfolio of projects will be formed on the next stage in accordance with priorities of the field development.

Realization of the projects mentioned above will bring opportunity for organization of high processing manufacture enterprises of small and medium-sized businesses, will allow to increase research intensity of the field, to use available scientific researches and meet the demands of external and internal markets.

#### **Sectoral and project measures of Governmental support**

##### **Infrastructure provision**

The issue of energetic infrastructure provision of the building project of the nitrogen-phosphate fertilizer manufacture plant in South-Kazakhstan oblast will be detailed.

The issue of transport infrastructure provision of the building projects of the complex mineral fertilizers manufacture plant in Zhambyl oblast and the nitrogen-phosphate fertilizer manufacture plant in South-Kazakhstan oblast will be detailed.

##### **Qualified personnel resources provision**

Demand for personnel in 12 specialities of chemical industry and speciality "pharmacy" will be met by means of their training in universities and 13 educational institutions of TaPE.

New specialities will be open in educational institutions of Akmolinsk, Pavlodar oblasts.

System of 3 months manufacture internships with individual supervisors will be implemented in manufacturing enterprises. No less than 1000 specialists- alumnus of educational institutions will be trained within the framework of the present system.

The internship program for managers of technologies, sale and supply for national chemical enterprises will be realized in the leading foreign chemical companies. No less than 200 personnel will be trained within the framework of the present program.

##### **Administrative barriers removal**

Procedures in the sphere of regulation of precursors production and turnover will be simplified in order to decrease their influence on formation of chemical products' costs and save time to obtain necessary permissions.

The issue of raw hydrocarbons and oil-processing products realization on internal market at economically expedient prices for the purpose of their use in national chemical industry of further processing will be detailed in order to deepen cooperation with foreign investors and big mineral developers.

##### **Technical regulations implementation**

9 technical regulations will be implemented, 225 state standards will be developed and implemented in accordance with international requirements; modernization of national standards on pH-metrics of electric conductivity of chromatography and spectrometry for physico-chemical, optics-physical and microbiological measurements using modern methods will be made.

##### **Development of innovations and assistance to technologic modernization**

In order to achieve high indexes of labour productiveness and energy-effectiveness of production the grants will be offered for development and implementation of development activity.

Engineering scientific-researches of the Program on creation of new chemical products, solution of technological

problems of chemical enterprises, use of chemical products in enterprises of other fields will be made.

Specialized engineering company in the sphere of chemical production will be created. Its activity will be aimed at training of no less than 30 qualified engineers from the number of Kazakhstan specialists, implementation of modern methods and international standards on manufacture engineering, increase of Kazakhstan content in engineering services in the field for no less than 40 %, formation of systems of scientific-engineering support of the field enterprises' activity.

#### **Creation of attractive terms for direct investments**

"Joint chemical company" Samruk Kazyna LLP will be the main operator of the Program realization in chemical industry and will meet the demands of the Government relating to acquisition of alienate rights to subsurface resources management, participate in development of natural resources occurrences, attract necessary capital loans on international financial market and search for strategical investors.

Concessional lending will be organized (with JSC "Bank of development of Kazakhstan" (hereinafter referred to as - BDK) and second-tier banks - partners of the Program) for Republican investment projects, enterprises of small and medium-sized businesses consuming products of national chemical manufactures for the purpose of high processed production.

Subsidization of agricultural producers will be increased in order to stimulate consumption of mineral fertilizers of national production; the current normative legal acts on widening of goods nomenclature (works, services) sold by national potential suppliers for the State requirements will be changed and amended with inclusion of the products of new chemical manufactures.

#### **Trade policy**

In order to create recognizable image of Kazakhstan chemical products in form of the state order, limited cost recovery for chemical enterprises (exporters of high processing products) will be considered for participation in specialized exhibition, branding of national products, creation of internet-resource and printable products for spreading overseas.

Procedure of acquisition of license for chemical products export will be simplified, terms of agreement issuance will be reduced in every ministry.

The problem of obtaining special permission for traffic of cisterns for yellow phosphorus transportation on the territories of the EU countries for the period of 2011 – 2018 will be solved (in view of their prohibition in the EU countries since 2011).

#### **Resources provision**

Searching works for raw materials occurrences will be held in chemical industry.

### **Atomic industry**

#### **Brief analysis of the current situation**

There are all reasons for development of export-oriented and the world competitive atomic sector in Kazakhstan.

They are:

- presence of significant quantity of developed uranium reserves and uranium-mining and processing industry;
- presence of enterprises of production of propellants (SC "UMZ") and constructional materials for nuclear-power reactors;
- presence of highly-qualified specialists with experience of operation of nuclear reactors in the country;
- presence of scientific enterprises with researching reactors, unique electro-physical installations and stands making researches in the sphere of nuclear physics, physics and technics of nuclear reactors, security of nuclear power units.

#### **Main task**

Creation of vertically-integrated complex with full nuclear-fuel cycle for manufacture of export-oriented products with high added value, that will be competitive on the world markets.

#### **Target codes**

1. Increase of uranium extraction volume in accordance with decisions of the Government of the Republic of Kazakhstan.
2. Creation of new manufactures of nuclear-fuel cycle, construction of conversion facility with manufacturing capacity of 12 000 tons of uranium hexafluoride (UF<sub>6</sub>), construction of the plant on Ulbinsk Metallurgical Plant of fuel assemblies with capacity of 400 tons of nuclear fuel.

#### **Primary areas of the branch development**

In order to effectively use uranium mineral resources base of the Republic of Kazakhstan and develop the following stages of nuclear-fuel cycle, the following actions are considered:

1. Exploration work in Shu-Sarysuy and Syrdarya uranium - mining provinces for the purpose of uranium mineral resources base production and development and extraction of new mines with massive construction of a new APS

proclaimed by many countries.

Starting in 2010 the works on productive capacity extraction in operating mines and put into operation of new extracting complexes with summary project capacity of 6 000 tons of uranium per year will be continued.

Depending on the market situation volumes of uranium extraction will be determined by the decisions of the Government of the Republic of Kazakhstan.

Uranium extraction calculations will also depend on development of the following cycles of nuclear fuel production in Kazakhstan.

2. Participation of JSC "NSC "Kazatomprom" (hereinafter referred to as - Kazatomprom) in the offer of services relating to uranium conversion and finding its place in the present stage of nuclear-fuel cycle by means of obtaining access to high conversion technologies.

For these purposes the project of construction of conversion facility with manufacturing capacity of 12 000 tons of uranium hexafluoride (UF<sub>6</sub>) per year (approximately 17 % of the world capacities upon conversion) on the basis of Ulbinsk metallurgical plant will be realized jointly with Canadian company "Cameco".

3. Participation of Kazatomprom in provision of concentration services.

In order to obtain access to concentrating capacities, the joint company CHSC "Center of uranium concentration" was created on the territory of the Russian Federation in Angarsk city on parity basis of Kazatomprom and JSC "Techsnabexport" (the Russian Federation). CHSC "CUC" activity is aimed at construction and operation of the plant of uranium concentration with capacity of 5 million EPP per year.

4. Participation of Kazatomprom in provision of services of nuclear fuel production.

For creation of fuel assemblies production and their promotion on the markets of nuclear fuel and fuel assemblies, the agreement on construction of the plant on Ulbinsk metallurgical plant of fuel assemblies production with capacity of 400 tons of nuclear fuel was signed with the AREVA Company in 2008. This plant will manufacture assemblies for French designed reactors and reactors of other manufacturers for South-East Asian markets and will meet the demands for fuel of national atomic energetics.

5. Realization of new high-tech projects.

Modern infrastructure providing promotion of high-tech developments in the sphere of nuclear technologies on the market, their implementation in manufacturing and also development of new science-intensive manufactures will be formed on the basis of JSC "Park of nuclear technologies".

Technological line on damp-proof roof-boarding materials and cellular polyethylene manufacture was started on the basis of industrial electron accelerator ELV-4, work on construction of irradiation sterilization body was started on the basis of industrial accelerator ILU-10, which is a part of the complex of radioactive technologies and is aimed at sterilization of medical goods and preparations, pharmaceuticals synthesis.

It is assumed to implement the following projects: production of thermocontractable cuffs and tapes for oil- and gas-pipelines and housing and utilities infrastructure; mobile complex on cleaning and deactivation of radioactive oil and gas equipment; production of motor transport equipment for railroad transport; implementation of hydraulic pump assemblies.

Besides the projects aimed at formation of vertically-integrated atomic-industrial complex, it is assumed to implement high-tech projects that allow development of alternative and allied areas and sectors of energetics.

## **1.2 Fields development on the basis of domestic demand**

Intensive development of economy in "traditional industries", development of Kazakhstan content will stimulate development of economic sectors that are the main according to the demands of mineral developers, national companies and the Government. First of all they are mechanic engineering, building industry and pharmaceutical industry.

The strategy of these sectors development will be gradual transition from meeting of domestic demand to their export potential by means of improvement of competitive ability of national enterprises, growth of production factors, implementation of innovative technologies.

### **Machinery**

#### **Brief analysis of the current situation**

Mechanical-engineering complex includes 13 subindustries: railroad, oil and gas, mining, metallurgics, automobile manufacturing, agriculture, electro-equipment, etc. Share of the products of mechanical-engineering complex in total volume of Kazakhstan production reduced from 15,9 % in 1990 to 2,9 % in 2008. Capacity of market in 2008 was 16 663 million dollars, including import - 15 475 million dollars or 41 % in total structure of import of goods.

The main problems of the field development are: lag in technology of enterprises, low competitive ability of products; lack of connections with the world manufacturers, lack of access to construction documentation; insignificant volume of investments; lack of interfactory cooperation; high level of equipment worn-out (43-80 %); deficit of qualified personnel; low level of after-sale service of mechanical-engineering products.

in oil and gas, mining and metallurgical mechanic engineering the problems are: lack of information awareness of

mechanic engineering enterprises about perspective purchase plans of mineral developers, plans of technical rearmament, demand for products of oil and gas mechanic engineering occurrences, regions, plans on products import.

in agricultural mechanic engineering the problems are: use of import assemblies and materials, low purchasing power of agricultural manufacturers, hardness of credit resources, the legal limitation of opportunities of financing of national mechanic engineering production by leasing companies.

in transport mechanic engineering the problems are: lack of large-dimensioned cast; use of import assemblies and materials.

in defense industry the problems are: practical lack of scientific researches; lack of full production cycle (generally, production of assemblies); lack of effective interaction with the main consumers – Armed Forces and other forces and military formations of Kazakhstan; limited number of potential consumers (generally, Kazakhstan military products can interest only the Governments-members of the CSTO); low profitability of production, insufficient Governmental financing.

### **Main task**

Maximal satisfaction of needs of internal market and export extension by means of increase of end goods production with high added value.

### **Target codes**

1. Gross increment of added value for 74 %.
2. Increase of labour productiveness in the field up to 52 thousand dollars/man per year.

### **Primary areas of the branch development**

Modernization of operating enterprises in order to create flexible manufactures of widening of output assortment and develop new types of mechanic engineering products.

Organization of big assembling manufactures with increase of localization level by development of details and assemblies production.

Creation of new modern enterprises of mechanic engineering production with high added value.

Assembling production of automobiles and assemblies with localization level up to 30 % will be organized in **transport mechanic engineering to 2014**. Production of road-building technics will be developed in volume of 200 units per year. Production of locomotives, freight cars will be increased in railroad mechanic engineering. Production of specialized storage depot platform will be developed with capacity of 1200 units per year, of railroad bogies – up to 5000 units per year, of hopper cars – up to 400 units per year. Production of large-dimensioned cast will be organized for needs of railroad mechanic engineering with annual output volume of 30 thousand tons.

In **agricultural mechanic engineering**: production will be increased in 2 times to 2014, including increase of combines production up to 800 units per year, assembling production of tractors and attached equipment will be organized in volume of 1 thousand units per year. The net of nine trade-service centers of realization and servicing of agricultural engineering will be created in big oblasts of the country.

In **oil and gas mechanic engineering**: production will be increased in 2,5 times to 2014 with increase of the share of national products up to 22 %. Production of pipe fittings, fluid pumps and mobile train rigs will be developed as well as production of gas compressors (8 units per year) and gas turbine plants (6 units per year). Plant for repair and service maintenance of gas turbine plants and equipment will be put into operation.

In **mining mechanic engineering**: production will be increased in 2,7 times to 2014 with development of production of rolling mills, mill tables, hydraulic props, hydraulic and pneumatic perforators, selfpropelled drilling and loading-transport equipment.

In **electrotechnical mechanic engineering**: production will be increased in 1,7 times to 2014. Production of accumulators, transformers and insulated cables will be increased, production of transformers with pressure of 220 kV and more will be developed.

#### **The following investment projects will be implemented:**

Locomotive- assembling plant, Astana - 100 locomotives per year and production of details and assemblies on the FEZ territory of Astana.

Assembling production of automobiles, East-Kazakhstan oblast - 120 000 automobiles per year and technopark for manufacture of details and assemblies.

Assembling production of combines - 800 units per year, road-building technics - 200 units per year and buses - 300 units per year in Kostanay oblast, production of details and assemblies.

Assembling production of mainline electric locomotives, Akmolinsk oblast - 50 electric locomotives per year and development of enterprises of small and medium-sized businesses for manufacture of details and assemblies.

In **defense industry**: program measures aimed at current problems solution and creation of real potential for significant increase of the share of Kazakhstan content will be implemented to 2014 in government defense order of the Republic.



Main areas of development of defense-industrial complex enterprises of Kazakhstan will be determined by the most perspective needs in goods of military character for military organization of the State.

Governmental bodies and defense enterprises will take effective and agreed measures on increase of export of Kazakhstan products of military character.

Interaction of the Government and defense complex aimed at increase of number and quality of scientific-research works in the sphere of defense production will be activated.

#### **Sectoral and project measures of Governmental support**

##### **Transport infrastructure provision**

The issues of provision of construction of automobile plant on the left bank of Ust-Kamenogorsk city and technopark for manufacture of vehicle components with engineering services will be detailed.

##### **Qualified personnel resources provision**

Demand for personnel in 16 specialities of mechanic engineering will be met by means of their training in universities and 19 educational institutions of TaPE in Aktubinsk, Atyrau, East-Kazakhstan, Karaganda, Kostanay, Mangistau, Pavlodar oblasts.

Construction of Interregional center for training and additional training of personnel of mechanic engineering sphere for 700 students will be started in Ust-Kamenogorsk city in 2012.

System of 3 months manufacture internships with individual supervisors will be implemented in manufacturing enterprises.

There will be co-financing of the Program for advanced training of administrative personnel in progressive mechanical-engineering enterprises of developed countries.

For foreign engineering companies operating on the territory of the country (no less than 30 % of the number of personnel per year) there will be obligatory requirements for presence of educational center in the companies for training and advanced training of Kazakhstan personnel.

##### **Technical regulations implementation**

14 technical regulations of safety requirements will be developed and implemented for: vehicles; fire equipment for site protection; ventilation systems, low voltage equipment; agricultural and timber cutting tractors, trailers and cars, oil and gas field; drilling, geological survey and geophysical equipment; stationary compressor cooling installations; equipment for processing of agricultural raw materials and products of plant breeding; equipment for processing of agricultural raw materials and products of animal breeding; water-heating and steam boilers; for mine winding plants, hoisting and transport facilities; equipment under the pressure; elevators and 169 state standards (including for testing methods - 98, for products - 80 and for management systems - 7).

National standard of geometric variables and physico-chemical measurements for metrological assurance of production and mechanic engineering products safety and quality monitoring will be modernized.

##### **Development of innovations and assistance to technologic modernization**

Creation of 5 construction departments for servicing enterprises by segments - agricultural, electrotechnical, mining, transport and oil and gas machinery.

Equipment leasing at reduced rates will be organized for renewal of the main funds and technological rearmament of mechanic engineering enterprises.

Stimulation of SREDW development by means of reduction of tax base on corporate income tax for 150 % of expenses for implementation of SREDW results.

##### **Creation of attractive terms for direct investments**

Enabling of leasing companies to purchase agricultural machinery selling by national manufacturers for further transmission to leasing without requests from agricultural goods manufacturers for the moment of production financing.

Support of the field development will be provided by means of priority purchase of goods, works and services by the field enterprises, mineral developers, national companies and governmental bodies.

Domestic demand for agricultural equipment will be met by means of purchase of leasing equipment of national production at reduced rates on the basis of JSC "KazAgroFinance".

Domestic demand for national mechanical-engineering products will be met by development of mechanism of compensation of the part of reward on credits for purchase of national mechanical-engineering products.

The issues of purchase of automotive equipment for governmental bodies of the executive branch, their territorial bodies and institutions within their jurisdiction will be detailed.

##### **Trade policy**

Promotion of Kazakhstan mechanic engineering products on the markets of Uzbekistan, Kyrgyzstan, Tadjikistan, Turkmenistan, Afghanistan.

Granting of financial stimulations for improvement of export of Kazakhstan mechanic engineering products.

#### **Pharmaceutical industry**

#### **Brief analysis of the current situation**

At the present time the share of national production in total volume of pharmaceutical market in Kazakhstan does not exceed 30 % in natural terms and 10 % in monetary terms.

For the last decade Kazakhstan market volume of pharmaceutical products significantly increased, growing annually for 10 % starting in 1999. According to the results of 2009 production of pharmaceutical goods in the Republic of Kazakhstan was 84,7 million USD. This is 0,13 % of the volume of manufacturing industry and 0,4 % of the volume of processing industry.

During 2009 import volume of medicaments in Kazakhstan was about 816,9 million USD, export of products - 17,8 million USD.

The problems of the field development are: deficit of qualified personnel trained in accordance with GMP standards; limited investments in the sector; lack of guaranteed sales markets; lack of productive capacity in accordance with GMP standards, lack of production of national essences.

Production of medicaments can be divided into three groups: original (patented) medicaments, generics, production of essences.

At the present time generics market is the main part of medicaments market in Kazakhstan - about 85 %, market of original medicaments – no more than 15 %. The most perspective area of pharmaceutical industry development in the country for 2010 - 2014 will be organization of generics production and also modernization of current and implementing capacities in accordance with the requirements of international GMP standards.

#### **Main task**

Nation's health support and the country's medicinal safety support by means of increase of production of national high quality medicaments.

#### **Target codes**

Increase of the share of national medicaments on internal market from 30 % to 50 % in natural terms to the end of 2014.

#### **Primary areas of the branch development**

There will be modernization of operating manufactures and construction of new pharmaceutical enterprises within the framework of the field development.

New manufactures of solid dosage forms (tablets, gelcaps, pills) with capacity of more than 18 billion units/year, infusion solutions - 16 million units/year; ampuls - 285 million units/year, soft dosage forms - 30 tons/year; one-use medical linen - 4,9 million/year, essences and chemical raw materials - 60 tons/year, medical syringes - 408 million units/year, containers for secure utilization - 698 thousand units/year; new X-ray equipment - 350 units/year will be created.

The issues of creation of national synthetical essences manufactures will be detailed.

It is planned to implement the following investment projects:

Construction of pharmaceutical factory of solid dosage forms manufacture (tablets, gelcaps, pills) and antibiotics apportion in Astana city;

Widening and modernization of operating manufactures of ampul-infusion solutions in accordance with the GMP standards in Shymkent city;

Development of manufacturing base of the Plant of healthcare products (Pavlodar city) in accordance with the GMP standards and also start of new lines of manufacture of ampuls, bioproducts, vaccines, serosities and antibiotics.

Introduction of the GMP standards, start of new production of creams and active ingredients in Pavlodar oblast;

Increase of medical syringes output, development of production of infusion systems and containers for medical wastes in the Plant of healthcare products.

Increase of antibiotics production in the form of tablets on the operating manufacture in accordance with the standards.

Construction of a new plant of injections, tablets, gelcaps, "soft" dosage forms and surups meeting the GMP requirements in Almaty oblast.

Construction of a new plant of tablets, gelcaps and flacons meeting the GMP requirements in Almaty oblast.

Modernization and widening of current manufacturing base in accordance with required standards, personnel training for the work with equipment of GE healthcare production and provision of necessary infrastructure.

Construction of the plant of one-use infusion solutions injection systems.

The mentioned list of projects is not final. An additional portfolio of projects will be formed on the next stage in accordance with priorities of the field development.

Realization of the projects mentioned above will allow widening of national production up to 600 items (of 1200) and provision of 50 % of medicine assortment in natural terms.

## **Sectoral and project measures of Governmental support**

### **Governmental purchases of medicine**

Long-term Government purchase of medicaments selling by national manufacturers of pharmaceutical products will be organized with only one distributor - "CC pharmacy "Samruk-Kazyna" LLP, that will partially settle the issues of sale in the present field. Share of government purchases in the structure of internal market of pharmaceutical products will increase up to 45-50 %.

Long-term contracts on Government purchases will be offered to enterprises with obligatory condition of investments in production modernization and productivity improvement.

### **Qualified personnel resources provision**

In 2011 - 2014 no less than 400 specialists will be trained for the work in the enterprises of pharmaceutical industry in accordance with the GMP standards;

In 2011 about 80 specialists will be trained for the work in the enterprises of medical industry in accordance with European standards and the quality standard ISO 13485.

It is planned to improve qualification of personnel supervising pharmaceutical and medical industry of the Republic of Kazakhstan.

### **Administrative barriers removal**

Priorities of medicinal forms for guaranteed volume of free medical aid within medical organizations shall be revised: instead of expensive treatment of small groups of patients there shall be common and rational provision of medicines decreasing purchases of medicaments with lack of evidentiary medicine data, implementation of analogue preparation substitution systems and transition to national generics.

### **Technical regulations implementation**

International GMP standards "Appropriate manufacturing practice" and European medical standards on production and operation of medical equipment in accordance with quality standard ISO 13485 will be implemented in big and middle-sized enterprises of pharmaceutical and medical industry of the Republic to the end of 2014.

### **Creation of attractive terms for direct investments**

The tax laws will be changed relating to increase of withholding coefficient of corporate income tax for 150 % for expenditure of the enterprise for implementation of international standards (GMP) and European medical standards according to the Directive 93/42/EEC.

The Government purchase of medicaments, medical equipment and medical items of national manufacturers will be made by conclusion of long-term contracts with only one distributor determined by the Government of the Republic of Kazakhstan.

### **Trade policy**

Within the framework of the Customs Union the following activities are planned:

harmonization of the law base for medicaments, medical equipment and medical items manufactured in the Republic of Kazakhstan, import of assemblies for production of medical equipment, essences and other additives for production of medicaments on the analogy with the European Union;

mutual recognition of registration certificates of medicaments, medical equipment, medical items of national manufacturers corresponded to the standards of appropriate manufacturing practice (GMP) and European medical standards of 93/42/EEC.

## **Construction engineering and constructional materials production**

### **Brief analysis of the current situation**

Kazakhstan construction volume rapidly grew since the beginning of the XXI century and achieved the level of 60 % in 2005 and 2006. Influence of the world financial crisis led to retardation of construction growth rates.

Rapid growth of constructional materials prices since the beginning of the XXI century was due to increasing deficit of constructional materials, which led to the import growth. In 2008 the import ratio on the constructional materials market was 46,7 %.

Constructional materials production growth in Kazakhstan was refrained due to number of problems: production of mainly low processing products; many types of products are not produced; wearing process of the main means of production; low labour productiveness; constructional materials production is concentrated in Almaty, Karaganda and East-Kazakhstan oblasts, Astana and Almaty cities (with more than 60 % of production volume).

In spite of sufficient raw-materials base for the field development, only production of cement and bricks was mainly developed in Kazakhstan. In 2006-2007 the cement import was up to 30 % of the cement used, but national factories capacities growth will allow complete refusing from the cement import.

At the present time there is no plate glass production in Kazakhstan. Most of the end glass products are imported. In spite of good raw-materials base (29 aqua-gel occurrences available for use), ceramic production started its development just recently. Most of the products are imported from Turkey, China and Italy.

Import products prevail on the Kazakhstan finishing material market:

in recent years imported linoleum completely dominated on the market (more than 99 %);  
limitedness of forest resources and lack of modern manufactures resulted in dominating of import on the market of laminboard and beaver board products;  
on the wallpaper market import products are 73 %, still wallpaper production actively develops in the country. Share of national manufacturers market directly depends on customs duties of wallpaper import.  
The main problems of Kazakhstan constructional materials development are:  
non-conformity of technical regulation systems and standardization with international standards and outdated principles of price formation;  
low technologic level of production and low labour productiveness level.

#### **Main task**

Satisfaction of internal market demand by increase of production of national constructional materials, items and constructions and manufacture of products with high added value.

#### **Target codes**

Increase of gross value added in building industry for no less than 76 % and satisfaction of internal market demand for constructional materials for more than 80 %.

#### **Primary areas of the branch development**

Governmental policy on development of building industry will be directed on development of production of competitive, energysaving constructional materials, articles and constructions with high added value on innovative basis, improvement of the Government regulation by architectural, town-building and building activity, increase of quality and safety of building products.

Within the framework of the branch development modernization of operating and construction of new manufactures will be implemented that directed on domestic demand and widening of export opportunities:

By 2014 the output of cement in the cement production will be brought to 13.5 millions tons/year on 5 operating enterprises and 4 new enterprises (in Akmola oblast, Zhambyl oblast, East-Kazakhstan oblast and Mangistau oblast), 5 clinker-cement terminals will be build in Mangistau, Aktubinsk, West-Kazakhstan, Pavlodar oblasts and in Almaty city with total capacity 2.1 millions tons/year, technical retooling of operating cement factories will carried out and the degree of depreciation of basic investments will be decreased to 30 %.

By 2014 the output of ceramic tiles in the ceramics manufacture will be brought up to 13 million m<sup>2</sup>/year, the production of sanitary-engineering ceramics up to 1 million items/year will be provided in Aktobe, Almaty and South Kazakhstan oblasts, the processing combine for processing clay with capacity of 200 thousand tons/year will be built.

In glassmaking the construction of plant on output of plate glass with the capacity up to 140 thousand tons/year will be started.

By 2014 in the prefabricated construction 13 combines of the prefabricated construction with a total capacity of 3 million m<sup>2</sup> of housing per year will be built in the cities of Aktobe, Almaty, Astana and Shymkent. Combine of prefabricated construction supplies services for the production of articles and constructions from which the construction of passive houses will be organized.

Around the combines of prefabricated contractions there will be created the conditions for the development of at least 130 small and medium-sized enterprises producing construction materials (windows and doors, laminate flooring, linoleum, etc.) and services (planning and surveying, design, finishing services, etc.).

It is panned to implement the following key projects and the formation around them a network of suppliers:

Zhambyl oblast - construction of a cement plant - 1100 thousands tons/year.

Akmolinsk oblast - construction of a cement plant - 552 thousands tons/year.

East-Kazakhstan oblast - construction of a cement plant by "dry method" - 1000 thousand tons/year.

Mangistau oblast - construction of a cement plant by "dry method" - 2000 thousand tons/year.

#### **Sectoral and project measures of Governmental support**

##### **Qualified personnel resources provision**

System of 3 months manufacture internships of secondary and higher educational institutions' alumnus with individual supervisors will be implemented in manufacturing enterprises.

Demand for personnel in 10 specialties will be met by means of their training in universities and 139 educational institutions of TPE.

New specialties will be opened for the construction industry in education establishments of Zhambyl, East Kazakhstan, Karaganda oblasts.

##### **Improvement of technical regulation**

There will be changes in the sphere of technical regulation in part of:

elaboration and implementation of 405 state standards in areas of: constructional materials - 242; concrete construction, reinaccelerated-concrete construction, wooden construction- 51; construction equipment - 19; electrical supply and electrical installations - 48, road building - 8; system of management - 6, the design of buildings and facilities - 31;

modernization of national standards on the thermal conductivity and temperature values according to the technical regulations and also harmonization of up to 80% standards and standard specifications within the framework of the Customs Union.

Reformation of the system of construction industry technical regulation of the Republic of Kazakhstan will be carried out.

A new budget-normative base will be developed.

The State Town Planning Cadastre will be established at the republican level.

For the purposes of scientific ensuring of technical regulation system reformation of construction industry there will be identified and strengthened the scientific structures which will be under jurisdiction of the Agency of the Republic of Kazakhstan for Construction and Municipal Housing Economy.

The legislative acts on strengthening of responsibility and standards compliance and technical regulations in the field of construction (including industrial, road building and construction of other infrastructure) will be changed and amended in order to increase security and duration of their use, reduce the amount of necessary repair operations.

For this purposes the system of the state architecture-building inspection will be strengthened.

#### **Development of innovations and assistance to technologic modernization**

To increase the innovative activity of the business there will be:

allocated funds for the development institutions to provide financial leasing at preferential terms for the modernization of fixed assets;

annual grants for innovations introduction in priority areas (energy-saving materials, exploring possibility of the use of related industries waste in the production of building materials, technology transfer of pre-fabricated, “green” and “passive” houses).

In view of scientific and technological development of the industry the development of scientific research will be ensured that aimed at developing new technologies in housing construction.

#### **Creation of attractive terms for direct investments**

For manufacturers of resource-saving and energy-saving building materials and constructions, as well as for the development of small and medium-sized businesses created around the combines of the prefabricated construction, they will be provided with loans at preferential terms.

In order to maintain demand for domestic construction materials and housing construction development will be provided the following:

government support for housing construction, government funding of engineering-communicative infrastructure will be continued in the areas of housing construction, as well as credit and public rental housing;

development of series of typical projects for high-rise and low-rise housing contraction using energy-saving materials and technologies;

elaboration of a system of lending secured against the certified building materials in order to develop the individual housing construction.

In order to develop local content the activities will be implemented to prevent unreasonable (price, quality) use of imported building materials, components and structures and compliance with technical regulations by including representatives of professional construction public organizations (self-regulatory organizations) in the state acceptance committee.

There will be changes in the licensing system in the field of architecture, urban planning and construction, taking into account international experience. There will be reduced and optimized licensed types of activities; the independent audit will be entered into a licensing system, which will reduce the interference of state bodies in the activities of entities of the construction market. Issued licenses will be divided into categories according to the technical complexity of the construction project, work experience and availability of licensee’s owned capital.

#### **Resources provision**

Mineral resources base of the construction industry will be expanded due to prospecting and exploration for mineral deposits used to produce building materials.

### **1.3 Support to the branches with export potential**

#### **Agro-industrial complex**

##### **Brief analysis of the current situation**

At the present stage due to measures taken by the State the agricultural sector of the economy develops steadily.

Growth of output of products of agriculture in 2009 compared to 2008 amounted to 13,8%. Growth was achieved virtually in all varieties of agricultural crops. The record grain harvest was obtained in the amount of 20.8 million tons after processing.

Main indicators of cattle-breeding development in the country gives evidence of stabilization of branch, annual increase of livestock number and poultry production and overall production of animal products. In recent years the annual number of livestock and poultry increased on the average by 3.8%, overall production of animal products - by 3.5%.

Country's capacity allows ensuring in full the stability of domestic food market, its guaranteed saturation with basic articles of food and access to foreign markets with ecologically clean products.

In general, in the country the stable base was created to provide the population with agriculture goods and to achieve of country's food security.

### **Main task**

Provision of competitive production of agricultural goods in extent sufficient to meet the needs of the domestic market and to form the export resources for the purpose of taking leading positions in foreign markets.

Development of water sector of the economy and hydro-economic policy.

### **Target codes**

1. Provision of food independence of the internal market.
2. The increase in gross value added of agriculture at least by 16%.
3. Improving labour productivity in the agro-industrial sector from 3,000 U.S. dollars per a person employed in agriculture not less than 2 times.
4. Building-up of export potential of the branch in total volume of country's export up to 8%.

### **Primary areas of branch development**

Development of the agricultural sector will be directed at increase of production volume of agricultural goods which has market outlets by diversification of the branch, improvement of farming standards, introduction into manufacture of contemporary moisture-and-recourses-saving technologies, extensive chemicalization, involvement in the turnover of new and currently unused irrigated lands.

In the livestock the main emphasis is assumed to be done to increase the volume of production in the agricultural units through transfer of the branch on an industrial basis, the development of the brood base, improvement of the genetic potential of livestock and it will be accompanied by a large-scale breeding on a scientific basis.

In the sphere of reprocessing of agricultural products, technical and technological re-equipment of production and the transition to international quality standards and on this basis further increase of the competitiveness of the output products remain urgent.

The work will be activated on forming a single grain export policy, saturation of market with food products of domestic production, establishment of facilities for semi-fabrication, processing and storage through cooperation of agricultural commodity producers.

Industrial and innovative development of agricultural complex will be achieved through the implementation of high-tech investment projects, as well as by implementing the principles of integrated management of water resources.

Implementation of at least 20 major projects in the agricultural complex is envisaged, including the construction of 8 animal production units, 2 poultry plants, 3 hothouses, 3 commercial dairy farms, 1 meat-packing plant, per one plant for the production of bakery products, sorted seed material of cotton.

It is envisaged the creation of conditions for attracting large-scale investments in the agricultural sector and continued interaction between the state and financial institutions.

Clear guideline for entrepreneurs, financial institutions, government bodies and socio-entrepreneurial corporations in implementation of investment projects will be the master plans on priority areas of agriculture, including in the sphere of development of production and export of grain and products of its advanced processing, meat and meat products, oilseeds, fruits and vegetable production, milk and dairy products, wool and products of its advanced processing, development of poultry farming, production of white sugar from sugar beets.

Along with this, it is necessary to develop related branches of economy, including production of mineral fertilizers, chemicals for plant protection, veterinary preparations, diagnosticums, and agricultural machinery.

The mechanism of state support for domestic enterprises-producers of agricultural machinery and equipment will be implemented by subsidizing the fee rate on leasing of agricultural machinery and equipment.

#### **Sectoral and project measures of the state**

##### **Promotion of investments**

For economical stimulation of the branch development and enhancement of its investment attractiveness the subsidization of agro-industrial complex will be continued in the following areas:

cheapening of percentage rates when lending of agriculture complexes entities and providing agricultural machinery and equipment;

seed farming development;

improvement of productivity and product quality of livestock;

improvement of productivity and quality of plant breeding production, reduction of the cost of oil and lubricants, and other inventory items required for the spring field operations and harvest works by subsidizing the production of priority croppers;

cheapening for the domestic agricultural producers of the cost of fertilizers (except organic ones);

cheapening for agricultural producers of the cost of processing expenses for treatment of agricultural crops with herbicides made (formulated) by domestic producers;

development of management systems for production and market of agricultural products;

development of brood livestock.

Support for agricultural goods producers will also be implemented through preferential lending and micro-lending, development of leasing of agricultural machinery, special machinery and processing equipment, development of insurance systems in agriculture complex, information and marketing support, increase of the share of local content in government procurements.

##### **Technological modernization, development of innovations and agrarian science**

increase in productivity and quality of plant production by stimulating the production of priority agricultural crops using advanced technologies;

encouraging the production of vegetables under coverage;

stimulation of creation of medium and large-trade livestock;

development of fish rearing for sale;

stimulation of output of products of Cervus elaphus breeding and bee-keeping in order to strengthen the nation's health;

technical-technological modernization of agricultural units and enterprises for processing of agricultural products and the transition to modern quality management system through the use of government support measures;

concentration of researches on priority areas of agriculture development, as well as implementation of international researches and innovation projects;

introduction of modern methods and acceleration of research processes through development of infrastructure of agricultural science and ensure transfer of foreign agricultural technologies, as well as the development of implementation system into the production of scientific developments and stimulation of the activities of research workers and attraction of young specialists in agricultural science.

##### **Training of competitive professional personnel**

It is assumed the introduction of mandatory working off of the agricultural specialists who obtained education under the state order on quotas for citizens from the countryside, in agriculture organizations of at least 3 years after graduation from educational establishment;

consideration of issue on introduction of changes and amendments to some legislative acts on measures of social support of agricultural experts who came to work and live in rural areas;

consideration of issue on increase of the state education order for the training of doctors PhD, Masters and Bachelors in accordance with the needs of agricultural branch, as well as specialists with technical and professional education on agricultural and veterinary specialties.

##### **Infrastructural and resource's provision**

provision of phytosanitary and veterinary welfare of the country;

development of infrastructure for slaughter of livestock, pre-fabrication, storage, transportation and sale of agricultural products;

use of water resources in accordance with the principles of integrated water resources management;

improving economic conditions and creation of incentives for growth in commercial products due to enlargement of agricultural production, creation and expansion of network of prefabrication-sale structures;

conservation and improvement of ameliorative condition of lands through the introduction of advanced irrigation methods.

Light industry includes textiles, garment, knitting, leather and fur and footwear industries.

Currently, in light industry more than 80% of companies represented by small and medium-sized businesses.

Perspectives of technological development of the branch are connected with the presence of natural raw materials, productive capacities and human resources.

The successful development of light industry in Kazakhstan there are favorable factors and conditions - in the South Kazakhstan region annually 400 - 450 thousand tons of raw cotton are collected, production in the country of natural raw materials - cotton fibers (130-170 thousand tons/year), wool (15-20 thousand tons/year) and more than 7.5 million pieces of rawhide, the ability to export textiles and yarns, clothing in world commodity markets where there is demand for specified products from natural raw materials.

In addition, about 80% of industry enterprises are equipped with outdated equipment, load is 30 - 40%.

The general trend of industry development is characterized by a decline in its share of the republic industry volume which is associated with job cuts.

Products of industry have a low competitiveness on price because of the presence of large number of goods produced in China including counterfeit ones.

### **Main task**

Meeting the needs of the domestic market in light industry products due to reprocessing of raw materials, output of products with high added value and with the prospect of its access to foreign markets.

### **Target codes**

1. The increase in gross value added of industry by 2014 by 50% compared with 2008.
2. Meeting the needs of the domestic market in light industry products by 2014 up to the level of 30%.
3. Increase of labour productivity in one time and half up to 4.9 million tenge/person (33 thousand USD).

### **Primary areas of branch development**

In the forthcoming period, major industry development trends related to the creation of incentives for modernization and diversification of productions on processing of local raw materials (cotton, wool, leather) in the textile, garment, leather and footwear industry.

In order to create products with high value-added measures of support will be provided:

sub-branches for the production of woolen goods, for the modernization of the primary processing of wool in Aktobe, Zhambyl, Almaty and East Kazakhstan oblasts, and Almaty oblast – foundation of a woolen cluster for organization of the full technological cycle of wool processing;

the manufacture of cotton articles in the territory of FEZ “Ontustyk” (SKO) fro organization of full technological cycle of production of carded and combed cotton yarn, fabrics and finished textile products, dyeing and finishing of yarns and fabrics, as well as finished garments, including by expanding the activities of the FEZ “Ontustyk” (production of silk fabrics, production of non-woven textiles, carpets and Gobelin tapestries, cotton cellulose and its derivatives, high-quality paper from raw cotton and leather goods);

leather and footwear sub-branches for organization of advanced processing of skin of farm animals and release of competitive commodity skin, furs and footwear based on the leather-fur industries in the cities of Taraz and Semey;

garment sub-branches to implement the modernization of enterprises for contract manufacturing on the example of brand products output (products for cycling).

Provision is made for implementation of the following investment projects:

East-Kazakhstan oblast – “Reconstruction and modernization of leather industry”;

South-Kazakhstan oblast – “Organization of the modern textile industry in the FEZ “Ontustyk”;

South-Kazakhstan oblast – “Output of hygroscopic cotton wool and cellulose”;

South-Kazakhstan oblast – “Organization of the modern production on output of combed and carded cotton yarn”.

### **Sectoral and project measures of the state support**

#### **Qualified staff resources provision**

The need for personnel in 20 specialties of the light industry will be covered by their training in universities and 89 educational establishments TPE in Almaty, Zhambyl, East Kazakhstan and South Kazakhstan oblasts.

In 2011 in Shymkent the construction of the Interregional Center will be started on training and retraining of personnel for the manufacturing sector for 700 educational places.

#### **Removal of administrative barriers**

Consideration of issue on exclusion from licensable types of activities of the primary processing of raw cotton into cotton fiber and the lifting of the ban for cotton processing organizations to carry out business activities not related to primary processing of raw cotton by amending the Law of the Republic of Kazakhstan “On the development of the cotton industry”.



### **Implementation of technical regulations**

To ensure proper quality level, 2 technical regulations and 50 national standards on production of light industry products will be developed and implemented for security agencies and national companies.

### **Development of innovations and science and promotion of modernization**

Under the Almaty technological university the issue of foundation of engineering center for research works and laboratory for evaluation of product quality will be considered.

## **Tourist industry Brief analysis of the current situation**

In recent years, generally there can be observed the positive dynamics of development of tourist industry of the country: following the results of 2008 the total number of visitors compared to 2007 increased by 3.1%, the volume of domestic tourism grew by 8.2%, outbound tourism grew by 15.3%.

The volume of investments in the development of tourist facilities has increased from 47 billion tenge in 2005 up to 97 billion tenge in 2007, and in 2008 this figure rose to 129.3 billion tenge.

Moreover, the global economic and financial crisis has adversely affected the inbound tourism the volume of which decreased by 11% and amounted to only 4.7 million tourists, compared with 5.3 million in 2007.

One of the components of reduction of the amount of tourists entering the Republic of Kazakhstan was a minor attraction of tourist industry facilities because of their moral deterioration and lack of infrastructure.

A small number of placements corresponding to international standards lead to underutilization of capacity of provision of a full range of services to entering tourists, and as a consequence it leads to low economic returns.

The measures have been taken to form a tourist image of Kazakhstan and to promote the national tourist product in world markets. For this purposes, Kazakhstan's participation is ensured at the largest international tourism exhibitions in Madrid, Berlin, Beijing, Seoul, Tokyo and London, video ads are placed on leading television channels around the world such as CNN, BBC, Euronews and Discovery. Along with this, the Kazakhstan International Tourism Fair - KITF in Almaty – is held.

### **Main task**

Improvement of competitiveness of the tourism industry and the attractiveness of Kazakhstan as a tourist destination

### **Target codes**

The increase of aggregate income of organizations rendering services in the field of tourism activity by 2015 no less than by 12% of the level of 2008.

### **Primary areas of branch development**

Development of the branch will be focused on the creation of competitive infrastructure of the tourism industry, forming of national tourism products, and their promotion in international and domestic markets.

Provision is made for implementation of the following investment projects:

Integrated development of the Shymbulak ski resort in Almaty city to receive up to 2000 people a day.

There will be the construction of tourist-entertainment complex in the FEZ "Burabay" Akmola oblast for reception of up to 220,000 tourists a year, where the conditions will be created for development of small and medium-sized businesses in the following areas:

rendering of services in the field of health promotion, entertainment, catering, provision of hotel, sightseeing, information and transport services, in addition with the provision of transport services the ecologically clean transport will be used, including small aircraft;

rendering of services in the field of cultural-educational, ecological, business, sport and other types of tourism; organization of production in manufacturing and output of various souvenir products.

### **Sectoral and project measures of state support**

#### **Infrastructural and resource provision**

Within the framework of creation of the competitive infrastructure of tourism industry the following issues will be worked out:

allocation of plots of land by the local executive bodies for the construction of roadside infrastructure objects along the transport corridor;

creation of engineering-communicative infrastructure to the newly created objects of the tourism industry;

development of typical project of road infrastructure objects construction;

subsidizing of fee rates on lending of investment projects of national tourism cluster along the transport corridor "Western Europe - Western China".

### **Qualified staff resources provision**

Staffing needs for the tourism industry in 14 specialties will be met due to their training in universities and 77 educational establishments TPE;

additional need for personnel (staff for entertainment, shopping and commercial personnel) for the tourist-entertainment complex in the FEZ “Burabay” in Akmola oblast and for tourism base of the ski resort “Shymbulak” in Almaty oblast will be replenished due to training in educational institutions TPE and training centers for short training;

conditions will be created to improve the quality of tourism education by conducting an audit of one state institution of higher education on certification of quality of tourism education “UNWTO-TedQual” and the development of professional standards in the field of the tourism industry.

### **Development of competition**

In order to promote competition in the services provision market for tourists the following will be made:

ensuring of establishment of the legislative conditions for the consolidation of tourist operators;

consideration will be made for possibility to create a bureau of tour guides and tourist information centers in regions with tourism potential.

### **Creation of attractive conditions for investments**

The issue will be elaborated on transfer of lands of specially protected natural sites into reserve lands within the boundaries of FEZ “Burabay”, in order to attract investors, as well as providing subsidies of fee rates on lending of construction of tourist objects of tourist cluster along the transport corridor “Western Europe - Western China”.

## **1.4 Development of branches the “economy of the future”**

### **Informational and communication technologies**

#### **Brief analysis of the current situation of the branch**

Large-scale introduction of information and communication technologies (hereinafter - ICT) is indispensable condition for increasing of labour productivity and creation of conditions for the integration of domestic enterprises in the global economy.

The growing demand of business and population for telecommunication services has led to a significant increase in revenues of telecommunication operators. According to preliminary results of 2009, revenues from communication services provision amounted to 430 billion tenge which is greater by 7.5% compared with 2008. The most dynamical development is observed in provision of services on Internet access (increase by 22% compared with 2008), local telephone services (by 19%) and the mobile communication segment (by 9%). The greatest growth which occurs due to the development of backbone networks of fiber-optic communication of Kazakhstan operators and the unique geographic location of the country is observed in a segment of data transmission services and it equals to 37%.

In 2009, operators of postal and courier services rendered services for the overall amount of 12.3 billion tenge, which is greater by 100 million tenge compared with 2008. The most dynamical development is observed in courier services which are provided by more than 40 companies, including domestic small and medium businesses.

In the field of information technology following the results of 2009, the gross income of enterprises according to estimations will decrease by 7% compared with 2008 and reach about 90 billion tenge, which is caused by a general downturn in economic activity in the country and a one-time devaluation of national currency held in early 2009. In the ICT costs the expenditures of procurement of computer and network equipment are predominant; they constitute more than 75% of all expenditures on information technologies which reflects the ongoing computerization of the Kazakh society. Domestic companies are well represented in the sectors of the assembly of computer hardware, system integration and software development by the order.

To maintain fast paces and accelerated development of the ICT sector in the Republic of Kazakhstan it is necessary to solve a range of existing problems:

administrative barriers for companies operating in the field of information technology (imperfection of customs clearance procedures and registration of information products);

low share of percentage of “local content” in the procurement by the government agencies and companies with participation of the state services related to information technology;

problem of staff provision of companies operating in the ICT sector;

low investment activity in attracting venture capital to finance innovation developments.

### **Main task**

Formation of the competitive export-oriented national sectors of info-communication technologies.

### **Target codes**

The share of the ICT sector including the info-communication infrastructure in GDP in 2014 – is 3.8%.

## **Primary areas of the branch development**

In the ICT sector in the Republic of Kazakhstan the following directions are planned to develop.

Within the framework of development of electronic services and “electronic government” in order to ensure the needs of business and population, simplification and optimization of the work of the state bodies the following will be implemented:

- establishment of target architecture of “electronic government”;
- creation of info-communications infrastructure for information exchange within the Customs Union;
- elaboration of new electronic services including services in the sectors of social protection, health, transport and communications and agriculture;

- introduction of information systems of electronic licensing, electronic notariat and electronic procurement.

As part of development of the Kazakhstan segment of Internet network in order to ensure the population's demand for Kazakhstan's content the following will be implemented:

- creation of electronic commercial platform for business;
- creation of national Internet-resources, including news, multimedia, social networks.

Within the framework of development of domestic production of high-tech equipment and microelectronics in order to meet domestic demand and the phased access to foreign markets it is planned to:

- establishment of enterprises for assembly and maintenance of equipment of international companies that are major suppliers of public sector, based on the FEZ “Information Technology Park “Alatau” in Almaty city.

Within the framework of progressing of the sector of software and services development to meet the needs of business and government with phased access to the foreign markets the following will be implemented:

- establishment of the companies developing and operating innovative information systems and products based on the FEZ “Information Technology Park “Alatau” in Almaty city.

Within the framework of development of education in the sphere of info-communication in order to ensure the needs of the industry in the qualified specialists of technical and professional level the following will be implemented:

- provision of development of the International University of Information Technology;
- establishment of three professional-technical educational institutions in info-communication specialties.

### **Sectoral and project measures of state support**

#### **Meet the demands for qualified staff resources**

Twofold increase of the number of state grants for info-communication specialties to study in universities of Kazakhstan, compared with 2009;

- change in training programs for IT specialists at the level of higher and professional-technical education according to accepted international standards.

#### **Implementation of technical regulations**

Development of base of standards in the sphere of info-communications up to the international level.

#### **Development of innovations and promotion to technological modernization**

- issue of grants for implementation of the projects on development of Kazakhstani segment of Internet network within the venture financing of the projects in the field of info-communications through the “NIF” JSC, “Science Fund” JSC;

- release of radio-frequency spectrum within 450 MHz band for the development of telecommunications networks using the technology CDMA;

- redistribution of at least 50% of radio frequencies from 3 kHz to 400 GHz from the category of “joint use” in the category of “civilian use”.

#### **Creation of attractive conditions for direct investments**

- Development of infrastructure FEZ ITP “Alatau”;

- allocation of land grants for projects to build data centers, implemented under the Program;

- establishment of a system of state support of development of Kazakhstani segment of Internet network;

- increase in the number of services rendered by the state through a web-portal of “e-government”;

- government financing of social projects in Kazakhstan's segment of the Internet network including children's social network;

- Organization of intellectual part of FEZ ITP “Alatau” in Almaty for the optimal use of research and technological potential of leading Kazakh universities.

## **Biotechnologies**

### **Brief analysis of the current situation**

In Kazakhstan in the framework of implementation of the research programs on biotechnology there was developed the manufacturing technology of recombinant vaccine against swine influenza A/H1N1 and H5N1 vaccine against avian influenza for health care. Preclinical studies are completed and clinical trials of vaccines data are started.

At present the own production of medical drugs in the Republic of Kazakhstan is 11% (including vaccines – 1.1%), veterinary drugs 78% (mainly the manufacture of drugs from imported substances), while other drugs are being imported into the country.

The main problem is the lack of original domestic biotechnological drugs in the presence of perspective experimental developments. To date, virtually the production of genetically engineered drugs is not adjusted, while there are original domestic or joint developments that passed or passing phase of preclinical and clinical studies.

For further development of the crop sector it is necessary to create and introduce into operation the high-quality competitive varieties of agricultural plants, in connection with which it is required the transition of the selection on the level of quality.

Conservation and breeding of highly productive breeds of animals is a key issue in improving profitability and efficiency of livestock, so there is the need to use genetic engineering to create new types and breeds of animals.

In the world annually about 50 million tons of oil is emitted in the environment. The most perspective methods of purification of water and soil from a wide range of pollutants, including petroleum hydrocarbons, are bioremediation techniques based on the use of biochemical potential of biological objects, primarily microorganisms and plants.

One of the priority areas of biotechnology is the development of starter cultures, enzymes, dietary supplements and probiotics for the needs of food and processing industry.

#### **Main task**

Creation and implementation of high technology and competitive biotechnological products for health protection and agriculture, environmental protection, food and processing industries.

#### **Target codes**

1. Increase of share of industry in total volume of export up to 1% by 2015.

#### **Primary areas of the branch development**

For the purposes of effective and qualitative development of biotechnology the following measures will be implemented:

creation of new domestic test systems based on the use of genomic technologies for the diagnostics of socially significant diseases;

development of technology and pilot production of original medicinal drugs based on genetically engineered recombinant substances;

creation of a center for developments in the field of transplantation of organs, stem cells, medicine of longevity and elaboration of a methodological basis for their use in regenerative medicine and cell therapy;

creation of production on output of diagnosticums and vaccines that meet international standards of good manufacturing practice (GMP);

creation of collection of microorganisms and biotechnological productions on output of starter cultures, food protein, amino acids, enzymes and bio-conserving agents;

nurture of highly productive, competitive varieties of plants for agricultural purposes;

development of ecologically clean biological methods of protecting plants from pests and diseases;

creation of consortiums of microbial strain to use for the purpose of bioremediation of oil-contaminated soil and water ecosystems;

development of methods for phyto-remediation of soils contaminated with heavy metals and pesticides through the use of plants-hyper-accumulators;

nurture of highly productive breeds of animals.

#### **Sectoral and project measures of the state support Qualified staff resources provision**

Retraining and advanced training of scientific personnel and technical personnel for the sphere of biotechnology.

#### **Infrastructure and resource provision**

Working out of issues of necessity to build a technological building and creation of infrastructure for small-scale production of biotechnological medical and diagnostic products, inactivated and live vaccines, as well as the purchase of equipment for use in regenerative medicine and cell therapy.

### **Space activities Brief analysis of the current situation**

Objective prerequisites for the formation of the space industry in our country are the presence of a unique competitive advantage - the world's largest space airfield "Baikonur" with functioning space missile weapon system (SMWS) "Proton", "Soyuz", "Zenit", "Dnepr" and being at the stage of construction SMWS "Baiterek"; ground control of space communications, the basic elements of the National Space Monitoring System (NSMS) including three Reception centers of space data from the satellites ERS; the main elements of scientific and technological infrastructure which includes cosmic-ray station, science laboratories and astronomical observatory.

Within the framework of the first space program for 2005-2007 there have been implemented the projects of creation of broadcasting and communication satellite "KazSat-1", organization of special design-technology office of space-system engineering (SKTB KT), subsystems of NSMS have been developed. Project materials were developed for creation of space missile weapon system (SMWS) "Baiterek", communication and broadcasting satellite "KazSat-2", the space Earth remote system (ERS), the Assembly, Integration and Testing Complex of spacecraft (AITC S), the space-based system of scientific purpose, the system of high-precision satellite navigation.

In Kazakhstan today a significant need has been formed for the various space services, in particular the need in the services of space communication systems, space systems ERS and the system of high-precision satellite navigation (HPSN).

To meet these needs it is necessary to solve a range of problems on creating a full-fledged space industry:  
insufficient development of domestic market of space services (communications, ERS, navigation, production of space technology, launch services);

lack of regulatory, legislative and technical framework for the development of space activities;

lack of system of provision of space activities with staff.

To solve these problems it is necessary to implement the following tasks:

creation and development of target space systems and the objects of ground space infrastructure;

development of scientific and technological base of space activities;

training and advanced training of professional personnel;

establishment of contractual and regulatory framework of space industry

### **Main task**

Implementation of the first phase of creation of the full-fledged space industry as a science-intensive and high-tech sector of the economy assisting to acceleration of industrial-innovative development of the republic, strengthening of national security and defense, development of science and high technology.

### **Target codes**

1. Gross value added growth shall be not less than 85.0 bln tenge by 2015.
2. Growth in exports shall be not less than 15.0 bln tenge by 2015.
3. The degree of satisfaction of needs of the country in the channels of fixed satellite communications shall be 80%, the needs in services of highly-precise satellite navigation (% of coverage of the territory of Kazakhstan) shall be 30%.
4. The share of data from Kazakh spacecraft ERS in the total amount of space data provided to consumers shall be 50%.

### **Brief analysis of the current situation**

Creation and development of target space systems and their use involve:

systems of the satellite communication and broadcasting "KazSat" for provision of services of space communication systems in the domestic market with a phased exit to foreign markets;

the space system ERS for delivery of services for data reporting ERS in domestic and foreign markets;

space system with scientific purpose for solution of tasks of development of the space science and technology, research of earthquake precursors.

Provision is made for the development of the National Space Monitoring System (NSMS) to meet demand in the domestic and foreign markets in the ERS data with a high level of processing and value added.

Creation and development of ground space infrastructure provide:

Environmental safety of the SMWS “Baiterek” at the “Baikonur” to provide launch services in the domestic and foreign markets;

AITC spacecraft to provide services of designing, manufacturing, assembly and testing of spacecraft under government orders and foreign orders;

ground infrastructure of the system of high-precision satellite navigation (HPSN) to provide services of satellite navigation and on certification of navigational equipment in the domestic market;

production of consumer navigation equipment for domestic and export markets.

For the purpose of progressive transfer of the space airfield “Baikonur” to Kazakhstan provision is made for the participation in the projects of commercial use of the SMWS “Zenit” and “Dnepr” existing at the space airfield “Baikonur” to provide launch services in the domestic and foreign markets.

It is planned to implement the following investment projects:

establishing the system of system of satellite communication and broadcasting “KazSat” (“KazSat - 2, 3”, reserve ground control);

creation of an environmentally safe SMWS “Baiterek” at the space airfield “Baikonur”;

creation of assembly, integration and testing complex for spacecrafts;

creation of space system of Earth remote sensing system;

establishment of ground infrastructure of system of high-precision satellite navigation of the Republic of Kazakhstan;

participation in projects of commercial use of the space missile weapon systems “Zenit” and “Dnepr” existing at the space airfield “Baikonur”.

The suppliers of works and services on the project of the SMWS “Baiterek” are the Russian companies, the suppliers on projects of creation space system ERS and AITC are the French companies.

#### **Sectoral and project measures of the state support**

##### **Qualified staff resources provision**

Implementation of the program of training, retraining and advanced training will be continued for the space sector.

Training of specialists will be held at the branch “Voshod” at the Moscow Aviation Institute (Baikonur city), as well as at universities in Kazakhstan on the program “Bolashak” in the countries near and far abroad.

Retraining and advanced training will be organized with the assistance of foreign experts. The development of advanced space technologies is provided in the contract with a strategic partner on creation of the space systems ERS and AITC.

Provision is made for preparation and retraining of specialists of space profile up to 700 persons.

##### **Removal of administrative barriers**

The law on space activities will be developed for the implementation of state regulation of relations in the area of establishment, operation and commercial exploitation of space systems.

##### **Implementation of technical regulations**

Regulations will be developed in the field of technical regulation of the industry development: concerning the security requirements of missile and space systems, concerning the security requirements of automatic spacecrafts, security requirements of conveying equipment for items of space-rocket technology and components of rocket-engine propellant.

##### **Development of innovations and promotion of technological modernization**

The development of scientific and technological base of space activities involves the development of scientific and technological support for the creation of space equipment and technologies, development of scientific and experimental base of astrophysical and space research, the study of optical and electrodynamic processes in the atmosphere - the Earth’s ionosphere, creation of a system of space-ground geodynamic and geophysical monitoring the Earth’s crust.

## **Alternative energetics**

### **Brief analysis of the current situation**

One of the priority direction of development of the electric power industry and solving of environmental problems of Kazakhstan is the use of renewable energy resources. The potential of renewable energy resources (hydropower, wind and solar energy) in Kazakhstan is very significant.

Currently, hydropower resources of Kazakhstan are usually characterized by the following values:

Total (theoretical) potential	170x10 <sup>9</sup> kWh/year;
Technical (possible for use)	62x10 <sup>9</sup> kWh/year;

use) potential

Economic potential

27-30x10<sup>9</sup> kWh/year

Throughout the territory of Kazakhstan the hydropower resources are distributed unevenly, most of them are concentrated in three regions of Kazakhstan:

In South-East zone in the basin of the Ili River, fed by rivers flowing down from the mountains of Zailiyskiy Alatau, in the basin of eastern Balkhash and the group of Alakol lakes fed by rivers flowing down from Zhetysuskiy Alatau.

In the Eastern zone in the basin of the Irtysh River with major tributaries.

In the South zone in the basins of rivers Syrdarya, Talas and Chu.

One of the most perspectives types of renewable energy resources is wind energetics. a wind The wind atlas of Kazakhstan has been developed.

At present there were studied 10 sites for the construction of wind power stations (hereinafter - WPS) in Kazakhstan. All of these sites can be used for the construction of large WPS with total capacity of 1000 MW for the commercial production of electric energy in the amount of 2-3 billion kWh of electric energy.

Despite the northern latitude of the geographical location of Kazakhstan, the solar energy resources in the country are stable and acceptable due to favorable climatic conditions. As a result of research the potential of solar energy in the south regions of the country reaches 2500 - 3000 hours of sunshine a year.

### **Main task**

Increase of share of renewable energy sources (small hydroelectric stations, solar installations) in the country's balance of energy.

### **Target codes**

1. Achievement of the volume of generated electric power in 2014 by renewable energy sources has to be 1 billion kWh per a year.

2. The share of renewable energy sources in total volume of electricity consumption has to be more than 1% by 2015.

### **Primary areas of the branch development**

It is planned to implement the project on building of the first wind power plants. The assumed location regions are Astana, Akmola, Dzhungarian Gates and Shelek corridor - in the Almaty oblast. The estimated power of generated electric power at the first stage may amount to 50-100 MW.

By 2015 it is planned the construction of wind turbines with installed capacity of 125 MW with generation of electric power 400 million kWh.

Till 2015 in the Republic it is planned the commissioning of new small hydropower stations with total installed capacity of over 100 MW with planned production of electric energy - 300 million kWh.

Taking into account the produced electric energy from facilities for use of renewable energy sources at the present time, generation of electric energy in 2014 by renewable energy sources is expected to reach 1 billion kWh per a year.

Also in the current year it is expected to continue the work on development and implementation of projects of construction of small hydropower stations in Almaty and South Kazakhstan oblasts with total capacity – 8.4 MW.

Provision is made for development of plan for placing of facilities for use of renewable energy sources.

Work will be continued to improve and expand the first wind atlas of Kazakhstan.

Provision is made for development and adoption of subordinate acts in order to implement the Law of the Republic of Kazakhstan "On supporting the use of renewable energy sources".

#### **Sectoral and project measures of the state support**

Provision is made for working out of issues on support of renewable energy sources including: redundancy and priority in the allocation of land plot for construction of facilities of renewable energy sources; obligations of energy transmitting organizations on purchase of electric energy produced with use of renewable energy sources; exemption of renewable energy sources from fee for the transportation of electric energy through the networks; support in connecting the facilities for use of renewable energy sources to the networks of the power transmission organization.

### **Atomic energetics**

#### **Brief analysis of the current situation**

At the present time, Kazakhstan has all the objective preconditions for the development of atomic energetics. They include:

- presence of a large number of the explored reserves of uranium and developed uranium-mining and uranium-processing industry;
- presence of the fuel manufacturing enterprises and constructional materials for nuclear power reactors;
- presence in the country of highly qualified specialists with experience in operating of nuclear reactors;
- availability of scientific enterprises equipped with research reactors and unique electro-physical installations and stands that carry out researches in nuclear physics, physics and engineering of nuclear reactors, safety of nuclear electric power installations.

### **Main tasks**

The development of nuclear energetics infrastructure.

Development and implementation of new high-tech projects for the atomic industry.

### **Primary areas of development**

In order to develop nuclear energetics and to create conditions for accelerated industrial development of the country it is assumed to carry out the following activities:

- justification of the layout chart and identification of parameters of the atomic power units;
- organization of development and design of the atomic power plants and other nuclear facilities in the Republic of Kazakhstan;
- provision of nuclear, radiological and industrial safety, physical protection and safety of strategic facilities of the atomic branch;
- monitoring of nuclear tests;
- development of international cooperation in the sphere of peaceful uses of atomic energy.

#### **Sectoral and project measures of the state support**

Development of technical regulations and regulatory legal acts for implementation of the unified state policy in the atomic branch.

Qualified professional staff provision.

#### **2. Key measures to support the development of priority sectors**

The state support of industrialization will be carried out through the implementation of systematic measures of economic policy at the macro- and sectoral levels, as well as selective support measures for specific sectors of the economy and projects that will be implemented on the basis of a combined package of measures of financial and non-financial support, through the formation of favorable macroeconomic environment; expansion of financial instruments to support the Program; infrastructural, resource and staffing provision, improvement of business environment; technological modernization, development of innovations and science; creation of favorable conditions for attracting foreign direct investments; effective trade and tariff policies.

System measures of macroeconomic policies will include a balanced and agreed use of instruments of monetary, fiscal and structural policies that will be implemented in accordance with the objectives of industrialization.

Consistency of monetary and fiscal policies will be provided through annual adoption of the Joint statements of the Government, the National Bank and the Agency of the Republic of Kazakhstan for Regulation and Supervision of Financial Market and Financial Institutions on the main directions of economic policy.

In the framework of monetary policy the measures will be taken to ensure the stable functioning of the domestic financial system, as well as a stable exchange rate of tenge and stability of the country's balance of payments through:

- exchange rate policy aimed at ensuring a balance between internal and external competitiveness of Kazakhstan's economy and not allowing for revaluation of exchange rate of the national currency. Exchange rate policy will adequately respond to changes in world prices, terms of trade, thus creating the foundations for the development of domestic economy;

- low rate of inflation maintained together with measures of anti-inflationary policy of the Government (the annual inflation rate in 2010-2014 within the limits of 5.0-8.0% (December to December of previous year);

- regulation of short-term liquidity of the banks in order to maintain it at adequate level with use depending on the situation in the money market and inflation rate of instruments of adjustment of rates the National Bank transactions, including the official refinancing rate.

Fiscal policy will be aimed at creation of conditions for the modernization and diversification of the economy through fiscal stimulation of industrialization processes, financing for development of industrial infrastructure, science and innovations, human capital.

An optimal model will be formed for attraction and allocation of capital to the economy through public institutions channels in the coherence with the parameters of the state budget.



Policy of formation and use of assets of the National Fund will be focused on augmenting of savings in the National Fund which will ensure macroeconomic stability and create necessary conditions for raising the sovereign rating of the country and reduction of the cost of external borrowing of public and corporate sectors.

## **2.1 Ensuring energetic infrastructure Brief analysis of the current situation**

Production of electrical energy is carried out by 59 electric power stations of national importance, industrial and regional purpose of different pattern of ownership, the total installed capacity is 18, 992.7 MW, available capacity – 14, 558.0 MW, 80% of the power plants run on coal.

Following the results of 2009 the generation of electrical energy at power stations of the country amounted to 78.4 billion kWh; consumption amounted to 77.9 billion kWh.

Assets of the electric power industry have a high level of depreciation including:

generating equipment - 70%;

electrical networks - 65%.

In connection with the growth of depreciation of power generating equipment of the power stations and lack of investments since May 2009 a new tariff-making mechanism was introduced for electric energy which provides introduction of limited, calculated and individual electricity tariffs for the energy-producing organizations and accordingly the implementation by the energy-producing organizations of investment obligations on reconstruction, modernization, extension and new construction of power generating facilities.

Electric energy limited tariffs were approved on 13 groups of the energy producing organizations for the period from 2009 to 2015 with division by each year, which may be adjusted annually taking into account the need for provision of investment attractiveness of the industry.

Between the Ministry of Industry and New Technologies and the energy producing organizations there are 36 agreements on the implementation of investment commitments in the framework of limited tariffs for 2010 amounting to more than 84.2 billion tenge.

In cases of large-scale investments as the construction of new power stations the investors can operate on calculated tariffs or individual tariffs.

Introduction of new tariff-making mechanism will allow raising investment attractiveness of the industry, to create conditions for attracting investments into the sector and to calculate possibilities of the energy-producing organizations to ensure the repayment of investments.

### **Main task**

#### **Meeting of electric power demands of the economy and achievement of energy independence of the country**

#### **Target codes**

1. Bringing the electricity generation in 2014 to 97.9 billion kWh in the forecast consumption of 96.8 billion kWh.
2. Providing the volume of coal production in 2014 up to 123 million tons.

### **Strategy of actions**

Reliable electricity supply of the economy and population of Kazakhstan will be connected with the construction of new electric power facilities, expansion and renovation of existing ones, upgrading the national electrical network, the effective use of available energy resources on the basis of development of forecast balances.

On the basis of the forecast balances of primary resources taking into account business needs provision will be made for the coordination of long-term plans for development of industries and integrated development of infrastructural and resource potential of the country.

In the planning period due to commissioning of new facilities and modernization of existing ones, the total amount of electric energy produced in the country will exceed the foreseeable levels of consumption.

Excess volume of electric power production in the North energy band due to modernization of the Ekibastuz and Aksu GRES (State District Power Stations) will be redistributed to the South and West energy bands experiencing shortage of electricity through inter-regional power transmission lines North Kazakhstan - Aktobe oblast and the North - South.

In order to eliminate the problem of energy shortage in West Kazakhstan, it is expected the commissioning of the Uralsk Gas Turbine Power Plant and expansion of the Atyrau Heat Electric Generation Plant in the southern regions of the country - construction by 2012 of the Moinak Hydroelectric Station, the Akshabulak Gas Turbine Power Plant, by 2015 two energy units of the Balkhash Thermal Power Station, the construction of a number of power supply network

facilities including substations “Alma” and power transmission lines on delivery of power of Moinak Hydroelectric Station, the reconstruction of existing electric networks and the step-down substations will be carried out.

Provision is made for the following projects:

1. Atyrau Heat Electric Generation Plant. The cost of the project implementation is 16.4 billion tenge. Power is 75 MW. Implementation period is 2006-2010.
  2. Uralsk Gas Turbine Power Plant. The cost of the project implementation is 9.8 billion tenge. Power is 54 MW. Implementation period is 2010-2012.
  3. Balkhash Thermal Power Station. The cost of the project implementation is 360.7 billion tenge. Power of the I-module is 1320 MW. Period of implementation is 2010-2015.
  4. Moinak Hydroelectric Station. The cost of the project implementation is 54.1 billion tenge. Power is 300 MW. Implementation period is 2006-2012.
  5. Gas Turbine Power Plant at the Akshabulak field. The cost of the project implementation is 17.7 billion tenge. Power is 87 MW. Implementation period is 2010-2012.
  6. Ekibastuz GRES-2 (building of unit # 3). The cost of the project implementation is 118.3 billion tenge. Power is 525 MW. Implementation period is 2010-2014.
  7. Ekibastuz GRES-1 (rebuilding of unit # 8). The cost of the project implementation is 23.4 billion tenge. Power is 500 MW. Implementation period is 2010-2012.
  8. Rebuilding of energy unit # 2 of the Aksu GRES. The cost of the project implementation is 12.9 billion tenge. Power is 325 MW. Implementation period is 2009-2011.
  9. Modernization of the Shardarinskaya Hydroelectric Station. The cost of the project implementation is 13.6 billion tenge. Implementation period is 2010-2015.
  10. Delivery of power of the Moinak Hydroelectric Station. The cost of the project implementation is 10.3 billion tenge. Period of implementation is 2010-2012.
  11. Construction of substation “Alma” 500 kV with connection to the National electric networks of Kazakhstan by the lines of 500 and 220 kW. The cost of the project implementation is 30 billion tenge. Project implementation period is 2010-2014.
  12. Modernization the National electric networks of Kazakhstan, II stage. The cost of the project implementation is 52 billion tenge. Period of implementation is 2010-2016.
  13. Construction of transforming substations in the city of Almaty and in Almaty oblast for Asiada-2011. The cost of the project implementation: 19.9 billion tenge. Project implementation period: 2009 - 2011 years.
- Provision of growth in coal production volumes will be achieved due the following projects:
- the open pit coal mines of Ekibastuz coal basin:
- the reconstruction project of the transport scheme of the open pit mine “Bogatyr”, the transition to the new automobile-conveyor technology with which the production at the open pit mine will be up to 48 million tons of coal a year;
- completion of the construction project of the cyclic-and-continuous overburden complex (CCOC) on the open pit mine “Vostochniy”. Productivity of the CCOC will amount of 10 million cubic meters overburdens per a year - in the mines of the Karaganda coal basin through the introduction of highly productive mining equipment and technologies providing the average daily load on the breakage face at the level of 3000 -:- 5000 tons;
- construction and commissioning of a carboniferous deposit “Zhalyn” in the Karaganda oblast with design capacity of 500 thousand tons of coal per year.

#### **Qualified personnel resources provision**

The need for specialists in 17 specialties will be covered within the framework of their training in universities and 80 educational establishments TPE.

Contraction of the Interregional Center will be completed for training and retraining of personnel for the fuel-energy industry for 700 educational places in Ekibastuz city.

## **2.2 Provision of transport infrastructure**

### **Brief analysis of the current situation**

Currently, in the sphere of transport the implementation of infrastructure projects is carried out: the modernization of the railways is carried out, construction of railway lines is began - Uzen-state border with Turkmenistan and Zhetygen-Korgas; the program for modernization and development of ground infrastructure facilities is implemented, reconstruction of the 5 key airports (Astana, Almaty, Aktobe, Atyrau, Aktau) has been completed; a new air terminal at the airport in Aktau was commissioned; the further work on improvement of technical condition of roads was began, express freeway “Astana-Schuchinsk” with a 6-band pass was opened, annually the work on maintenance of navigable

waterways is carried out, implementation of the project on reconstruction of Ust-Kamenogorsk and Bukhtarminsky locks is started.

At the same time, significant part of the motor transport infrastructure is operated beyond the normative period, the other part approaches this period, in connection with which the situation of transport operation security is significantly worsen. The high depreciation of the existing road and operational equipment can be noted.

In the railway industry the railways network is not sufficiently developed, depreciation of fixed assets in the rail industry is growing, as well as the lack of passenger rolling stock; the low level of service and lack of competition; lack of funding of renewal and development of rail transport; the existing principles of tariff-making and mechanisms of regulation exclude the client-orientedness of the carrier. It is necessary to implement most effectively the country's transit potential and to attract new (private) entities in the development of railway lines which in its turn will allow creating the competitive environment in the transport and communication complex and increasing the fleet of vehicles.

In the field of civil aviation the main problem is the park of outdated regional aircrafts not meeting the standards of the International Civil Aviation Organization (ICAO), the shortage of aviation personnel, especially aircraft personnel.

In the field of water transport there is insufficient capacity of the port infrastructure, poor service infrastructure development, lack of qualified local professionals, the necessity for reconstruction of shipping locks.

### **Main task**

Development of transport and communication complex capable to fully meet the needs of the economy and population in transport services.

### **Target codes**

1. Increase of main indicators of transport and communication complex to achieve growth of gross value added for transport by 63% by 2015.

2. Reconstruction of about 7 thousand km and repair of 10 thousand km of roads of national importance and 12 thousand km of local importance.

3. Good and satisfactory condition of 85% republican and 70% local highway network.

4. The introduction of fee-paying system in some parts of highways of national importance.

5. Construction of 453 km of railways.

6. Growth of volume of transit traffic throughout the territory of the Republic of Kazakhstan by rail transport by 25%.

7. Increase by 2015 of the rate of freight traffic by 15-20%, and on major international transport corridors - by 20-30%.

8. Carrying out in 2014 of reconstruction (construction) of airstrips, passenger and cargo terminals in 14 airports in the Republic.

9. Increase of number of international aircraft traffics in twofold compared to 2010 and the  $\text{ITEKIII} \text{B} \text{C} \text{E} \text{M} \text{III} \text{T}$  of European aviation standards.

10. Bringing by 2015 the of trade fleet number to 11 units including 9 tankers and two dry cargo vessels.

11. Upgrading and modernization of the state technical river fleet in the amount of 40 units by 2015.

12. Reconstruction and modernization of the Ust-Kamenogorsk, Bukhtarma and Shulbinskaya locks by 2014.

13. Creation by 2014 of management system of vessel traffic and rescue effort at sea.

### **Strategy of actions**

Development of the industry will be focused on provision of needs of the economy in transport services and the country's integration into international transport networks.

To accomplish the assigned tasks the measures will be taken on:

bringing the existing railway network to world standards of safety and speed of movement along with optimization of the network through the construction of new sites;

reconstruction of the main international transit corridors, highways of international, republican and local significance;

the phased modernization of air navigational infrastructure and on completion of reconstruction of the airport network of the Republic, the acquisition of new modern aircrafts;

Further equipping of the marine trade fleet with modern vessels, development of port and service infrastructure, provision of security of navigation and modernization of shipping locks and river technical fleet.

In the road sector the following projects will be implemented:

reconstruction of sections of motor roads of the main transit corridors: "Western Europe - Western China", "Omsk-Pavlodar-Maikapshagai", "Astrakhan-Atyrau-Aktau-border of Turkmenistana", "Schuchinsk-Kokshetau-

Petropavlovsk”, “Russian Federation border Uralsk – Aktobe”, “Astana-Kostanay-Chelyabinsk”, “Aktobe-Atyrau”, “Astana-Yereimentau-Shiderty”, “Kurty-Burylbaytal”;

reconstruction of sections of motor roads of national importance “Almaty-Ust-Kamenogorsk”, “Usharal-Dostyk”, “Zhezkazgan-Petropavlovsk”, “Kyzyl-Orda-Pavlodar-Uspenka-border of the Russian Federation”, “Beineu-Akzhigit-border of Uzbekistan”, as well as implementation of measures for the reconstruction of the local highway network.

Construction issues will be worked out on a concession basis of sections of roads and implementation of ITS (intelligent transport system) on highway “Astana-Schuchinsk” followed by the introduction of fee.

In the railway industry the projects on construction of railway lines “Uzen - the state border with Turkmenistan”, “Zhetygen-Korgas”, “Yeralievo-Kuryk” will be implemented.

In the field of civil aviation it is planned to reconstruct the flight strips at 9 airports of the cities of Kyzylorda, Kokshetau, Semey, Kostanay, Uralsk, Taldykorgan, Petropavlovsk, Ust-Kamenogorsk and Aktau, reconstruction of passenger terminals in the cities of Kokshetau and Uralsk, also it is planned to build the second flight strip at the airport in Astana and new passenger terminal at the airport in Almaty, Shymkent and the new passenger and cargo terminal in the city of Atyrau.

Issues of building of a new international airport Kenderli on a concession basis will be worked out.

In the field of water transport the management system of vessel traffic in ports Kuryk, Atyrau, Aktau, the regional management system of rescue efforts in the Kazakh sector of the Caspian Sea will be created, as well as provision will be made for construction of the tanker and dry cargo fleet, continuation of work on the reconstruction and modernization of Ust-Kamenogorsk and Bukhtarma locks, construction of protective hydraulic structure of Shulbinsk lock, updating and modernization of the state technical river fleet, technical modernization of the infrastructure of the Aktau port.

#### **Development of innovations and assistance to technological modernization**

It is planned to conduct scientific applied researches in the highway industry in terms of forecasting of resource of reinaccelerated-concrete superstructures of high-way bridges; in the field of highway transport on the issues of dispatch control of passenger transportations in major cities; in the area of transit potential for study of the competitive environment in the transport services market within the framework of regional economic organizations.

#### **Stimulation of investments**

attraction on the Kazakhstan market of railway passenger transportation of strategic investors from the number of qualified international passenger operators subject to conditions of public-private partnership;

the liberalization of the railway industry market and the reform of state regulation in accordance with the target model of the railway industry;

taking of measures on subsidization of railway passenger transportations on socially important inter-oblast services and regular domestic and international air transportation.

#### **Technical regulation**

By 2015, in the sphere of civil aviation the European aviation requirements will be fully implemented, 12 airports will have the category of International Civil Aviation Organization (ICAO);

by 2012 in the highway transport the ecological standards Euro-3, as well as the automated system of weighing of vehicles in motion will be implemented, the digital tachographs in international transportations will be introduced;

introduction of systems of management and quality in accordance with international standards ISO 9001:2000, ISO 9001, ISO 14001 and OHSAS 18001 at the expense of enterprises’ funds.

#### **Qualified personnel resources provision**

Training of the specialists of the transport industry will be implemented in the educational establishments for technical, professional and higher education, the training centers of enterprises, at the expense of the state educational order, the grant and funds of enterprises. The need during 2010-2012 in the field of transport and communication complex is more than 70.000 qualified specialists;

the need for staff on 8 specialties of transport and communications will be provided due to their education in the higher education establishments and 109 educational establishments TPE;

professional education of the workers on 75 qualifications and professions related to the ensuring of safety of trains movements will be carried out by the branches of “NC “Kazakhstan Temir Zholy” JSC – the educational centers for railway workers in the cities of Aktobe, Karaganda, Pavlodar, Taraz.

### **Improvement of the legislation**

Introduction of changes to the Laws of the Republic of Kazakhstan:

1. On the merchant shipping in the part of reducing of licensing functions in order to stimulate private sector activity, prolongation of the right of the shipping companies to attract foreign citizens in the composition of ship crews;

2. On automobile transport in part to enable the introduction of digital tachographs in the country when implementing the international automobile transportation.

3. Adoption of the Law of the Republic of Kazakhstan “On the use of airspace of the Republic of Kazakhstan and of aviation activity”.

## **2.3 Info-communication provisioning**

### **Brief analysis of the current situation**

Provision of the population, business and government with info-communication services and technologies is one of the conditions for the country's transition to innovation economy and information society.

The penetration of info-communication technologies is characterized by the following indicators. Number of Internet users reached 5.1 million subscribers (32 per 100 persons). Indicator of computerization of society in 2009 reached 12.7 computers per 100 people (11.2 computers per 100 people in 2008). Number of fixed-line subscribers in 2009 was more than 3.7 million subscribers that are more than in 2008 by 100 thousand subscribers. The average telephone density reached 23.4 subscribers per 100 inhabitants (22.2 subscribers per 100 inhabitants in 2008). Number of mobile subscribers amounted to 14.9 million subscribers which corresponds to the density of mobile subscribers of 95.5 subscribers per 100 inhabitants.

The main problem of info-communications provisioning:  
infrastructure problems (lack of radio frequencies necessary for the implementation of telecommunication technologies of new generation; outdated material basis of the broadcasting system);  
barriers to competition development (loss of rural postal and local telephone communications; high wholesale rates of dominant operators for the secondary providers of Internet service).

### **Main task**

Development of info-communicational technologies for transition to an information society and innovation economy.

### **Target codes**

1. Increase of the level of digitalization of local telecommunications networks - 100%.
2. Subscriber density of broadband network of Internet - 22 per 100 persons.
3. The density of mobile communication users - 135 per 100 persons.
4. Increase of the level of computer competence of the population up to 40%.
5. Provision of transfer of at least 50% of socially important public services to electronic form.
6. Terrestrial digital telecasting coverage of the territory of Kazakhstan - 95%.
7. Construction and modernization of 560 rural departments of postal services.

### **Strategy of action**

Developed infrastructure of info-communications promotes the competitiveness of Kazakhstan's economy and plays an important role in the development of the corporate sector and solution of a number of other social problems:  
modernization and development of info-communication infrastructure in order to meet domestic demand for telecommunication services (digital television, broadband access to Internet) and postal services;  
development of computation centers in order to provide the demand for web-hosting services, primary and backup storage of data and with phased access to foreign markets.

Within the framework of the development of telecommunication infrastructure provision will be made for full coverage of households of the Republic of Kazakhstan with telephone service and broadband Internet access; the level of digitalization of local telephone communication will reach 100% by 2015.

Prior to 2015, there will be completed the transfer of the telecommunications to the technology of NGN with capacity of 1 million users, which will allow to transfer to provision of converged services which are user-oriented and are the next step on the way of development of modern telecommunications.

Modernization of the rural telecommunications network using CDMA technology will allow providing the rural users with data transmission services and Internet access at speeds up to 153.6 kbps. The total number of base stations in the telecommunications network of rural communication will reach 900 units by 2015.

Modernization of postal saving system will be implemented modernized in order to provide high quality postal and financial services in conditions of free competition, primarily in rural areas through the development and automation of rural departments of postal services.

#### **Key projects are:**

- introduction of digital broadcasting;
- providing regional coverage with an integrated transport environment of the state bodies of the Republic of Kazakhstan;
- creation of a server platform for providing hosting services for the state bodies;
- completion of technological equipment for the server center;

introduction of cellular transmission standards 3G and 4G;  
modernization of the radio spectrum monitoring system;  
creation of the reserve server-based center;  
creation of commercial data centers.

## **2.4 Development of mineral-resources complex**

### **Brief analysis of the current situation**

Mineral-resources complex of the republic is able to provide the priority sectors of the economy with necessary resource base, to serve as a “locomotive” to lead-out Kazakhstan on the rail track of sustainable development.

Kazakhstan has a strategic role on the world market of copper, uranium, titanium, ferroalloys and steel, is a monopolist on the Eurasian subcontinent for chromium, has a significant impact on the regional market for iron, manganese, coal and aluminum. With the resolution of transportation issues Kazakhstan will be able to dispose effectively with oil and take its rightful place in the world oil market.

The objective reality of the current state of mineral-resources complex are the conditions of reproduction of mineral raw materials reserves becoming more complicated with each passing year.

The development of a perspective resource base of the mineral resources complex of the country requires searching, prospecting and evaluation work in order to increase reserves.

### **Main task**

Provision of sustainable and integrated usage and reproduction of mineral resources for the active development of all branches of industry.

### **Target codes**

1. Percentage of replenishment of extracted stocks of basic types of minerals to repaid ones up to 50% by 2014.
2. Percentage of coverage of the territory of Kazakhstan available for regional geological surveys, from 78% in 2009 to 95% by 2014

### **The main directions of development**

The primary direction of strengthening of the mineral resources of the country is the introduction of new technologies for prospecting, recovery and holding in significant amounts of geophysical operations for solid mineral products and hydrocarbon material. To radically improve the entire process chain of exploration work there will be provided modern methodology of geological survey work, begun at a new level of research aimed at developing of modern methods of exploration, assessment of stocks that meet modern requirements and standards and on this basis – execution of regional, search, and prospect evaluation surveys will be provided in order to increase reserves

Kazakhstan's joining of the world market necessitates the synchronization of national and international standards in the field of subsoil use (in particular, classification and categorization of mineral resources, staging of exploration works, etc.).

In order to organize effective control over rational and complex utilization of subsurface resources there will be improved the mechanism of state examination of subsurface resources, and also there will be implemented a gradual transition to the new advanced technologies for expertise of stocks based on computer modeling of deposits occurrences of mineral products, automated systems for assessment and calculation of reserves.

On the group of priority sectors with a satisfactory state of raw materials bases(iron ore, coal, uranium and oil and gas) the main directions of development should be considered the following: replenishment of decreasing reserves, rational development of existing proven reserves, the timely transfer of pre-priced stocks in the industrial categories, their development and public support in promotion of products on the world market (uranium), increment of capacity of mining and processing complex (manganese), the creation of internal transport communications (oil and gas).

For the group of industries with less satisfactory condition of the mineral resource base (manganese, aluminum, iron ore and chromite base) the main directions of development are the following: exploration, development and promotion of resources to the foreign market, the replenishment and consolidation of raw materials bases by readily available, prolific and high-quality ores.

For industries with acute problems of raw materials (copper-ore, lead-zinc-ore, gold-ore and titanium) the most important direction of development should be the fundamental strengthening of raw material bases with new competitive objects by providing perspective areas of search and exploration of deposits.

To continue the effective development of mineral resources complex the following measures are envisaged:

suspension of further reduction in stocks of ferrous, nonferrous and precious metals, increase of exploration works volume;

provision of priority of increment of a wide range of mineral products in the traditional mining areas of the country in order to maintain the mineral resource base of existing enterprises;

gradual increase of volume of oil stocks growth with condensate and gas;

continuing of work on the geological and economic re-evaluation of mineral resources base taking into account the conditions of market economy and world business environment;

creation of conditions for improving the development system of ore deposits in order to reduce losses of mineral products in the ground and their dilution;

creation of economic conditions to improve the development system of oil and gas deposits taking into account the current level of scientific and technological progress to increase the percentage of the initial stocks of oil and gas (especially viscous oil), use of associated gas, hydrogen sulfide, condensate and heavy fractions, exception of practice of selective and accelerated working of large oil and gas deposits and deposits with high specific productivity index;

provision of wide introduction of geological-technical mapping of exploited ore deposits for the planning of current production and averaging of ore quality before concentrating in order to significantly improve the performance of the concentrating mills and reduce the loss of useful components;

acceleration of creation of highly efficient equipment and critically new technologies for concentration of mineral raw minerals, the transition to a deep concentration to improve the quality of the concentration quality, agglomerate, pellets (additional costs at this stage should be paid for in later stages of redistribution in the form of heat savings, coke, fluxes, improvement of metal quality etc.);

creation of necessary conditions for the integrated use of produced ore raw material in order to extract on a rational economic basis of passing valuable components: molybdenum, rhenium, osmium, scandium, indium, gallium, and others;

general conduction of audit testing of tailing dumps and mine dumps for the content in them of passing valuable components, their revaluation and in case of positive results execution of exploration activities with the development of feasibility studies (FS) of repeated concentration of accumulated tailings of concentration and stored massive materials;

ensuring of more complete use of occasionally extracted overburden in the economy of the country;

creation of economic conditions for the maximum use of secondary raw materials and energy material-saving technologies and alternative energy sources to ensure the rational use of mineral resources;

introduction of alterations in the legislation on provision of commitment of subsoil users to create a productions with high added value.

## **2.5 Provision with qualified human resources**

### **Brief analysis of the current situation**

Sustained economic growth and associated structural changes in the economy were accompanied by increase of capacity of the national labour market and changing of its structure. Increase of demand for labour resources to a certain extent was due not only to the expansion of production, but also it was connected with preserving at that the relatively low productivity growth and the use of cheap labour.

The country remains shadow employment in the field of construction, food production, transport, on street food and flea markets, on seasonal agricultural works. Within it a particular group of illegal migrant workers remains (10.5 thousand people - in 2000, 24.7 thousand people - in 2005, 54.0 thousand - in 2008, and 30.4 - in 2009) who cover the unsatisfied demand for labour despite the presence of unemployed people in the labour market in Kazakhstan.

In recent years the growth of occupational mobility of workers is traced, many of them receive the second or third professional education, as well as increase of number of workers with higher and secondary special education.

With that, the structure and forms of occupational training for citizens are inadequate to changes in labour demand in the professional section. There is an imbalance between occupational training and higher education.

The structure of higher and postgraduate education of the Republic of Kazakhstan meets the international standard classification of education UNESCO. There was introduced a three-level model of specialist training: Bachelor - Master - Ph.D.

Staff training on direction of the Program is carried out in 69 institutions of the republic with a total enrollment of 238.104 people on 199 programs of higher and postgraduate education.

Universities are working on the development of innovative educational infrastructure, also on creation of different profiles to promote innovative scientific centers, new technological parks which are interlinks between education, science and industry.

Training of qualified staff in technical, technological professions and occupations of agriculture is carried out in 543 educational institutions TPE (Technical and Professional Education) on 186 specialties, where 260.9 thousand people have been learning.

At the same time there is a range of problems that inhibit to ensure the needs to train professional personnel for industrial innovative development of the country:

- Forecasting of demand for staff for the long term is not implemented;
- inadequate legislative framework to attract employers to the staff training;
- outdated material and technical base of educational institutions TPE;
- unresolved question of the organisation of practical training and probation of students of educational institutions TPE at the enterprises;
- content of educational programs of higher and postgraduate education does not fully meet the requirements of employers expressing changes in the labour market;
- insufficient development of social partnership. There are no mechanisms to provide with databases of practical training, employment of graduates, and attraction of employers to the process of establishing professional standards.

### **Main task**

Provision of qualified staffing resources of needs of the priority sectors of the economy within the industrial and innovation development.

### **Target indicator**

1. Increase of percentage of schools with modern equipment up to 70%.
2. Increase of percentage of graduates participating in assessing of the level of professional training and assignment of qualifications up to 100%.
3. Increase of percentage of employed graduates of technical and vocational education studied on government orders up to 78%.
4. The development of 100 contemporary professional standards in the priority sectors of the economy.
5. Providing of advanced training and probation of 5000 teachers of special subjects and masters of industrial training.
6. Provision of teacher training and industrial masters training for educational institutions of technical and vocational education on account of the state educational order for staff training in higher educational institutions in the amount of 5000 persons.
8. Creation on the basis of 35 companies 35 bases of practical trainings.
9. The specific density of highly skilled labour force in the foreign labour force 55% - by 2014.

### **Strategy of actions**

To achieve the goals on provision with qualified staff of the economy needs and demand for labour in the labour market will be implemented through the actions on creation of a model of continuing education including the interconnected system of technical and vocational education, engineering and additional vocational training, the development of balanced, dynamic labour market, cooperation between the government and business to attract specialists to the priority sectors of the economy, as well as the use of internal and external migration.

Taking into account the shortage of skilled workers and specialists of mid-tier priority will be given to the TPE.

Development of technical and vocational education will be implemented in the following areas:

- 1) Development of infrastructure and strengthening material-technical base of educational institutions TPE:
  - updating of material-technical base of the existing educational institutions oriented to the needs of priority sectors of the economy;
  - construction of new schools TPE. The selection of projects to build schools TPE claimed by akimats will be done on a competitive basis, taking into account the summary of requirements for the projects included in the map of industrialization. Projects will be implemented under the co-financing from the republican and local budgets with the participation of large enterprises;
  - construction of inter-regional trade centers in the cities of Atyrau on oil and gas industry, in Ekibastuz on fuel and energy sector, the processing sector in Shymkent and in Ust-Kamenogorsk on the engineering industry;
  - creation of basic training centers at existing institutions TPE on projects of industrial and innovation development.
- 2) Updating of the structure and content of educational programs in line with demand in the labour market and international standards through the development of:
  - national qualification system with the involvement of association of employers and workers;



professional standards;  
integrated (modular) training programs for preparation of qualified professionals.

3) Improving the structure and management systems TPE:

ensuring of interaction of national, regional and industry development councils on development of TPE with the coordination councils at the national and regional levels for targeted training of staff of priority sectors of the economy and projects of Industrialization map;

involvement of employers and industry associations to staff training within the social partnership by signing the relevant agreements, establishing funds to support the TPE development, educational institutions and training centers in enterprises, providing jobs for manufacturing practices, probations, study grants.

4) Ensuring the quality of training of qualified personnel to solve the problems of industrialization:

implementation of sectorial system of certification of qualifications of specialists including international certification;

strengthening of human resource capacity of TPE organisation on the base of inter-regional centers for advanced training;

training of teachers and masters of industrial training for educational institutions TPE in higher educational institutions.

Improving of the system of higher education in order to ensure industrial-innovative development will be implemented in the following areas:

Conclusion of agreements on the formation of bases of production practices between universities, research institutes and industrial institutions forming the system;

implementation of joint educational projects of domestic and foreign universities involving funding of national and transnational companies;

many-sided cooperation of universities with leading domestic and foreign industrial companies and leading research institutes for advanced training, retraining, probation of teaching staff in high-tech enterprises, domestic and foreign universities.

In presenting the need in staff the industry-government agencies will form the state educational order for all professions and specialties necessary for implementation of projects (including single-piece, exclusive training).

#### **Retraining and advanced training of personnel**

Management staff training is crucial to ensure competitiveness in the global market both individual businesses and the economy of the country as a whole.

For this purpose there will be implemented cooperation with local and foreign partners in the field of further training of executives and managers in the field of economics with ordering them abroad for training on probation.

Organisation of forward-looking training of personnel is based on creating conditions for continuous updating of knowledge and skills throughout the whole life. For this purpose a three-level system of training and retraining of personnel in institutions of higher, secondary and primary education will be further developed and used; in the workplace (intracompany training); training and retraining of the target population by the authorized bodies of employment.

Within the limits of measures taken to retrain and advanced training of qualification of workers in priority order there will be covered the following categories of citizens: workers employed in part-time work or who are facing the threat of staff reduction and representatives of target populations.

For this purpose on the basis of public-private partnership measures will be taken for employment of persons who were retrained.

On the interaction of government and business to attract specialists to the priority sectors the following activities will be implemented:

development of a mechanism of partly paid practical training;

holding of career fairs;

organisation of social work places and youth practice;

forming and constant updating of the "Graduate" database.

#### **Usage of internal and external migration**

Along with usage of educational system opportunities to provide with skilled human resources the mechanisms of internal and external migration will be widely used by means of:

Searching of necessary staff (employees) in the regional labour markets including those who are unemployed;

involvement of labour resources from other regions of the country with excess of labour resources including rotating scheme of work;

attraction of foreign labour in accordance with the demand for specific projects through the rational allocation of quotas for foreign workers attraction.

Regulation of foreign labour migration will be focused on meeting the demand for highly skilled labour force, reducing of stress on the domestic labour market, promotion of inward investment.

Particular attention will be paid to curb of immigration flows and the transformation of the “brain drain” to the “enrichment of minds” in the form of invitations to highly qualified specialists (including from former countrymen) for work, lecturing, conducting of business on a temporary and/or permanent basis.

To develop a balanced and dynamic labour market the following activities will be implemented:

In 2010:

On the basis of Industrialization map there will be determined the need in staff for specific occupations for the coming period including the construction and operation phases;

There will be held a one-time statistical survey of supply and demand for labour for the long term;

Provision is made for establishment of system of continuous monitoring of current and future needs of the labour market for personnel of different qualifications including considering international trends of the global labour market.

By 2014 at the national level it will be necessary to create a common information database which includes attracting and using foreign labour, the need of employers for staff on professional and qualification content in region-wise.

Within the information database it will be necessary to create a qualitatively new system of informing the public about the state of supply and demand in the labour market and significantly expand the network of information and consulting services.

On the basis of a republican databank creation there also will be developed regional forecasts of demand and supply of labour power.

### **Legislative improvement**

Introduction of changes and amendments to laws and codes:

1. The Labour Code of the Republic of Kazakhstan in a part of creation of national qualification system and establishment of competence for the development of professional standards;
2. The Law of the Republic of Kazakhstan “On private entrepreneurship”, “On the state enterprise” in the part of providing of places for practical training in organisations and intracompany staff training (at the workplace), followed by assignment of qualification;
3. The Law of the Republic of Kazakhstan “On Employment”, in the part of assistance to employment of graduates.
4. Adoption of the Law of the Republic of Kazakhstan “On Migration” (new version) and “On introduction of changes and amendments to some legislative acts of the Republic of Kazakhstan on issues of population migration”.

## **2.6 Reducing of administrative barriers**

### **Brief analysis of the current situation**

As part of implementation of the Concept of improving the authorization system in the Republic of Kazakhstan for 2009-2011 there was prepared proposals for the abolition of 348 procedures from the identified 1004 types of authorization procedures that involve reducing licensing and permissible flow of documents for about 880.000 units per year compared with 2008 (it was issued nearly 29 million authorization documents).

In 2009 the Law of the Republic of Kazakhstan “On introduction of changes and amendments to some legislative acts of the Republic of Kazakhstan on issues of private enterprise” which made changes in the 72 legislative acts including 8 codes.

The law allowed optimizing and normalizing the inspections of business entity conducted by government bodies vested with control and supervisory functions. Optimization and normalization of inspections are achieved through the introduction of systems for risk assessment, approval of checklists forms and departmental statistical reporting.

### **Main task**

Reduction of administrative barriers that hinder the development of entrepreneurial activity.

### **Target codes**

1. The reduction by 2011 of running costs of business associated with registering and conduction of business, and by 2015 – by another 30%.
2. Improvement of Kazakhstan's indicator in the “Doing Business” rating of the World Bank by 6 positions.

3. Reduction by 30% compared with 2009 licensed types of activities and simplification of procedures for issuing licenses, authorizations, approvals and other permitting documents.

4. Reduction up to 30% of amount of planned inspections carried out by public authorities (excluding tax authorities) vested with supervisory oversight functions, the elimination of checks on grounds not relevant to legislation of the Republic of Kazakhstan

### **Strategy of actions**

Measures to reduce administrative barriers that hinder to business development will be focused on the following areas:

Improvement of licensing and permissible and registration systems:

1. "Compression" of authorization system:

reduction of the number of permit documents and procedures and approval of their exhaustive list at the legislative level;

narrowing of the scope of licensing, including exclusion from the list of licensed types and subtypes of activities unsecured with qualification requirements;

introduction of international experience in the sphere of licensing, including self-regulatory organisations except the financial sector.

2. Simplifying and improving the procedures of authorization:

dissemination of the principle of "one-stop shop" for all authorization documents and on all public bodies excluding the financial sector. All necessary agreements with public bodies within the framework of issuance of one authorization document will be exercised by the public body which issues this document;

reducing time costs and expenses in connection with obtaining authorization documents by means of: limit of time for consideration of documents to be complete up to 2 days; exception of mandatory notarization of documents, introduction of the principle "silence means consent", i.e. if the public agency does not issue a document on time or did not provide a reasoned refusal to issue, the document is considered as issued one and the procedure is considered as consistent one;

expanding of application scope of the notification and reduction of administrative procedure for admission to the implementation of entrepreneurial business;

introduction of standards and regulations for providing of public services on licensing procedures;

expansion of e-licensing, excluding the financial sector:

2010 - 2011 - Central government agencies - licensors including their territorial subdivisions;

2011 - 2012 - Local government agencies - licensors.

3. Facilitation of procedures for opening and closing of businesses.

4. Simplification of procedures for regulating foreign economic activity.

5. Improvement of the normative legal regulation of business activity:

introduction of regulatory impact analysis (hereinafter RIA) procedures of developed normative legal acts to the activities of each public body;

increase of representation of public associations of businessmen in the expert councils on issues of business development under government bodies;

revision on the principles of RIA the existing normal legal acts establishing mandatory requirements for the subjects of private enterprise, while increasing their level (more than 10 thousand) by January 1, 2011;

providing of universal free access to a database of normative legal acts of the Republic of Kazakhstan by 2011.

6. Optimization and ordering of inspections of business entities:

optimization, reduction and regulatory action of the inspections of business conducted by law enforcement agencies;

consideration of the possibility of reducing the grounds for withdrawal of original documents;

settlement of the pre-investigation checks of law enforcement bodies in order to avoid undue interference in business activities.

7. Strengthening of government guarantee of protection of the legitimate rights of private enterprise including through regulatory of procedure for unscheduled inspections of businesses.

8. Ensuring liberalization of government regulation of business activity by enhancing of implementation of the principles of technical regulation of business activity.

9. Improving the normative legal base in the field of development of Kazakhstan local content.

### **Improving of the legislation**

Introduction of changes and amendments to the laws of the Republic of Kazakhstan:

1. “ On Bankruptcy”.
2. “On Railway Transport”.

Development and adoption of the laws of the Republic of Kazakhstan:

3. “On introduction of changes and amendments to some legislative acts on issues of improving the authorization system.”
4. “On introduction of changes and amendments to some legislative acts of the Republic of Kazakhstan on issues of competence revision of the Government of the Republic of Kazakhstan and authorized state agencies to adopt normative legal acts that set requirements for the audited entities.”

## **2.7 Competition development**

### **Brief analysis of the current situation**

The significance of competition increases with solving the problems of overcoming the crisis and the preparation of future economic growth. The tendency of the global economic crisis has affected the development of competition in general.

The results of analysis conducted in 2009 indicate that the monopolized and highly-concentrated markets for a long time have been remaining the railway industry, fuel and energy sector and telecommunications sector. These industries, being economy-forming industries significantly affect the development of competition in related industries.

There is insufficient development of competition in the food market.

There is high percentage of state participation in the economy including increase of the number of enterprises with state participation which negatively affects the competitive environment, but quality of main services by provided the public enterprises remains very low.

### **Main tasks**

Creation of conditions for growth of economic activity of business through development of free competition and provision of equal access to the markets of goods and services.

### **Target codes**

1. Carrying-out of analysis of goods markets.

	Unit of measurement	2010	2011	2012	2013	2014
Carrying-out of analysis of goods markets	unit	20	20	20	20	20

2. Advocacy (propaganda) of fair competition

	Unit of measurement	2010	2011	2012	2013	2014
Development of information materials about advantages of fair competition and results of work on main activity (publication in mass media, public speaking through TV and radio)	Unit	120	144	145	149	150
Public functions for representatives of business and government bodies on restriction of monopolistic activity and non-admission of unfair competition (including conferences, round tables, seminars)	Unit	40	50	55	60	65

### **Strategy of actions**

In order to implement the objectives it will be necessary to reduce the share of government participation in the markets of the Republic, de-monopolization of industries, as well as improvement of the antimonopoly control tools:

- 1) ordering of activities of public enterprises, LLP and JSC with participation of government by increasing the antimonopoly control and transfer of non-core assets in the private sector;
- 2) inclusion of the objectives of competition and de-monopolization of industries and sectors, as well as specific measures for their implementation of the strategic plans of the government bodies;
- 3) on the market of transportation by the rail transport:
  - approval of the investment rate;
  - ensuring non-discriminatory access to the backbone network and other infrastructure;
  - increase of terms of eligibility for the route on socially important transportation of passengers by rail transport from 1 year to 3-5 years, with introduction of appropriate changes in the legislation;
  - elimination of cross-subsidization and ensuring a transparent policy of rates formation for the services of transportation of loads and passengers for equitable tariff formation.
- 4) on the market of air transportation and airport services:
  - separation of the airport and transport activities;
  - development of competition in the maintenance, baggage handling, load and mail, servicing on the platform, delivering of food stuff, , free trade, parking, etc.;
  - Development and implementation of the rules of non-discriminatory access of the airline companies to the services of airports and air navigation services;
  - creating of conditions for expansion of low-cost airline transportations, development of business and small aviation;
  - creation of equal competitive conditions for air carriers (including, by monitoring the provision of public assistance);
  - provision of opportunity for airlines and airports to conclude direct contracts with manufacturers of aviation fuels and lubrication materials, bypassing intermediary structures;
  - ensuring provision of airport services on aviation fuel storage by air carriers and the possibility of building alternative fueling facilities.
- 5) in the telecommunications market:
  - sale in the stock market of block of shares and partnership share “Kazakhtelecom” JSC in operators of fixed, mobile communication and Internet in order to reduce in the in the medium term the degree of economic concentration of the market for telecommunication services;
  - carrying out of group of actions for the conversion of radio frequencies in order to release them for the needs of line operators; ensuring of equal open access to telecommunication networks of general use, as well as transparent and non-discriminatory inter-operator connection.
- 6) in the market of oil products and coal:
  - Ensuring of equal access to services of the processors of oil to the services of the oil refineries;
  - In order to eliminate the shortage of petroleum products in the domestic market it is necessary to consider the issue on processing of Kazakh oil in the refineries of the Russian Federation and the PRC on the tolling scheme;
  - exception of unproductive intermediaries in markets for the sale of gasoline, diesel fuel, авиационного керосина kerosene natural and liquefied gas, coal.
- 7) in the food market:
  - to eliminate the facts of dictate from the side of retailers at the legislative level it is necessary to regulate mechanism of relations between retailers, suppliers of food products, ensuring non-discriminatory access of suppliers to large retail chains, while avoiding the imposition of various conditions.

### **Improvement of the legislation**

Introduction of changes and amendments to existing legislation and adoption of the following normative legal acts:

- 1) development and adoption of the Law of the Republic of Kazakhstan “On introduction of changes and amendments to some legislative acts on issues of public monopolies in order to bring a number of laws in conformity with Article 32 of the Law of the Republic of Kazakhstan “On competition”;
- 2) development and adoption of the Law of the Republic of Kazakhstan “On introduction of changes and amendments to some legislative acts of the Republic of Kazakhstan on issues of competition”;
- 3) introduction of changes in the Subsidy rules of the carrier losses related to the implementation of passenger traffic on socially important services, as approved by the Government of the Republic of Kazakhstan dated November 11, 2004 # 1188, in a part of improving the mechanism of subsidizing of socially important transportations of passengers by rail transport in a part of increasing the period of provision of routes from 1 year old to 3 years old;
- 4) revision and introduction of amendments to the regulatory documents governing the order of transportation of passengers, baggage, load and railway stations works in accordance with the appearance of the institute of private carriers;

5) the harmonization of legislation on air transportation in terms of bringing bilateral intergovernmental agreements on the use of the airspace in conformity with the norms of antimonopoly legislation (supplement them by competition rules aimed at eliminating of discrimination or unfair competition policy);

6) introduction of amendments to the Law “On railway transport” and other legislative acts in a part of approval of the investment rate;

7) adoption of the Rules of non-discriminatory access to the services of the oil refineries.

## **2.8 Technical regulation and creation of quality infrastructure**

### **Analysis of current situation**

Currently there is a tendency of economic niches conquest by methods of regulatory expansion - through lobbying in the technical regulations, standards, methods of accreditation, conformity assessment and other forms of access to the market.

Problems of security products provision for the life and human health and the environment, national security, reduction of pressure on business, restrictions on access to imported products market are solved through the adoption of technical regulations.

Technical regulations for consumers are the guarantee of security of consumable products, and for manufacturers, importers and sellers of technical regulations is the document containing the comprehensive requirements of the state to ensure safety of the first ones.

In accordance with the Plan for the development of technical regulations for 2007-2009 there was planned adoption of the 1997 technical regulations, among them 61 was approved. According to the induced corrections it is necessary to develop and adopt 43 technical regulations.

The work on creation of the single customs union is in the active phase, and one of the important directions is a technical regulation.

According to the approved Schedule of development of high-priority technical regulations of the Eurasian Economic Community it is expected to develop and adopt 32 technical regulations, thereat there is or has been developed Kazakh analogues on 24 technical regulations.

In this regard consideration of interest of Kazakhstan to the adoption of technical regulations of EurAsEC is important, in the basis of which must be laid the well developed technical regulations of Kazakhstan.

It is required the adapted implementation of technical regulations which must balance the interests of the state and business.

For full implementation of the requirements of technical regulations on average it is required at least one year, during this time there should be taken measures to eliminate departmental regulatory actions, reducing administrative pressure on business environment, when needed the modernization of productions, creation of test base, the harmonized standards are developed and adopted.

Currently the State Fund for Technical Regulations and Standards contains more than 56.342 normative documents on standardization, which include government, international, national and regional standards. At the level of state standards 2.791 units are adopted, among them 1.846 units are harmonized with international standards that equals to the overall percentage of harmonization - 66%.

Level of harmonization of national standards by industry is: 1. machinery and engineering products (80.3%) 2. power engineering and electrical engineering (57.4%) 3. road transport equipment (72.8%), 4. building materials and construction (72.3%), 5. Light industry (32.9%), 6. agriculture (47.1%), 7. food industry (60%) 8. chemical engineering (70.1%) 9. metallurgy and mining engineering (59.7%), 10. oil and gas. related manufacturing (92.4%).

Annually about 350 state standards are adopted. This is to some extent can increase the overall level of harmonization by 1-2%.

In view of forcing of work in the framework of industrialization each year it is necessary to adopt additionally 500 standards and within 5 years to adopt at least 2500 state standards, while paying great attention to their harmonization with international requirements.

Since 2008, there was created a national accreditation system which includes 1.059 structures, 186 of them are certification bodies, 541 are testing laboratories and 332 are metrology services.

Network of accredited certification bodies and testing laboratories is distributed highly irregular, mainly in the city of Almaty, there are no accredited testing laboratories to identify genetically modified sources, correspondence of fuel and automobiles to environmental requirements of Euro, fire safety and others.

### **Main tasks**

Application of technical regulations tools in the process of industrialization and the creation of quality infrastructure for:

1. Limitation of the domestic market from dangerous and defective (non-standard) products.
2. Creation of conditions for production of products meeting international standards, implementation of management systems and technological rearmament.

### **Target codes**

1. Development and adoption of at least 850 state standards each year, except 2010.
2. The implementation of 16 regional and 10 sectoral plans for standards implementation.
3. By 2012, the concentration of all technical documents in a one fund and ensuring of their general availability.
4. By 2014, bringing to the level of harmonization of national standards with international requirements from 65% to 76% (68% in 2010, 70% in 2011, 72% in 2012, 74% in 2013, 76% in 2014).
5. By 2014, increase of the number of enterprises implemented and certified the management system from 2035 to 3000 companies (2200 in 2010, 2400 in 2011 and 2600 in 2012, 2800 in 2013, 3000 in 2014).
6. By 2014, bringing of the number of implemented technical regulations to 90, herewith it is assumed to be their actualization in connection with the needs of industries.
7. By 2014, 60-fold upgrading (retrofitting) of at least 30 state standards and reference equipment.

### **Strategy of actions**

Within the framework of task on restriction of domestic market from dangerous and defective (non-standard) products there will be carried out:

development and implementation of technical regulations that set exclusive standards for product safety and special conditions of access to the domestic market of production by central and local executive bodies;  
state control based on the principle of minimum intervention and effective risk management;  
creation and modernization of testing laboratories including within the construction of border trade centers, special economic zones, as well as in the capital investment projects;  
taking of measures for the conclusion of multilateral and bilateral agreements on the equivalence of accreditation systems, certificates and protocols including within the framework of integration associations;  
inclusion of representatives of the authorized body in the field of technical regulation and metrology to ensure carrying out of requirements of technical regulations and standards in the contents of committee on financing and the acceptance of investment projects at national and local levels;  
works on creation of professional government body for development and implementation of policy of technical standardization and state control over observance of technical regulations and standards.

Within the framework of task to create conditions for the production of products conforming to international standards, implementation of management systems and technological rearmament the following activities will be carried out:

development and adoption of the state standards based on advanced international standards required for output of products within specific manufacturing;  
organisation of measures aimed at the introduction of product standards, as well as the social infrastructure taken by the central and local executive bodies;  
creation of a single fund of normative technical documents and the implementation of its completion by documents of the international organisations;  
organisation of measures to promote the implementation of management systems standards and improve product quality, development of mechanism of subsidizing of small and medium-sized businesses when introducing the management systems standards;  
resumption of the practice of specifying of goods compliance, works and services with requirements of state standards in the annual creation and approval of a plan of public procurement;  
creation of a single center for training and advanced training of specialists in the field of technical regulation and metrology;  
modernization of the national reference base for the metrological provision of industries and confirmation of equivalence of the reference base at the international level.

## **Improvement of the legislation**

Introduction of changes and amendments to the Code of the Republic of Kazakhstan “On Administrative violations”, the laws of the Republic of Kazakhstan “On technical regulation”, “On accreditation in the sphere of conformity assessment”, technical regulations. In particular, the tightening of administrative pressure against companies failing to comply with the requirements of technical regulations; bringing to conformity with the agreements adopted in the framework of EurAsEC and the Customs Union.

## **2.9 Energy saving**

### **Brief analysis of the current situation**

Currently, Kazakhstan is characterized by low prices for fuel and energy resources (hereinafter - FER) relatively to world prices, unsatisfactory efficiency of their use on the stages of extraction, production, processing, delivery (transportation), storage, distribution and consumption (reformation) which developed due to low prices and access to FER.

Industrial sector on energy consumption is five times more than analogous indicator of the EU countries. Taking into account the increase in energy prices in conditions of world markets the issues of competitiveness become more acute.

A large proportion of public institutions (schools, hospitals, etc.) as well as residential buildings are equipped with inefficient energy systems and require updating.

In the world economy the energy saving in recent years is a reliable means of solving the global energy problem which is characterized by a decrease in stocks and depletion of non-renewable FER, environmental problems associated with climate change, the need to reduce greenhouse gas emissions.

The experience of developed countries shows that investment in energy saving has become a full alternative to the construction of energy subjects and in some cases even more worthwhile.

In conditions of adaptation of the country economy to the international market relations the inevitability of price rise tendency is assumed in the domestic market of FER practically to the world level.

Experience of surmounting the energy crisis by industrially developed countries of 70th of the last century shows the urgent need to solve some critical problems in the field of energy saving, turn energy saving into a continuous process of implementation of complex of targeted projects aimed at the scientifically and technically sound reduction of energy consumption, especially in the sphere of material production.

Therefore the aim of policy in this area is unconditional achievement of the planned strategic directions of growth of energy efficiency using a wide range of regulating and stimulating consumers of energy resources, providing:

Structural change in favor of low-energy-intensive processing industries;

Implementation of the potential of technological energy saving.

It is necessary to implement a complete system of legal, administrative and economic measures to stimulate efficient use of energy. Under this system the following should be provided:

introduction of changes to the existing norms, rules and regulations defining the expenditure of fuel and energy, in the direction of tightening the requirements for energy saving;

improvement of the rules of accounting and control of energy consumption, as well as the establishment of energy consumption standards and mandatory certification of energy consuming appliances and equipment for mass application on their compliance with standards of energy consumption;

execution of regular energy audits of enterprises (mandatory for large enterprises and state-financed organisations);

creation of additional motivations for energy saving, transforming of it into an efficient sphere of business;

wide popularization by the state of efficient energy use among the population, mass training of staff; accessible database containing information on energy saving measures, technologies and equipment, normative and technical documentation;

carrying out of conferences and seminars on exchange of experience, propaganda of energy saving in the mass media, etc.

The task is to create stable and efficient system of interest of energy resources consumers in investing in energy saving due to a goal-oriented policy, providing a more attractive environment for investments in this sphere of activity, reducing possible financial and economic risks.

The measures on energy saving and efficient use of energy should become a compulsory part of the regional integrated programs (plans) of socio-economic development of the region, including regional energy programs.

In the regional programs (plans) it is necessary to provide a mechanism for evaluation of activity of the system carrying out of energy saving policy in the regions by the local executive bodies.



## **Main tasks**

Reduction of energy intensity of production in order to increase competitiveness of Kazakhstan's economy.  
Restructuring of the economy with an increase in low-energy-intensive processing industries.  
Realizing the potential of technological energy saving.  
Implementation of an integrated system of legal, administrative and economic measures stimulating the efficient use of energy.

## **Target codes**

1. Development and adoption of subordinate acts for the implementation of the Law of the RK "On energy saving".
2. Completion of formation of the register for enterprises inspection of which is mandatory under the Law of the RK "On energy saving".
3. Development of integrated regional plans on energy saving for 2010-2015 by akimats of oblasts and cities of Astana and Almaty

## **Strategy of actions**

The energy sector provides live activity of all sectors of national economy and in many instances determines the formation of the major financial and economic indicators. Efficient use of natural energy resources, industrial, scientific and technical potential of the energy sector creates the necessary preconditions for sustainable development ensuring growth in prosperity and raising of living standards of population.

Compliance with the requirements of modern times can only be provided by a new fuel and energy complex (FEC) - financially sustainable personnel, economically efficient and dynamically developing, but acceptable for the environment, equipped with advanced technology and highly skilled one.

Priority strategies for actions are:

reduction of costs per unit for production and use of energy resources due to rationalization of their consumption, use of energy-saving technologies and equipment;

Stimulation of creation of small innovative and venture businesses in the area of energy efficiency for creating competitive innovations;

Attraction of foreign investments for implementation of projects on energy efficiency.

At this stage the priority task is the adoption of the Law of the Republic of Kazakhstan "On energy saving", a number of normative legal acts in the implementation of the Law, as well as the development of the State Register of energy saving and organisation of monitoring of large consumers of FER with a view to energy saving.

Herewith according to the legislation it is necessary to:

envisage measures of tariff, tax, customs and antimonopoly regulation;

introduce the systems of promising technical regulations, national standards and norms, improving the manageability of the process of energetic development and encourage energy saving;

encourage and support strategic initiatives in the field of investment, innovation and energy saving activity of economic agents.

Provide with methods and means of standardization of increase of use efficiency of fuel and energy resources.

Establish the optimal nomenclature and level of indicators of use efficiency of fuels and energy resources and evaluation methods relevant to the modern achievements of science and technology.

Provision of improvement of accounting system and consumption of fuel and energy resources, introduction of modern meters of gas, water, heat, power consumption meters, efficient appliances, lighting equipment and systems of software controls of thermal energy consumption.

Ensuring of energetic marking of energy-consuming products through the development of standards for energy marking of household electric appliances and electronic equipment that will create conditions for the acquisition by the population the most economical instruments and strengthening of internal competition.

Acquire international, regional and national standards of foreign countries for the development of the harmonization of normative documents in the priority sectors of Kazakhstan's economy.

In order to improve the system of statistical reporting and monitoring in the sphere of energy efficiency it is necessary to introduce an order of provision of statistical reporting (development of special forms, reporting procedures), as well as to develop a monitoring system in the sphere of energy efficiency in the country.

In order to stimulate the activities of public institutions for the rational use of energy resources it is necessary to ensure the functioning of the mechanism of reinvesting of budgetary funds economized by the state-financed organisations resulting from introduction of energy saving measures.

Particular attention should be given to enhancing the investment attractiveness of the activities and projects in the area of energy efficiency and conversion of energy saving into effectively functioning form of business. The experience of developed countries shows that the most appropriate mechanism for energy efficiency in state-financed organisations is a scheme of energy service contracts.

For these purposes, it is necessary to develop mechanisms of interaction between state-financed organisations and energy service companies implementing energy saving projects and measures to reduce the consumption of energy resources.

Another one priority of action strategies is the following:

Development of cooperation with the Economic Commission for Europe by the United Nations, including the industrial development;

cooperation with the competent authorities on energy saving of the countries of the European Union;

establishment of stable contacts with organisations dealing with issues on increase of energy efficiency in member states of the Commonwealth of Independent States. Implementation of joint projects.

### **Improvement of the legislation**

In the implementation of the Law “On energy saving” there will be developed normative documents affecting industrial, energetic, construction and other sectors, as well as the new state standards and technical regulations on energy saving.

## **2.10 Development of innovations and assistance to technological modernization**

### **Brief analysis of the current situation**

Today in Kazakhstan the share of expenditure on science is 0.2% of GDP of the country, whereas the share of expenditure recommended by the International Academic Council for developing countries is 1-1.5% of GDP. For example, in Russia the figure is 1.3% of national GDP, in China – it equals to 1.4%, in Germany – 2.5%, in USA – 2.8%, in Japan - 3.3%. Number of patents issued in Kazakhstan is 1671, while in Russia 19 641 patents were issued, in China – 26 292, in the USA - 154 760, and in Japan - 217 364.

In Kazakhstan the Academy of Sciences was reorganized into a public association, and funding for research institutes is executed centrally through the national research centers under the Ministry of Education and Science, and is not connected with the needs of Kazakhstan's economy, in fact, being the funding of ongoing activities of research institutes, and participation of the universities and private sector is minimal.

Kazakhstani industrial enterprises do not tend to engage in the research and development activity independently and are not inclined to invest in the purchase of products of the research and development activity, even those enterprises which are engaged in modernization of production are relatively inert. According to statistics from the level of innovation activity of enterprises in Kazakhstan in recent years hovers around 3-4%, and it is significantly lower than in EU countries.

Since 1997 to 2008 the share of scientific and technical services in the costs of enterprises has increased more than 4.5 times, indicating increased demand for the products of the research and development activity.

Most enterprises prefer the “turnkey” projects when technological solutions are already embodied in the imported machinery and equipment. At the same time the licensed technology and patents are rarely purchased (4% of firms).

When analyzing the full structure of the domestic research complex it was established that 80% of all scientific area of the republic is the research part and less than 20% is the research and development activities. The ratio of scientists, engineers and workers of pilot productions in Kazakhstan is 25:4:1, while in developed countries the ratio is 1:2:4. The funding system for science will be optimal in the following proportions: 20% for basic researches, 30% for applied research, 50% for the development work, which will create an effective system for the introduction of innovative technologies

### **Main tasks**

1. Forming of the effective national scientific innovation system and development of innovation infrastructure.
2. Creation of conditions stimulating large-scale and accelerated assimilation of innovative development of new types of products and services.
3. Modernization of technical, technological and managerial levels of domestic enterprises.

## Target codes

1. Increase of number of internationally recognized patents up to 30 by 2014.
2. Increase of number of the implemented new technologies and the executed development activities by 2014 up to 200 and 160, respectively.
3. Creation and development of existing innovation infrastructure in the period up to 2014: the number of industry expertise centers - 2 units; the design offices - 3 units; technological parks - 4 units.
4. Increase of innovation activity of enterprises in the country up to the level of:  
by 2015 10%;  
by 2020 20%.

## Strategy of actions

### Scientific support of accelerated industrialization

Reforming science in Kazakhstan will focus on the development of university science and application of grant system of financing with regard for the identified priorities.

The main purpose of science development in the Republic of Kazakhstan is the creation of national scientific innovation system focused on the solution of clear scientific and technological tasks for the development of priority sectors for the coming period.

The highest scientific and technical commission will identify national priorities for research, taking into account the orders of the President and the priorities of the Program, as well as make suggestions on the budget for science and will determine the amount of basic and applied research. There will be provided the three types of funding of scientific investigations: grant – the financing of the research projects that meet national priorities of the country, program-oriented - the financing on the strategic directions, and basic – the financing for scientific organisations through the state tasks.

Under the Ministry of Education and Science of the Republic of Kazakhstan there will be established the State scientific and technical expertise (SSTE) with the participation of foreign experts and scientific councils on priority directions with participation of the line ministries, business community, scientific community and nongovernmental organisations.

Research applications will be submitted by scientists, universities and research institutes which involve scientific freedom in solving the set problems. After carrying out of the technical expertise of the SSTE applications with involvement of foreign experts on the subject of innovation, perspective and scientific soundness, the scientific councils will make a decision to award a grant based on the preferred directions of investigations.

For active involvement of universities to scientific researches a single scientific network will be created between universities, research institutes and scientific centers, as well as provision of equal conditions of competition for applicants to receive grants.

On the basis of the New University of Astana (Nazarbayev University) and existing major universities of Kazakhstan there will be a network of research centers, national laboratories and the planning and design offices.

The essential condition of development of effective science will be comprehensive and reliable protection of intellectual property.

With a view to commercialization of scientific developments and investment attraction it is required the active participation of private business for which there will be provided the initial state support in the form of state loan or state order.

System of management and administration of scientific activities will be reoriented from the work on the principle of “a scientist – an official - a scientist” to the principle of “business - an official - a scientist – business”.

The structure of science financing will be changed in the following proportions - basic research 20%, applied research 30%, development work 50%.

A new information resource “The base of the needs of the real sector” will be created in which results of the survey of industrial enterprises will be brought together, including enterprises' needs and ways of solving them (research organisations and ready technological solutions that have the potential to meet the needs of business)

### Innovation policy

The Ministry of Industry and New Technologies of Kazakhstan before the end of 2010 will have been develop the inter-industry scientific and technological plan of the country with clear objectives on the priority branches of industry for the medium term, which will ensure the achievement of a new level of technological development of the republic including clearly identified technological tasks of the country on priority branches of economy.

Within the framework of the Inter-industry plan the necessary public support will provide (grants, engineering, services, business incubation, etc.), the institutes, research institutes, universities, local businesses, investors, etc, will be as performers of technological problems.

The main focus of innovation policy for the next 2-3 years will be placed on stimulation of economic efficiency of enterprises through technology transfer, technical modernization, business process improvement and introduction of management technologies. By the second half of the five-year period it is planned the displacement of support vector in the direction of promoting qualitative improvement of the characteristics of products, development of new competitive products and processes for their manufacture.

To ensure inter-industry coordination of this work a Council for Technology Policy will be created which the main task will be to create and implement innovative policies of the country.

Every year the research on scientific and technological forecasting, analysis of the state of the world and the national innovation market and prospects for technological development of the efficacy of the innovation policy will be carried out (with the assistance of the best foreign and domestic experts), the specific recommendations to the Government are provided, including the development of normative legal acts.

The rating assessment of the central and local executive bodies on technological development in terms of industries and regions will be carried out.

The following measures to support innovation will be implemented:

issue of innovative grants, including subject to conditions of co-financing;

project financing, including those aimed at creating a joint venture with the cornerstone (brand) investors in priority branches;

implementation of a comprehensive propaganda work which includes the implementation of PR-strategy, competition among the youth and workers of enterprises, businesses, seminars, exhibitions, congresses and other events that form a favorable opinion among the population about innovations and innovators.

In 2010-2012 the technological parks will be set up in the East Kazakhstan, South Kazakhstan and North Kazakhstan oblasts and in Astana, the Center for Technology Commercialization the main task of which will be the introduction and promotion in the markets of domestic innovation developments and also creation and maintenance of a database of the needs of industrial enterprises in solving real engineering and technological problems and the available scientific and technical developments proposed by the domestic researchers for introduction.

As additional elements of innovation infrastructure in 2010-2011 the Centre of metallurgy will be established in the East Kazakhstan oblast, in 2011-2012 on the basis of the organized Caspian Energy Hub the Centre of oil and gas technologies will be established.

The created branch design offices will provide services to improve the quality characteristics of the used equipment, output products and technical assistance in creation of experimental-industrial samples. Design offices will also assist in accelerating the introduction by the machine-building enterprises of new products through the transfer of design and project documentation subject to conditions of royalty and other financial mechanisms. All the domestic enterprises will have access to services of experimental design offices under uniform conditions.

The Institutes of innovative development will actively work through the issue of attracting funds from international development institutions to implement innovative projects.

Funds for the implementation of state support will be provided through the institutions of the innovation development within the framework of the state task.

#### **Modernization of industry**

Within the framework of the Inter-industry plan the technology agreements will be developed and signed with major national companies and mining companies, with a description of technological control points for the medium term (5 years).

This will allow to effectively carrying out targeted government technological policy involving of domestic small and medium-sized businesses in solution of these problems.

Stimulation of growth of technical, technological and managerial levels of domestic enterprises and the realization of their latent potential of effectiveness will be conducted through:

introduction of modern management and integrated engineering solutions. Herewith assistance will be rendered in finding and attracting of qualified experts, international engineering organisations, organisation of seminars and post-implementation support of embedded engineering solutions;

soft lending and leasing of domestic enterprises to upgrade fixed assets. Annually the funds will be allocated to subsidize the credit rates for equipment replacement, soft lending through the "Development Bank of Kazakhstan" JSC (hereinafter - DBK), "FRP "Damu" JSC (hereinafter - DAMU) and the provision of equipment in leasing on favorable terms;

stimulation of domestic enterprises to improve product quality and technological processes. Progressive standards and technical regulations will be introduced, for the observance of this the company will make active search, development and implementation of advanced technological solutions including through domestic scientific organisations;

co-financing by the authorized body in the field of innovations of R & D activities made by large companies aimed at enhancing their competitiveness (up to 25% from the cost).

## **Improvement of the legislation**

1. Adoption of the Law of the Republic of Kazakhstan “On Science” in the new edition.
2. Introduction of changes in:
  - the Tax Code in the part of referring to the deduction on corporate income tax in the amount of 150% of R & D expenditures;
  - the Law of the Republic of Kazakhstan “On state support of innovation activity”, in part of stimulating the development of innovations through the introduction of new types of grants;
  - the Resolution of the Government of the RK dated August 6, 2009 # 1202 “On approval of Rules of providing innovation grants and reports on measures taken to implement intellectual property.”

### **2.11 Tariff policy Analysis of current situation**

Currently in the spheres of natural monopolies about 1000 entities carry out their activity, including:

- 552 - in the area of water and drainage systems;
- 407 - in the area of electricity and heat power industry;
- 177 - in the area of transport;
- 38 - in the area of oil and gas transportation.

In the areas of natural monopolies there is a problem of worn-out state and technological backwardness of production and associated low efficiency and losses which affect the quality of services provided and the level of tariffs for consumers.

Currently the depletion of basic investments on all spheres of natural monopolies of the residential sector in average amounts to 60 - 65%.

In addition to the high level of normative losses the enterprises have the excessive losses which lead to inefficient operations and reduced attraction as an investment.

Quality and accessibility of services of the natural monopolies entities associated with their technological upgrading and increase of investment attractiveness, as well as the predictability of the tariff level are the most important factors of successful industrialization.

### **Main tasks**

Carrying out of effective tariff policy based on provision of balance of interests of natural monopolies and consumers of their services.

### **Target codes**

1. Percentage of reduction of excessive losses (if any) of basic natural monopolies entities (hereinafter – NME):

	Unit of measure	2010	2011	2012	2013	2014
In electrical networks:	%	1.5	1.5	1.0	0.5	-
In heating networks:	%	2.0	2.5	2.0	0.5	-
In hydro economic networks:	%	2.5	1.0	0.5	0.4	-

2. Percentage of reduction of normative technical losses of the basic NME from approved one:

	Unit of measure	2010	2011	2012	2013	2014
In electrical networks:	%	1.3	1.0	0.5	0.2	0.1
In heating networks:	%	1.5	1.8	1.0	0.3	0.1
In hydro economic networks:	%	2.6	2.0	2.0	1.0	1.0

3. Forecast of tariffs for regulated services (subject to the stability of national currency, the cost of gas, coal, fuel oil and stability of volume of services rendered).

#### 3.1. Alterations of disbursing prices for electric energy

Name of services	Unit of measure	2010	2011	2012	2013	2014
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Average in the Republic of Kazakhstan	Tenge/kW	10.14	11.09	12.33	13.48	14.65
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### 3.2. Forecast of tariffs for transportation of loads by rail transport

Type of service	Unit of measure	Forecast				
		2010	2011	2012	2013	2014
In inter-oblast service	%	17.6	15	15	15	15
In export service	%	17.6	15	15	15	15

### 4. Provision of stability of the level of regulated tariffs:

	Unit of measure	2010	2011	2012	2013	2014
Number of natural monopolies entities working on medium-or long-term tariffs	piece	12	15	11	10	12

## **Strategy of actions**

Improvement of the tariff design system of the regulated markets entities will be implemented using tools of assessment the influence of tariffs on development of branches of economy.

In the coming period it is provided:

enhancement of efficiency of natural monopolies by practical application of a new method of incentive regulation - a comparative analysis to establish tariffs that take into account the degree of effectiveness of the regional electric-grid companies (hereinafter - REC) which will create a incentives of natural monopoly entities to optimize activities and technology of rendering of services;

the introduction of differentiation of tariffs for water supply services on consumer groups and depending on the volume of consumption in determining the value of water consumption which will allow to ensure social justice stipulating differentiation of services payment in accordance with enhanced conditions of comfort, as well as using water for commercial purposes;

introduction of price ceilings for services of the regulated market entities providing the regulated market entities with possibility for flexible response to changes occurring in regulated markets not exceeding the established price level. In this case, the regulatory body has the right to reduce prices during execution of examination.

Tariff changes affecting the development of industries are provides with a view of the planned corridor of inflation, as well as the contribution of regulated services in the inflation rate which is determined by the Government.

Methodology for tariffs calculations to stimulate natural monopolies entities to increase productivity and reduce costs through the elimination of excessive normative losses and reduction of normative losses will be improved.

### **Improvement of the legislation**

Introduction of changes and amendments to the Law of the Republic of Kazakhstan “On natural monopolies and regulated markets”.

In order to implement the Law of the Republic of Kazakhstan “On introduction of changes and amendments to the Law of the Republic of Kazakhstan “On natural monopolies and regulated markets”:

development of rules for determining the reasonable value of consumption volume by individuals of regulated services in the areas of water management systems, Methods of calculation of tariff using the method of comparative analysis;

introduction of techniques of differentiated tariffs for the regulated services of water and sewer systems, a comparative analysis to establish tariffs that take into account the degree of effectiveness of the RECs;

introduction of amendments to the Rules of pricing in regulated markets approved by the Government of the Republic of Kazakhstan dated March 3, 2009 # 238 providing for the rights of the regulated market entity to lower and raise independently the prices of manufactured (sold) goods (works, services) not exceeding a maximum price recognized by the competent authority reasonable on the results of carrying out of the cost examination.

## **2.12 Attracting investments and development of special economic areas** **Brief analysis of the current situation**

During the period since 1993 including 9 months of 2009 102.9 billion U.S. dollars of foreign direct investments (hereinafter - FDI) were attracted to the country's economy including those in non-raw sector – 14.6 billion dollars (14.2% of total volume).

Among the factors that negatively affect the attractiveness of many promising for Kazakhstan's economic sectors the key ones are the following:

low capacity of the domestic market;  
remoteness from major markets and lack of convenient logistics entail significant costs for transporting of goods;  
relatively high labour cost with a shortage of skilled personnel and lack of infrastructure;  
the absence of a centralized system on work with investors, including foreign ones, as well as insufficiently effective measures of state support of investments.

Currently, the expansion of attracting of FDI is made through increasing the investment attractiveness of FEZ, industrial zones (hereinafter - IZ) and the development of mechanism of public-private partnership (hereinafter - the PPP).

#### 1. The current state of the FEZ IZ

In total in Kazakhstan it is created 6 FEZ which conventionally can be divided into groups: 1) industrial production areas – “Seaport Aktau”, “Ontustik”, “National industrial petrochemical technological park” and “Astana - new city” in the part of the industrial sub-zone (IZ of Astana city), 2) service – “Burabay” and “Astana - new city” in the part of building sub-zone, and 3) technically development zone – “Information Technology Park”. In addition, there were created 2 IZ in the cities of Astana and Karaganda, at that IZ of Astana city is included in the FEZ “Astana - new city”.

World experience shows that the establishment of SEZ and IZ is a factor of accelerated economic growth through activation of international goods turnover, investment mobilization, enhancing of integration economic processes.

Investment attractiveness of Kazakhstan FEZ and IZ currently is not high enough since the conditions of their functioning are not completely focused on real needs and interests of investors.

#### 2. The current state of PPP

In Kazakhstan in conditions of societal needs growth for infrastructure facilities and quality rendering by them the services, increase of moral and physical depreciation of fixed assets and the absence of sufficient financial resources of the state for the renovation and creation of infrastructure facilities, the use of PPP can provide the tasks in the fields of traditional state responsibility, it will allow to implement and develop the capacity of private investors and to raise funds of institutional investors.

Experience of implementation of the first concession projects in Kazakhstan shows the possibility of attracting significant investments in transport infrastructure through the use of PPP mechanism.

Despite the presence of experience in implementing of concession projects it is necessary:

- 1) to attract private investment in the sector of traditional state responsibility;
- 2) create an enabling environment for investors and creditors under investing in capital-intensive facilities (infrastructure, energy, etc.);
- 3) introduction of effective methods of state property management of housing and utilities sector by attracting private capital.

### **Main tasks**

Creation of attractive conditions for direct investments in non-recoverable export-oriented and high-tech productions and also infrastructure development.

#### **Target codes**

1. Number of attracted focused investors from the list of companies included in the Global-2000: 2010 - 2, 2011 - 3, 2012 - 4, 2013 - 4, 2014 - 5.

2. Conclusion of agreements with foreign states on motivation and mutual protection of investments. 2010 - 2, 2011 - 2, 2012 - 2, 2013 - 2, 2014 - 2.

3. Achievement of indicator of Global Competitiveness Index of the World Economic Forum: “The impact of the rules governing the foreign direct investments in business (101 position)” - 2010 - The 100 position, 2011 - 99, 2012 - 98, 2013 - 97, 2014 - 96. “Foreign direct investment and technology” (104 position) - 2010 - 103 position, 2011 - 102, 2012 - 101, 2013 - 100, 2014 - 99. Improvement of Kazakhstan's positions in the ranking of “DoingBusiness” on indicator “Protection of investors”. 2010 - 52 position, 2011 - 51, 2012 - 50, 2013 - 49, 2014 - 48. Index of the World Bank on the country competitiveness up to 60 position in 2014 (67 position - 2009).

4. Increase of the number of participants in the FEZ - 39 in 2009 to 159 in 2015 and at the IZ up to 42 by 2015.

5. Increase of investments in non-recoverable export-oriented and high-tech production in the territory of FEZ - 1588 bln tenge by 2015 and in the IZ territory up to - 151 bln tenge.

6. Increase of production volume of goods and services (works) in the territory of FEZ from 21.9 billion tenge in 2009 up to 718 billion tenge by 2015, IZ up to 719 billion tenge by 2015, including product exports of at least 50% of output volume.

7. Implementation of at least 15 PPP projects per year totaling over 900 billion tenge by 2015.

### **Strategy of actions**

One of the main tools of accelerated industrial-innovative development will be the attraction of direct investments.

Along with measures to create an overall favorable investment climate the special conditions will be created for large and multinational companies on projects implementation in the territory of Kazakhstan.

To do this it is planned to create an integrated system to attract direct investment which will include a range of incentives and institutional mechanisms for dealing with foreign investors.

There are the following measures to stimulate investment.

1. For investment projects in priority sectors of the economy:

investment preferences provided by law of the Republic of Kazakhstan “On Investments”;

special procedure of issuing entry visas for foreign professionals to the operational and non-reimbursable basis.

2. For investment projects in the territory of FEZ:

special order of taxation, taking into account international best practices. Allowances will be granted to enterprises selected according to criteria defined by the present Program;

special mechanism for the import of foreign labour.

3. On the largest and priority investment projects with participation of recognized foreign investors, transnational companies the separate investment agreements will be concluded providing special measures of state support:

tax allowances and preferences;

ensure of a minimum long-term public order and national companies order;

other financial and non-financial incentive measures.

Solution on this support measures under investment agreements will be taken at the government level.

In order to increase investment in primary sectors of economy individual negotiations will be carried on with each potential major investor.

The implementation of an individual approach on attraction of foreign direct investment will include the following activities:

search and identification of potential target investors, primarily from among the Transnational corporations;

development and implementation of “roadmaps” for the work with each target investor including:

assist in the implementation of necessary formalities related to the opening and doing business in Kazakhstan;

arranging of meetings with key political leaders and leading companies in Kazakhstan;

rendering of consultation services both at the stage of investment project development and during its implementation;

post-investment support.

To implement an individual approach the institutional mechanisms of cooperation with foreign investors will be improved. It is provided:

enhancement of the Investment Committee of the Ministry of Industry and New Technologies of the Republic of Kazakhstan as a single coordinating body for dealing with foreign investors operating on the principle of “first call address” and “single consultant” for the foreign investors. Also it is planned to determine the specialized company under the Ministry of Industry and New Technologies of the Republic of Kazakhstan to attract foreign investors and work with foreign investors;

creation of an international network will be achieved through the use of resources of diplomatic missions abroad, trade missions, the Institute of honorary consuls, and also by working out of issues of determining staff units in the country's diplomatic missions abroad in the diplomatic rank of the Minister-Counsellor, appointed on the proposal of the Ministry of Industry and New Technologies of the Republic of Kazakhstan and accountable to him, and the attach in the embassies of Kazakhstan in the individual countries to create an institution of the representatives for investment issues, trade and technology. The rating scores for assessment of their activity will be implemented;

creation of a standing commission on foreign investment under the leadership of the Prime Minister of the Republic of Kazakhstan in order to coordinate and monitor the activities of state bodies and national holdings in attracting foreign investments into Kazakhstan's economy and protect the rights and interests of foreign investors. The Commission will serve as “ombudsman” for foreign investors.

The Commission will consider projects and make decisions about entering into investment agreements for the provision of special conditions for investors in major projects. With separate major investors in exceptional cases the investment agreements will be concluded for projects implementation outside the SEZ providing a specific package of benefits and preferences including the possibility of compensation of the part of investment.

The selection of the largest investment projects and decision on all the benefits and preferences within the framework of investment agreements will be made by the Government of the Republic of Kazakhstan. Along with a personal approach to work with investors the work on promotion of attractive investment image of Kazakhstan (general approach) will be continued including:



conduction of informative-presentational activities (publications, exhibitions, official meetings, forums, print, television and electronic media, Internet resources). The key event in this area will be creation of a single Internet portal for foreign investors;

assist to investors in finding partners, establishing business contacts, providing the necessary information.

In order to focus on attracting FDI the activities of Kazakh part of the intergovernmental commissions will be structured, where these issues will be coordinated by the Investment Committee of the Ministry of Industry and New Technologies of the Republic of Kazakhstan.

#### **Increase of investment attractiveness of FEZ and IZ**

FEZ and IZ will be one of the basic tools to attract private investment. The branch linking of special economic zones will be cancelled, the main criterion for the companies will become the export oriented production and productivity of labour.

A new law on FEZ will be worked out where in addition to existing benefits the following is expected:

Working out of issue on provision of guarantees to participants of SEZ on the stability of tax regime for the period of the project implementation;

introduction of a special mechanism for the import of foreign labour in the territory of FEZ;

Introduction of a mechanism of providing services to participants of FEZ on the one stop-shop principle.

The issues on expanding the network of FEZ will be considered.

New FEZ and IZ will be created taking into account the presence of suitable routes of communication for the delivery of raw materials and supplies of end products.

On this principle in 2011 there will be worked out the issues on creation of new:

FEZ:

“BTEZ (border trade economic zone) Khorgos - Eastern Gate” on the basis of ICBC (international center of border cooperation) Khorgos”- for the development of various types of manufacturing activity and transportation and logistics services;

in Karaganda on the base of IZ of Karaganda city - for the development of metallurgy and metalworking manufacturing.

IZ:

in Almaty city - for the development of engineering, manufacturing, agricultural processing and the creation of the construction cluster;

in Pavlodar city - for the development of metallurgy and metalworking manufacturing, chemical, pharmaceutical, energetic and agricultural processing.

In addition, the issues on creation of new IZ in Aktobe, Ust-Kamenogorsk and Uralsk will be worked out.

For effective implementation of the Program within the FEZ and IZ high-quality physical infrastructure will be created that meets the needs of potential investors.

In 2012, the construction of the industrial sub-zone of FEZ “Astana - new city” (IZ of Astana city) and the additional infrastructure of FEZ “Ontustik (fire station, a cargo terminal and an integrated service and technology center) will be completed as well as connection of existing businesses to electrical substation will be provided; design work on the FEZ “Information Technology Park” will be carried out taking into account the alteration of territory; and also construction of transport and engineering infrastructure (electricity, water, sewage) of IZ of Karaganda city will be completed.

In 2013 the construction of transport and engineering infrastructure (electricity, water, gas, and telecommunications) of subzones # 1 and # 3 of the FEZ “Seaport Aktau” will be completed.

In 2014 the design works will be held for the subzone # 2, # 4 - # 6 of FEZ “Seaport Aktau”; putting into operation of the 1st stage of the FEZ “Information Technology Park” will be provided, the design works will be held taking into account the alteration of the territory and putting into operation of the 1st stage of the FEZ “National industrial petrochemical technological park” will be provided; reclassification of lands of special protected natural sites to the reserved lands will be provided and putting into operation of the 1<sup>st</sup> step of the FEZ “Burabay” will be made.

In addition, in 2014 the newly created free economic zone and the IZ will be provided with sufficient infrastructure to carry out projects with the volume of output products:

FEZ “BTEZ Khorgos - Eastern Gate” - over 4 billion tenge;

FEZ in the city of Karaganda - over 280 billion tenge;

IZ of the city of Almaty - over 135 billion tenge;

IZ of the Pavlodar city - over 297 billion tenge.

An important factor in increasing the efficiency of the FEZ and IZ will be the attraction of cornerstone (strategic) investors including foreign ones for the production of non-raw high technology products with an emphasis on market development of the Customs Union, China and Central Asia.

With a view of overall control and monitoring, methodological and legislative support of FEZ and IZ, the Ministry of Industry and New Technologies of Kazakhstan in 2010 will be determined by a single competent authority for FEZ and IZ. By the coordinating bodies of FEZ and IZ will be determined relevant local and central executive bodies.

To manage, find, and attract investors and to provide basic and specialized services to participants of FEZ and IZ professional companies-operators (international) will be involved using the mechanism of partial reimbursement by the state.

#### **Development of public-private partnership**

Attracting investment in the sector of traditional state responsibility will be made on the base of the transfer to the private sector of the state-owned facilities while reserving the right to direct the state by concluding the following types of contracts:

designing, financing, construction and operation (concession) on which the private sector performs functions to finance the construction or reconstruction, operation, maintenance and operation of the entity of concession; the state reserves the functions of control over the quality of service and may also provide a measure of public support.

It is supposed to transfer to concession the following:

sections of highroads: “Astana-Karaganda”, “Almaty-Khorgos”, “Tashkent-Shymkent-border of Zhambyl oblast”, “Almaty-Kapchagay”, “Uralsk-Kamenka-border of RF (on Ozinki)”, “Astana-Schuchinsk”;

sections of railways: “Zhetigen-Korgas”. “Yeralievo-Kuryk”;

construction of a new international airport Kenderli;

operation and maintenance for which the private sector rents production facilities and liable to the consumer, as a service provider the state retains responsibility for investments in the project;

construction and operation on which the private sector performs the function of the construction (reconstruction) and operation of the facility, the state is responsible for funding the project during the operational period;

management and maintenance (trust management of property) for which the private sector implements functions on management and maintenance of state property facilities, the State retains the overall responsibility to consumers for the provision of services for the solution of problems of expansion, reconstruction and repair of facilities.

Important role in the implementation of infrastructure projects will play accumulative pension funds to raise funds which will be applied to the mechanism of production of infrastructure bonds under the guarantee of the state.

State will continue to carry out the work on introduction of the principles of project financing, structuring and maintenance of the PPP projects with use of the mechanisms of syndicated financing and securitization. The legislation will be amended to ensure the ability to create special project organisations with a special legal status.

### **Совершенствование законодательства**

1. Adoption of the Law of the Republic of Kazakhstan “On special economic zones” in the new edition.
2. Introduction of changes and amendments to the Law of the Republic of Kazakhstan “On concessions”.
3. Introduction of changes and amendments to the Law of the Republic of Kazakhstan “On Investments”.
4. Introduction of changes and amendments to the tax legislation of the Republic of Kazakhstan.
5. Introduction of changes and amendments to the relevant regulations of the Republic of Kazakhstan in terms of improving the investment attractiveness of the special economic zones.

#### **2.13 Trade policy**

##### **Analysis of current situation**

Carrying out of effective trade policy is an important component of industrial and innovation development. In the context of globalization and severe competition Kazakh exporters need to retain existing “niche” and win new ones in the world markets while upholding the rules of international trade.

In connection with this objective condition is the integration of Kazakhstan into the global economy through entering the World Trade Organisation and the Customs Union.

Currently a general legal base of the Customs Union is developed. From January 1, 2010 in the territory of the Customs Union common measures of customs-tariff and non-tariff regulations of foreign trade with respect to the third countries are applied.

Negotiations on entry to WTO of three countries-participants of the Customs Union are recommenced by a single negotiating delegation from the three countries.

Along with integration into global markets, to meet the objectives for the development of export-oriented non-raw sectors of economy it is required to form an effective system for the promotion of economic interests and rapid elimination of trade and non-trade barriers in foreign markets and institutions of promotion of non-raw exports.

Positive trends in the development of internal trade are accompanied by a conservation of number of issues.

Undeveloped stock exchange trading, modern trade formats. On the trading markets a significant amount of shadow economy is focused, there is high level of realization of contraband and counterfeit goods, the widespread use of fake certificates of quality on traded goods.

## **The main tasks**

1. Creation of effective and efficient system for the promotion and protection of economic interests of the republic through the integration into the global trading system.
2. Assistance to development and promotion of exports of Kazakh production of non-raw sector of economy.
3. Improving the efficiency of internal trade, increase of productivity labour in trade through improving trade infrastructure.

## **Target codes**

By the end of 2014 it is planned to:

1. Increase of the World Economic Forum ranking on involvement in world trade up to 80 seats.
2. Increase of share of non-raw exports in total volume of exports up to 40.0%, according to the classification by broad economic categories (statistical classification of the UN Secretariat).
3. Achieving an annual growth rate of retail turnover in % to the previous year beginning from 2014 no less than 106.0%, and except that in 2010 - 100%, 2011 - 102%, 2012 - 103%, in 2013 - 104%.
4. Bringing the share of modern trade formats in total volume of retail trade turnover up to 50%.

## **Strategy of actions**

Creation of system of promotion and protection of economic interests of the republic, integration into the world trading system.

1. In order to create efficient and effective system of promoting and protecting the economic interests of the republic through the integration into the global trading system the formation of the Customs Union of Belarus, Kazakhstan and the Russian Federation will be completed.

From 1 January 2010 the practical implementation of the Customs Union of Belarus, Kazakhstan and the Russian Federation was started.

Customs union supposes in addition to free trade the application of a single trade policy towards third countries and the elimination of internal customs borders.

This will be negotiated with third countries, including CIS countries, in order to standardize trade regimes operating in three states today.

Furthermore, in accordance with the decisions of the Heads of State from January 1, 2010 the authority to conduct a unified customs tariff and the use of non-tariff measures were transferred to a supranational authority (Commission of the Customs Union) which will be distributed in three states and formed on the basis of proposals from the parties.

From July 1, 2010 customs clearance at the internal customs borders will be abolished, and before July 1, 2011 the customs control will be cancelled. Thus, by removing administrative barriers and ensuring free movement of goods between our two countries a single customs territory of the customs union will be created with the domestic market capacity of about 165 million people.

Expanding the domestic market will be a major incentive to attract foreign investment, new business development, co-operation of complementary businesses, and elimination of administrative barriers and also it will create conditions for joint ventures and the growth of mutual investments.

2. Until 2012 the Common Economic Space of Belarus, Kazakhstan and the Russian Federation will have been created.

Formation of the Common Economic Space provides for equal access to the internal infrastructure of participating states which is especially important for Kazakhstan as a country that has not access to the sea.

Also it is provides for the establishment of uniform conditions of the services market functioning, free movement of labour and capital, the unified rules of competition, industrial subsidy assistance, common measures to support agriculture, implementation of a unified economic policy, tariff policy, unified public procurement rules.

For this purposes there relevant international documents will be developed that create the legal framework of the Common Economic Space.

3. Proposals on the conclusion of preferential trade agreements with third countries and associations of the countries will be initiated.

Negotiations will be held on conclusion of free trade agreements with Turkmenistan, the participating States of the European Free Trade Association (Switzerland, Liechtenstein, Norway and Iceland), Serbia and Montenegro, on preferential trade with Egypt, Jordan, Israel, Afghanistan, the Gulf countries (Kingdom of Saudi Arabia, Kuwait, Bahrain, Oman, Qatar, UAE) and other countries taking into account membership in the Customs Union.

4. Completion of negotiations and accession to the World Trade Organisation (hereinafter - the WTO).

Full membership of Kazakhstan in the WTO, as well as compliance with rules and regulations of the international organisations to ensure access of Kazakh goods to the markets of WTO member countries on a non-discriminatory basis, and also it will allow effectively protect the interests of Kazakhstani producers in third country markets through access to international arbitration.

WTO membership will increase the inflow of foreign direct investments due to the predictability and transparency of foreign policy, and eliminate trade barriers and discriminatory treatment in trade proceedings to the Kazakhstani goods.

5. Promotion of economic interests and strategic removal of trade and non-trade barriers in foreign markets.

In establishing the trade restrictions against Kazakhstan's goods the initiation mechanism and procedures for resolving international trade disputes will be used, or the application of retaliatory measures in accordance with international agreements.

6. Application of mechanisms of customs-tariff and non-tariff regulation.

On an ongoing basis the study work on existing production and plans will be made, on results of this work proposals will be developed for increase of customs duties on goods which produced in Kazakhstan, as well as for reduce of customs duties on goods for which there is interest in imports from foreign countries.

Also on the basis of analysis of the impact of business environment changes on the domestic market in the world market proposals will be developed for the application of other measures of customs tariff and non-tariff regulation of foreign trade on commodities.

In addition, in order to provide domestic enterprises with the necessary raw materials, as well as to exclude the appearance of a critical shortage of goods in the domestic market the appropriate proposals to restrict exports will be developed.

The proposals will be forwarded for review of the Customs Union Commission.

Promotion of development and promotion of exports of Kazakhstan production of non-raw sectors of the economy

1. Provision of informational and expert support to exporters.

To enter the markets of the target of interest with specific Kazakh non-raw sector of the economy there will be regular reviews of country, industry/products of the countries of trading partners, the analysis of trends in world trade (Trade Performance Index (TPI), publishing of an annual directory of export production of Kazakhstan, a series of guidance materials "To assist the exporter", guides "Export Guide" and publishing of information about Kazakhstan's enterprises and products in the international specialized catalogues.

To develop new export niches activities will be implemented to develop and promote trademarks of concrete products of manufacturing sector of the economy to external markets.

Study programs for specialists training on management of export activities will be implemented; visits to the leading foreign export industries will be organized for the purpose of application of best practices on the enterprises of Kazakhstan.

For the formation of the ideology of "export orientation" the propaganda oriented on export will be carried out with involvement of the private and public sectors.

2. Financial support for export trading operations.

Since 2010, exporters of goods (services) of non-raw sector will be provided with export grants in the form of reimbursement of expenses for activities related to marketing researches; branding of national products abroad, the production of new types of goods to foreign markets, advanced training of specialists, the opening of representative offices abroad, the creation of Internet resources and manufacturing of printed material for distribution abroad.

For the implementation of financial support for trade export operations of representatives of small and medium business of non-raw sector of the economy which includes the insurance of export and credit financing of export trading operations, as well as a number of related services the export credit agency (ECA) will be established.

3. Promotion to the exporters in access to distribution channels to target markets.

The creation of the following entities is provided:

international network through the use of resources of diplomatic missions abroad, trade missions, the Institute of honorary consuls, as well as elaboration of issues on determining staff units in the country's diplomatic missions abroad in the diplomatic rank of Minister-Counselor, appointed on the proposal of the Ministry of Industry and New Technologies of the Republic of Kazakhstan and accountable to it, and attaches in the embassies of Kazakhstan in the individual countries to create a institution of representatives on issues of investment, trade and technology. The ranking score for assessment of their performance will be implemented;

specialized state trading company to guarantee the promotion of production of domestic producers and exporters to facilitate access to distribution channels of goods with high added value;

specialized structure for the development of export packing as one of the main elements of the system of export support on examples of international best practice.

In order to direct comprehensive assistance to Kazakh producers in the exporting country, from 2010 to 2014 the network of agencies abroad of the National Organisation for Development and Promotion of Export (JSC "Corporation for Development and Promotion of Export "KAZNEX" of the Ministry of Industry and New Technologies of

Kazakhstan, which is the operator of development system and export promotion of non-raw sectors of the economy) will be opened.

In order to develop a joint strategy and coordination of actions of state agencies on issues of assistance to development and promotion of export, as well as removal of administrative and bureaucratic measures that impede the development and promotion of exports and ensure the needs of the business the work of the Council of exporters under the Ministry of Industry and New Technologies of the Republic of Kazakhstan, intergovernmental Commissions on Trade-Economic, Scientific-Technical Cooperation (IGC) in protecting the interests and problem solving of Kazakh exporters will be activated.

In order to ensure effective action by the state for Kazakh exporters in 2010 the integration of Kazakhstan to the number of suppliers will be carried out in the framework of humanitarian assistance.

Realization of the Kazakhstan's potential as an international trading hub between Europe, Russia, China and Central Asia through the forming of modern transport and logistics infrastructure by stimulation of creation of transport-logistics centers.

To facilitate direct contacts between domestic producers and potential foreign buyers, the exchange of information on quality and price index of production, discussion of the details of export contracts regular trade missions of Kazakhstan abroad, meeting in the format "Buyers and Sellers" in different regions of Kazakhstan, the activities of the target promotion of specific products will be organized.

Enhancement of the efficiency of internal trade

In order to form a transparent pricing system taking into account international practice a modern stock exchange trading infrastructure will be created.

In order to develop modern forms of trade the large retail formats and retail chains will be developed. To reduce costs in the chain "producer – consumer" the trade-purchasing cooperation system will be established through concessional financing of the purchase of the processing, packaging and commercial equipment, and through association of small commercial formats (trading houses such as hypermarkets, supermarkets, discounters, etc.) under a single brand and uniform assortment and pricing policies.

In order to develop remote access to the products of domestic producers the cashless electronic payment system in the Internet will be set up with suitable modules for integration to online shops, incorporating all the second-tier banks into a single processing center (like Webmoney, Paypal), as well as a unified republican electronic trading site.

For the development of remote delivery of goods, an increase in retail turnover and improvement of services to consumers the post-logistics centers in the cities of Astana and Aktobe will be created and also functioning of sorting centers under them that provide optimal delivery scheme (according to international standards).

### **Improvement of the legislation**

1. Bringing of the national legislation into accordance with WTO requirements, as well as the international legal base to be concluded within the framework of integration associations.
2. Introduction of changes and amendments to the Law of the Republic of Kazakhstan "On regulation of commercial activities" in part of fixing the legal status of the National Organisation for Development and Promotion of Export and tools of economic incentives for exports, as well as the regulation of trade structure.
3. Improvement of legislation in the field of electronic commerce.

### **2.14 The instruments of financial support of the Program**

#### **Brief analysis of the current situation**

The global financial crisis has suspended the funding of the domestic economy by foreign credit funds, and therefore the access to external funding for domestic financial institutions turn out to be closed or restricted. Second-tier banks have no "long-term money" to finance long-and medium-term investment projects included in the Program. In this connection there is a need to increase the volumes and instruments of financing of the Program with the participation of development institutions.

#### **Main tasks**

Increase of investments in priority sectors of the economy by expanding the availability of instruments and sources of financing.

#### **Target codes**

Attraction of investments to the fixed capital of priority sectors in the planning period in the amount of at least 6 280 billion tenge.

#### **Strategy of actions**

It is provided the formation of a unified system of instruments, operators and agents of financial support for domestic enterprises and investment projects at national and regional level. In this case, market mechanisms stimulating activation of investment activity in the priority sectors of the economy will be laid into the basis of state financial support.

The main emphasis of policy of state instruments application will be made for mobilizing private financial resources and the focused credit activity of second-tier banks and other financial institutions for the aims of industrialization.

System of financial support will come to increase of financial resources availability for domestic manufacturers, offering favorable financing conditions to meet the needs of investment projects, their index of payback and profitability.

Government financial resources will be directed through public and private operators. The following entities refer to the operators of the public sector:

Samruk-Kazyna, "National managing holding "KazAgro" JSC (hereinafter - KazAgro), BRK, "BRK-Leasing" JSC, "Investment Fund of Kazakhstan" JSC, "National Innovation Fund" JSC, "Kazyna Capital Management" JSC, Kazagrofinance, "Agrarian Credit Corporation" JSC, "Food contract corporation" JSC, DAMU, socio-entrepreneurial corporations, "Corporation for Promotion of Export "KAZNEX" JSC, "State Insurance Corporation for insurance of export loans and investments" JSC, and other organisations.

The following entities refer to the private operators: second tier banks, international development institutions, leasing companies, investment companies and other sponsoring organisations. In this case the criteria for selection of private operators will be transparent and open to the public and will be required to provide equal (non-discriminatory) access to all potential participants in the projects implementation. The criteria and procedures will be determined by the Government.

Functioning of operators and instruments will be organized on the principles of rational and efficient use of financial resources, offer of a wide range of sources and instruments of support and sharing of risks of government with the private sector.

Operators of the public sector will establish mechanisms for providing financial support, stable operation, based on the following principles:

- balance of provision of financial support;
- timeliness of decision making on the financing and provision of necessary government support measures;
- specialization of government agencies in certain operations and activities;
- cooperation between public and private financial institutions in financing and integration of various instruments in a particular investment project.

Activities of operators of the public sector will be oriented on achievement of maximum effectiveness of Program's goals and tasks. In accordance with the amount of required financing the production capacity and number of employees of organisations will be increased or reduced, the internal business processes will be optimized, examination procedures will be brought under regulation, etc.

Investment policy and priorities of the operators of the public sector will be concentrated and focused on the needs of industrial development.

The operators of the program will pursue a policy of investing in projects that contribute to a qualitative change in the structure of the economy and its sustainable growth. The main criteria for funding projects are:

- compliance with the priorities of the Program;
- necessarily own participation in the project;
- to be export-oriented;
- production of competitive goods and services. In addition, products must meet the similar international standards and be competitive on price;
- manufacture of products with high added value, while priority will be given to projects that contain the most added value, or items that give the opportunity to enter the world markets;
- improving the labour productivity;
- reduction of energy consumption;
- increase of efficient use of resources;
- production contributing to the development of local content, the involvement of small and medium-sized businesses;
- development and introduction of innovations and advanced technologies.

The system of state financial support will contribute to the creation of market mechanisms to encourage investment activity, utilizing the following key instruments:

- lending;
- lease financing;
- shared financing;
- subsidization of fee rate on loans;
- provision of corporate guarantees (sureties);
- service support;

provision of grants for exporters;  
pre-export financing - trade financing and insurance of export operations of exporters' enterprises;  
long-term contracts to purchase products;  
grant financing for research and development activities;  
conditional obligations of the state in the form of state guarantees and state surety commitment.

State financial support will be provided in accordance with the priorities of the Program taking into account the following conditions:

fee rates - measures will be taken to reduce fee rates to the level below market rates, taking into account the industry average profitability and payback of investments in the industry;

time – the emphasis will be made on lengthening the term of financing to achieve the appropriate payback on projects and repayment of funds;

financing criteria - will be developed in accordance with the strategic goals and objectives of the Program and other program documents;

limits of financing - will be determined taking into account the branch orientation and size of business entities (large, medium and small businesses).

To finance the companies and the capital investment projects, determinations of the share of government participation in projects, operators and support instruments, as well as the involvement of the private financial sector the corresponding budgetary support programs will be formed at the national and regional level.

The target values to be achieved, the algorithm of monitoring of execution, as well as methods of evaluating the effectiveness of these budget projects and mechanisms for monitoring the proper use of allocated financial resources will be fixed.

### **3. Formation of the centers of economic growth on the basis of rational territorial organisation of economic potential** **Main task**

Provision of concentration of the economy in the territories that have competitive advantages for industrial development with the formation of growth poles, consolidating economic activity in the country, acting as “locomotives” for the rest territory of the country and ensuring the country's integration with regional and global markets.

#### **Strategy of actions**

The territorial aspect of the policy of industrialization of the Republic of Kazakhstan up to 2015 will be implemented in two interrelated ways.

The first way - is placing of production of priority sectors in the regions in the context of ensuring their balanced development.

The second one - is the creation of zones of advanced growth on the basis of country's mega-cities under formation and adjacent areas.

During the period under review the industrial modernization will be determined mainly by the development of the traditional export-oriented branches of economy, as well as related branches that oriented on demand in these sectors on the basis of intensification of production factors.

Placing of traditional production and production oriented on domestic demand of sectors will be implemented in the existing centers of localization in relation to sources of raw materials, electric energy and transport infrastructure, or close to markets outlets.

Development of new export-oriented industries in the area of agricultural complex, light industry and tourism, considering the requirements to qualification of workers in these sectors and the relatively low mobility of labour force of the country will be implemented in the areas that are traditional for these industries with a focus on markets of large cities or in the labour-redundant regions.

The prospects of long-term and quality economic growth will be determined by the concentration of new high-tech, innovative productions in the formed agglomerations of Astana and Almaty and territories related to them that have necessary scientific, technical and educational potential and communications infrastructure.

Agglomeration effect contained in saving from the scale, mobility of labour and capital, increase of returns from factors of production, in the aggregate will allow providing these cities with the advanced growth of the economy with multiplication of new opportunities for other regions of the country.

The instrument for the optimal allocation of the production potential of the country will be the Scheme of rational location of production capacity – the regularly updated instrument allowing coordination of actions of business, industry and territorial bodies of the state.

Meanwhile the Scheme of rational location of production capacity will become the part of the Expected scheme for spatial development of Kazakhstan, which is the basis for the development of the General Scheme of organisation of the territory of the Republic of Kazakhstan, as well as other city planning documents (inter-regional schemes of territorial development, comprehensive schemes of urban planning of the area, the general plans of populated localities, drafts of detailed plan).

### **3.1 Territorial organisation of production potential in frame of priority sectors of economy**

#### **1. “Traditional industries” (oil and gas, mining-metallurgical, chemical, nuclear industry).**

The determining factor for location of new productions of traditional export-oriented sectors of the economy of Kazakhstan will be the proximity to sources of raw materials, energy and transport infrastructure.

Major oil and gas companies are located in the western regions and the Kyzylorda oblast that are areas of location of mineral resources base and oil and gas production. Perspective location of new productions will be associated with the development of deposits of Kazakhstan's sector of the Caspian Sea.

Location of new productions related to deep processing of hydrocarbon raw materials (production of bitumen in the city of Aktau, polyethylene and polypropylene on the base of integrated gas and chemical complex in the Atyrau oblast) will be focus on sources of raw materials and reconstruction of three oil refineries (Atyrau, Pavlodar, Shymkent refineries) - on existing infrastructure and markets outlets.

Companies of mining and metallurgical complex in future will be predominantly located in the northwestern, central and northeastern parts of the country with the centers of industry specialization in the cities of Karaganda, Kostanay, Aktobe, Pavlodar, Ust-Kamenogorsk, Zhezkazgan, near the sources of raw materials and cheap electricity, existing manufacturing facilities, infrastructure and qualified labour forces.

Location of new productions and upgrading of existing productions of higher processing in the metallurgy and metal working will be bound to:

existing enterprises of primary processing - production of steel (Karaganda oblast), titanium ingots (East Kazakhstan oblast), ferrochromium (Aktobe oblast), the production of rails and mill products (Pavlodar oblast), ferrosilicomanganese (Zhambyl oblast), production of special steels (Karaganda and Kostanay oblasts).

sources of cheap electricity - the production of aluminum (Pavlodar oblast), cathode copper (East Kazakhstan oblast).

Location of chemical industry enterprises with the initial processing associated with binding to raw material sources (Zhambyl, Aktobe, Atyrau and South-Kazakhstan oblast - nitrogen, phosphorus, potassium, complex mineral fertilizers), higher processing is linked to existing production capacities, to labour resources with necessary skills, scientific and technical basis and demand from the population, industrial enterprises (special chemicals and consumer chemicals - Pavlodar, Karaganda, East-Kazakhstan oblast and Almaty city; caustic soda - Pavlodar city, production of sulfuric acid - Akmola, Kyzylorda and Zhambyl oblast) production of rubber products - Karaganda oblast.

Centers of industry specialization: Taraz, Shymkent, Aktobe and Almaty.

Location of enterprises of nuclear industry as before can be affected by factors such as availability of raw material sources, production and technical and scientific base, as well as historically formed territorial localization of industry.

Taking into account the specificity of the nuclear industry, its development will continue to be implemented in traditional regions of extraction of uranium raw material - in southern Kazakhstan, in the Akmola oblast; the processing - in Akmola (Stepnogorsk mining and chemical combine) and East Kazakhstan (Ulbinskiy metallurgical plant) oblasts.

Centers of industry specialization: Ust-Kamenogorsk, Stepnogorsk.

In general, the released surplus labour resources of material sectors of the economy in connection with intensification of production will be reallocated to the new high-tech enterprises focused on deep reprocessing of raw materials.

#### **2. Industries based on domestic demand (mechanical engineering, pharmaceuticals, defense industry, building industry).**

For the development of industries based on domestic demand, the dominant factor will be the existence of demand, production-infrastructure and technological base, including the, idle industrial areas of the city but that need to be restored, with supplied engineering-transport infrastructure, low transportation costs for delivery of products, components and equipment.

Location of new productions of this group of industries will be made near the enterprises of traditional sectors and in the cities of Almaty and Astana.

New enterprises in the machinery according to the profile will be located:

agricultural engineering - in the regions with the highest activity of agriculture - the northern and eastern regions (the project for the production of agricultural machinery in Kostanay, manufacture of tractors “Belarus” in Semey city);

Oil and gas engineering - in the western region for the purpose of technological support of a rapidly developing oil and gas production with focus on demand for oil and gas production and processing enterprises in the specialized equipment, expandable materials and constituent parts (projects of oil and gas mechanic engineering in Atyrau and Uralsk) and existing manufacturing facilities – in Almaty, North Kazakhstan and East Kazakhstan oblasts;



mining mechanic engineering - in the central and eastern regions, with a focus on the demand of large companies of mining and smelting complex (projects in East Kazakhstan, Pavlodar and Karaganda oblasts);

electrical engineering - in the southern and central regions, with a focus on the existing production basis (projects in South Kazakhstan, Almaty and Karaganda oblasts);

transport mechanic engineering - in northern, central and eastern regions, with a focus on the availability of skilled labour resources, the production of constituent parts and spare parts of related industries (production of road-building equipment and buses in Kostanay, locomotive-assembly plant in Astana, assembly of motor cars in Ust-Kamenogorsk, assembly of electric locomotives in Atbasar city of Akmola oblast, freight wagons in Petropavlovsk and Ekibastuz);

defense mechanic engineering will be based on existing factory capacity of mechanic engineering through the state order mechanism.

Centers of industry specialization: Astana, Almaty, Kostanay, Semey, Uralsk, Ust-Kamenogorsk, Petropavlovsk.

The enterprises of pharmaceutical industry will be located in relation to a previously created scientific-industrial base (South Kazakhstan and Almaty), as well as to the availability of educational infrastructure, skilled workforce (Aktobe, East Kazakhstan, Karaganda oblast and Almaty and Astana). The largest of these is the construction of a pharmaceutical factory in Astana.

Centers of industry specialization: Almaty, Shymkent, Astana, Karaganda.

Location of new production of building materials industry will be tied to local sources of raw materials, availability of local markets outlets, the established industrial and technological base.

Realization of investment projects for construction and modernization of cement plants, as well as production of ceramics, glass, gypsum blocks, light weight building panels, dry building mixes will be focused on raw materials base and market outlet (Akmola oblast, Atyrau oblast, Zhambyl oblast, West Kazakhstan oblast, Mangistau oblast, Karaganda oblast, East-Kazakhstan oblast, Aktobe oblast, Kyzylorda oblast, South Kazakhstan oblast).

The mills of the industrial construction will be oriented to market outlets (the city of Astana, Almaty, Shymkent, Aktobe).

Centers of industrial specialization: Almaty, Astana, Shymkent, Ust-Kamenogorsk, Atyrau.

3. Industries that have export potential (agro-industrial complex, light industry, tourism). The agricultural industry will be developed in the center, north, south and east of the country.

Location of processing enterprises of agro-industrial complex and fisheries will be targeted both to sources of raw materials and market outlets of big cities.

Priority will be the forming a food zones around Astana and Almaty.

The main production of agro-industrial complex aimed at the deep reprocessing of grain and meat, mainly will be located in the northern regions.

Centers of industry specialization: Petropavlovsk, Kostanay, Kokshetau, Shymkent, Taraz, Taldykorgan, Almaty, Kyzyl-Orda, Atyrau.

Light industry enterprises will be placed in Almaty, Shymkent, Semey in conjunction with the established industrial-technological base, to the presence of raw materials and labour resources, as well as to presenting and prospective domestic and global demand.

Centers of industry specialization: Shymkent, Taldykorgan, Semey.

Tourism activities will be formed near major recreational areas, cultural-historical and business centers of the country with a developed transport-communication infrastructure.

4. Sectors of the economy of the future (information and communication technology, biotechnology, alternative power generation sector, space activities)

Location of productions of knowledge-intensive sectors of the economy of the future and formation of centers of innovation systems will be conducted in the cities of Astana and Almaty having educational-innovative and business-technological potential, highly qualified specialists and suppliers of specialized services.

The base for development of industries in the area of information technology for the domestic and external markets and integrating the potential of processing centers of leading foreign companies will be FEZ "Information Technology Park "Alatau". Assembly Integration and Testing complex of spacecrafts will be placed in the city of Astana.

Innovations in the biotechnology area will be developed on the basis of previously established scientific-implementation base, and medical cluster in the cities of Astana and Almaty, and in the area of alternative (renewable) sources of energy and new materials - based on Nazarbayev University in Astana, the Kazakh-British Technical University and KazNTU named after K.I. Satpayev in Almaty.

Location of infrastructure facilities

Location of energy production enterprises and construction of main electrical supply network will be determined by perspective demand for electric energy, and budgeted balance sheet of electric energy until 2020, developed taking into account the needs of industrialization, as well as proximity to raw material sources.

To take the issue off the table concerning the energy shortage in West Kazakhstan, it is supposed to activate Uralsk gas turbine power plant and expansion of the Atyrau thermal power plant in the southern regions of the country - construction by 2011 Moinak hydroelectric station, Akshabulak gas turbine power plant, by 2013 - two power

generating units of the Balkhash thermal power plant and power delivery of these objects through the lowering station 500 kV Alma.

In the northern energy bands taking into account the additional requirements and the availability of cheap coal of Ekibastuz basin upgrading of Aksu and Ekibastuz state district power station and excess volume of electric energy production will be reallocated to the Southern and Western energy bands experiencing shortages of electricity.

The formation and location of transport-communication infrastructure will be focused on solution of problems of provision of access to external markets and connectivity of internal markets.

At that the formation of a developed transport and communications infrastructure will become strategically important in the west and south of the country where there is its deficit.

Thus, the implementation of projects to develop transport and energy infrastructure will add to the spatial development more dynamic character and reduce the risks associated with energy supply.

### **3.2 Formation of centers of economic growth**

In accordance with the international experience diversified big cities become the centers of economic growth generating competitive advantages in a multiplicative scale based on the effect of agglomeration. In Kazakhstan the cities of Astana and Almaty located on the main routes of trade flows possess a similar potential. They have become the most important centers in the Eurasian system of commodity, financial, technological and cultural exchanges.

For this purposes in the cities of Astana and Almaty and related territory of Almaty oblast and Akmola oblast the formation of multifunctional zones will be stimulated:

- high-tech industries focused on technology transfer, processing centers of the leading foreign companies (joint ventures, branches);

- innovation development (ITP “Alatau” in Almaty, Nazarbayev University in Astana);

- nationwide and in perspective the Central Asian distribution (trade and services);

- transportation-logistics and logistics-processing services with formation in perspective of the largest in Central Asia trade-logistics centers (by the example of Singapore, Hong Kong), air transit centers (“hubs”);

- tourism-recreation specialization - on the basis of large concentrations of recreational resources in adjacent areas of Almaty and Akmola oblasts, as well as the entertainment industry (e.g., establishment of centers for gambling business in the city Kapchagay, Shuchinsk-Borovoe zone);

- sports specialization (the transformation of Almaty city into an international center for winter sports);

- medical and educational specialization (formation in the cities of Almaty and Astana of the national centers and subsequently at the regional level);

- organisation and conduct of business (promotion of the dislocation in the cities of Astana and Almaty of representative offices and offices of international organisations, branches of the largest transnational companies);

- Food specialization (“food zones” of megalopolises).

Almaty agglomeration in perspective as growth center will include the satellite towns in Kapshagay direction.

Development of Astana as the growth pole must be transformed to the formation of a network zone of growth through the formation of development corridors and subsequent involvement in perspective of Karaganda agglomeration and Shuchinsk-Borovoe resort zone.

Accelerated development of the cities of Astana and Almaty provided mainly by the concentration of service functions, will have a multiplier effect for the sectors oriented to domestic demand.

Support to the development of the cities of Astana and Almaty in order to form in them the centers of economic growth will be implemented through various mechanisms to stimulate economic activity and investment attractiveness including through state investments in the development of providing infrastructures.

## **4. Provision of effective interaction of the state and business in the development of priority sectors of the economy**

Within the Program implementation the state's role will be to create a system of institutions, instruments, mechanisms of support for priority sectors of the economy and effective interaction with business.

Coordination of implementation of the Program at national level will be carried out by the State Commission on the questions of Modernization of Economy of the Republic of Kazakhstan (hereinafter - State Commission) and the Republican control center for accelerated industrial and innovative development, headed by the Prime Minister – the General coordination; the Foreign Investors Council under the President of the Republic of Kazakhstan (hereinafter - FIC) - the interaction with foreign investors, the Business Council under the President of the Republic of Kazakhstan - interaction with local investors, the Coordination Council for accelerated industrial development under the Government of the Republic of Kazakhstan (hereinafter - the Coordination Council) and sectoral working groups created under it on development of priority sectors of the economy (hereinafter - sectoral working groups) - issues of direct implementation

of industrial policy, the Council of exporters under the Ministry of Industry and New Technologies of the Republic of Kazakhstan (hereinafter - the Council of exporters) - interaction with domestic exporters.

At the regional level coordination of the implementation of the Program will be carried out by the regional coordinating councils and regional control centers for accelerated industrial and innovative development, headed by the akims of corresponding regions.

Both at the national and regional levels the consideration of business interests will be carried out by the representative of business organisations, enterprises and independent experts in the above consultative and advisory bodies.

State bodies providing interaction between central and local executive bodies to implement the Program will be the Ministry of Industry and New Technologies, Economic Development and Trade.

In order to implement the Program the sectoral programs and master plans will be developed which will have specified sectoral system and selective support measures for priority sectors (sub-sectors and segments), and within the framework of elaboration of territory development programs (hereinafter - the regional programs) - regional support measures.

Support for specific projects envisaged for the implementation of sectoral and regional programs will be implemented by providing a combined package of selective measures of financial and non-financial support within implementation of the regularly updated maps of industrialization.

Summary map of the industrialization of Kazakhstan for 2010-2014 will consist of national and regional maps of industrialization with certain sources of funding, schedules and plans for their implementation.

Infrastructural support measures will be implemented through Schemes of rational allocation of production capacities which is constantly updated instrument for solving problems of infrastructure and resource provision of projects, rational distribution of mineral resources and labour resources, market outlets.

Samruk-Kazyna, KazAgro will play the major role in implementing the Program, at the regional level - social, business corporations, as well as specialized service organisations.

#### **4.1 Scheme and instruments of implementation of Program at the republican level**

##### **4.1.1 Role of system-forming large private companies and entities of quasi-public sector in implementation of the Program**

Initiators of promotion of large-scale projects will be Samruk-Kazyna, KazAgro, large system-forming companies of fuel-energy and metallurgical sectors of the economy, as well as strategic foreign investors, their role in the stimulation of new business opportunities for small and medium businesses will strengthen.

In the framework of the Program the system-forming large companies and Samruk-Kazyna, KazAgro stipulate the following:

- execution by Samruk-Kazyna, KazAgro of role of “operators” in the implementation of individual sectoral policies;
- implementation of major investment projects;
- increase of local content in the procurement of goods and services;
- participation in investment projects of small and medium enterprises in the development of local content;
- delivery of part of products on the domestic market with the purpose of organisation of productions of higher processing by small and medium enterprises;
- formation around the newly created large-scale productions of the cluster-network structures of small and medium-sized enterprises;
- transfer of a part of non-core business functions for small and medium-sized enterprises;
- stimulation of policy of non-core assets.

In accordance with the role of Samruk-Kazyna and its branch organisations in the implementation of industrialization policy its assets will be regrouped and consolidated in line with their sectoral belonging and functional characteristics:

###### **Industry Group:**

Maintaining and developing the extractive sector of Kazakhstan's economy and the transition of primary productions to higher processing, stimulating development of reprocessing and associated manufacturing sector.

###### **Infrastructure Group:**

Development of strategic transport, communicational and energy infrastructure, ensuring the processes of industrialization.

###### **Financial group:**

Securing of financing and implementation of investment projects in priority sectors of the economy. Assistance in attracting private investment from domestic sources and foreign investments in the economy.

The main instrument to support major investment projects will be to provide concessional financing of “Development Bank of Kazakhstan” JSC as well as equity participation in projects of Samruk-Kazyna and its branch organisations.

KazAgro’s role will be to stimulate the development of agriculture by expanding the instruments of financial and non-financial support.

For Samruk-Kazyna, KazAgro the target values for attracting investments into the economy will be set.

Investment policy of national managing holdings, national holdings and national companies, the attraction and allocation of financial resources will be coordinated with the policy of industrialization.

For these purposes it is stipulated the review and approval by the Republican Budget Commission of development plans projects and forecasting parameters of budgets of national managing holdings, national holdings and national companies with state participation, taking into account the forecast of socio-economic development and budgetary parameters for the corresponding period.

In the process a transparent reporting on debts of national managing holdings, national holdings and national companies will be put to avoid concentration of risks in a quasi-public sector and “overheating” because of the debt load including by limiting the level of their borrowing.

To improve the effectiveness of control over observance, the declared indicators of local content in procurements of national managing holdings, national holding and national companies, as well as to stimulate improvement in these indicators on a monthly basis the checking of calculations of share of local content in the procurements will be implemented.

On the basis of such checks the key performance indicators (KPI) of national managing holdings, national holdings and holding companies will be deduced on achievement of plan figures of local content in the procurement at year-end.

Actions of national managing holdings, national holdings and national companies will also be concentrated on the following:

- integrations of business activity, support of cooperation and promotion of exports;
- service support of enterprises including services for technology transfer, support of innovation, consulting, engineering, training and personnel development.

In order to avoid duplication and the formation of a complex infrastructure of support of entrepreneurship the activities of the specialized service organisations will be structured such as “National Innovation Fund” JSC, “Center for Engineering and Technology Transfer” JSC, “Corporation of development and support of export” JSC, DAMU, “State Insurance Corporation on Insurance of Export Credits and Investments” JSC, “Center for Trade Policy Development” JSC, “Kazakhstan Contract Corporation” JSC, “Kazagromarketing” JSC, “KazAgroInnovation” JSC, “Center of the transfer and commercialization of technologies” JSC under the “KazAgroInnovation” JSC with a focus on the needs of business.

#### **4.1.2 Mechanisms of implementation of the Program at the republican level**

Sectoral support measures: sectoral programs and master plans

For the purposes of implementation of the Programs and coordination of actions of all participants of the Program 13 sectoral programs will be developed determining the major development of sectors, systemic measures of state support including scientific and technological support of the industries development, training of qualified labour resources and others, in which measures to support specific projects in this sector will be determined.

Industry programs will be approved by decisions of the Government of Kazakhstan after discussion at the meetings of the State Commission.

Among 46 priority sub-sectors on 23 ones requiring a more detailed analysis the master plans will be developed in which the specific mechanisms for the implementation will be stipulated on institutional, infrastructural and investment aspects, the support measures on these sub-sectors and specific projects in this sub-sector will be concretized.

Project support measures

Program of accelerated modernization of existing productions and creation of new productions – “Performance 2020”

The program’s aim is to increase the productivity of existing enterprises and stimulation of investments.

Instruments of implementation of the program:

- Subsidizing of fee rate on leasing and loan to purchase fixed assets;
- innovation grants;

- introduction into production of new products by the design offices;

- introduction of management technologies ensuring optimization of production processes.

Participants of the program can be the enterprises operating in the priority sectors of the economy and contributing their own funds which activities are aimed at:

- increase of productivity;

- to be export-oriented;

growth of investments to fixed assets;  
growth of innovation activity of enterprises.

Program operators will be the legal entities defined by the Government of the Republic of Kazakhstan.

Subsidization will be implemented both on new loans and on already received loans (lease financing).

The applicant's own participation in the project should be at least 20% of total investments.

The effective fee rate on loans may not exceed the threshold of market fee rate determined by the MEDT 2 times a year.

It is provided a progressive scale of subsidization of percentage rate on loans depending on labour productivity gains.

Implementation arrangement

The Program administrator will be the Ministry of Industry and New Technologies of the Republic of Kazakhstan.

Financial support of subsidizing of percentage rate on loans, the formation of lists of borrowers to obtain subsidization and monitoring of the target effective and timely use of funds will be made by financial agents identified by the Government of the Republic of Kazakhstan.

The cost of agency services will be reimbursed from the budget.

Mechanism, procedure and conditions for subsidization of fee rates will be determined by the Government.

Between the Ministry of Industry and New Technologies, Operators and financial agents a Grant Agreement will be signed.

Innovation grants will be made available to innovators, namely to enterprises, inventors, rationalizers, scientists and scientific organisations for the implementation of measures to improve the efficiency of technological and other processes used in the economy, by a specialized organisation in the field of technological development in order that approved by the Government of the Republic of Kazakhstan.

Services of design offices will be to acquire the technical and design documentation, adaptation and implementation of technology in enterprises, development by them of production of new products in demand in the market.

The introduction of management technologies ensuring optimization of production processes will be carried out by legal entities identified by the Government of the Republic of Kazakhstan on conditions of co-financing of at least 50% of the applicant's project and on competitive basis.

Services of companies-operators will be reimbursed from the budget.

Program of development and promotion of exports – “Exports 2020”

This program will be focused on promotion of domestic companies to foreign markets and its main directions of implementation will include: grants for exporters, trade financing and insurance; service support of export;

Trade financing and insurance of export trade operations, as well as a number of related services for small and medium enterprises of non-raw sector of the economy will be carried-out through the export-credit agency.

Services support of export will consist in:

provision of information, expert services;

provision to producers of marketing-analytical information on export markets;

publication of instruction materials to assist exporters;

promotion of trademarks of particular products;

organisation of trade missions of Kazakhstan abroad;

creating a network of overseas representative offices of the Operator.

Grants for exporters provide 50% reimbursement of expenses of exporters for activities related to promotion of their products for export, including:

brand building (branding) and promotion of specific products (services) in the external market;

procedures for registration and certification of trademarks abroad;

training of employees of the company engaged in the field of export management;

representation/representative/show room/office abroad during the first three years of activity;

catalogues of export products of industry, market segments and regions;

involvement of the franchise;

creation and start of a Web site of the exporter in English language;

marketing researches on entering a particular market with a specific type of product (service).

Services support of export and provision of grants to exporters will be provided to potential and existing exporters of priority non-raw sectors of the economy through a service institution defined by the Government.

Program administrator will be the Ministry of Industry and New Technologies of the Republic of Kazakhstan.

Operators of the program will be the legal entities defined by the Government.

Implementation of the program at the regional level.

Program administrators at the regional level will be the local executive bodies which in order to implement this program will be provided with funds in local budgets.

Measures on service support of exporters will be carried out with interaction and coordination with the service institution identified by the Government.

Basic conditions for trade financing and insurance, provision of service support to export and the provision of grants to exporters, the mechanisms of allocation of funds, the target values for growth of export and productivity in non-raw sectors will be determined by the Government.

Program of support and stimulation of direct foreign investments – “Investor – 2020”

This program will be focused on creation of attractive environment for direct investments in non-raw export-oriented and high-tech production with application of the following instruments:

- investment agreements;
- service support of investments;
- increase of investment attractiveness of special economic and industrial zones.

Investment agreements with investors investing within the framework of priority sectors of the Program will be concluded on the basis of Government decisions on the recommendations of Foreign Investment Commission under the leadership of Prime Minister of the Republic of Kazakhstan in order to provide government support measures.

Provision of services to foreign investors and representatives of Kazakhstan's business will be done through a specialized service organisation established by the Government with application of the following instruments:

- information-presentation measures to promote investment opportunities in Kazakhstan (business forums, road shows, printed materials, information reports in international mass-media);
- information-analytical activities (accounting function, database, researches);
- measures to support foreign investors;
- development and support of the national investment on-line website and Investment atlas of the country.

Increase of investment attractiveness of special economic and industrial zones will be implemented through:

- tax incentives;
- simplified mechanism for import of foreign labour;
- rendering of services on the “one-stop-shop” principle;
- regime of free customs zone in the FEZ.

Selection of projects for FEZ and IZ will be carried out taking into account the priorities of the Program, production output of higher processing, export-orientedness, high level of labour productivity, as well as the number of job places created.

Program Administrator - the Ministry of Industry and New technologies of the Republic of Kazakhstan.

Operator of the program will be the Investment Committee of the Ministry of Industry and New Technologies of the Republic of Kazakhstan.

Participants can be the legal entities of the Republic of Kazakhstan investing in priority sectors of the economy.

#### **The Republican map of industrialization**

The Republican map of industrialization is the main instrument for implementing investment projects stipulated by sectoral programs and master plans.

The selection process for projects in the Republican map of industrialization of Kazakhstan is iterative, i.e., list of projects included in the Map of industrialization can be supplemented with new projects in proportion to applications received and the appropriate approval of them on a quarterly basis.

The selection of projects of national importance will be as follows:

1. Presentation by investment projects Applicants of the application of sectoral working groups.
2. Carrying out of industry analysis by the Working groups and an initial selection in accordance with the following criteria:

- 1) the strategic importance of the project;
- 2) industry classification - correspondence of the project to priority directions of the Program;
- 4) innovativeness i.e. it is those projects that involve the formation of high-tech productions;
- 5) export-orientedness – it is the development of traditional export sectors with diversification of products and the continuation of the technological chain;
- 6) economic indicators: the level of added value, labour productivity, financial-economic indicators (IRR, EBITDA) shall be above the industry average global indicator.

3. Collection of problem issues and determination of the required support measures:

- 1) State support (trade, investment preferences, provision of government guarantees and warranties, guarantees of development institutions);
- 2) resource support (provision of labour forces, electricity, mineral raw materials, transport-communications infrastructure);
- 3) financial support (means of development institutions, second-tier banks, state budget, the participation of national companies, subsidization of rate).

4. Approval of the project at the meeting of the Coordinating Council with distribution on three groups according to the degree of readiness:

the first group will include projects that do not have problems in implementation (there is the design and estimate documentation (DED), issues of funding, infrastructure and marketing have been resolved);

the second group will include projects that have precedent conditions - particular problems for which there is DED (FS), the sale issues have been worked out, the issues of financing are being worked out;

The third group - the projects in the development stage (DED/FS in the development stage, the key issues of the project implementation are not resolved).

5. Approval of the project at the meeting of the State Commission on issues of modernizing the economy of the Republic of Kazakhstan.

6. Inclusion in the appropriate category of the base Map of industrialization and approval of schedule and realization measures plan of the projects.

The schedule of project realization is intended to describe the stages of the project realization and will provide an indication of responsible executors, timeframes and resources required.

The Plan of measures on project implementation will focus on execution of measures of state support on projects and business commitments including responsible executors as well as time of execution and supposed expenses.

In order to solve problems arising during the implementation of the projects included in the Republican map of industrialization national and regional control centers will be created for the accelerated industrial and innovative development headed by the Prime Minister and the akims of the regions.

Use of these instruments for the implementation of the Program will provide interaction between state and business on projects implementation through providing by the state of support for projects and carrying out by the business community of assumed obligations.

Small and medium business based on information about the intentions of the state and major investors on long-term development of sectors of the economy and infrastructure will be able to assess the effective demand and to plan investments.

Project monitoring will be carried out on a monthly basis by the Ministry of Industry and New Technologies in conjunction with the Coordination Council on the basis of the Information system of the authorized body on state planning.

The information system will provide an interactive process of collection, information processing and coordination of solutions on them using modern IT technologies.

## **4.2 Scheme and instruments of implementation of the Program at the regional level**

### **4.2.1 Role of the development institutions, national companies in implementation of the Program at the regional level**

Responsible entities for the promotion of entrepreneurial initiatives in the field of industrialization on the local level will be akimats of regions, integrating the activities of business, development institutions, national companies and financial institutions.

The akim of the region will head the following entities:

regional Coordination Council established with the purpose of making recommendations on the issues of implementation of accelerated industrial-innovative policy, proposals for the selection and definition of measures of state support for the business projects in the regional Maps of industrialization, and consisting of representatives of government agencies, development institutions, national companies, business organisations, second-tier banks and independent experts;

regional control center for accelerated industrial-innovative development created to solve problematic issues arising during the implementation of the projects included in regional maps of industrialization.

In the akimat's structure the post of the first deputy of the akim of the region will be introduced who will be responsible for implementing the policy of industrialization in the framework of state and regional programs.

Instruments of integration of business activity and creation of infrastructure to support entrepreneurship will become the Territory development programs and the budget program "Business Road Map 2020" within which the role of each institution's development, mechanisms of their interact with local executive bodies and business as well as sources of financing of measures to support entrepreneurship will be clearly defined.

Social-entrepreneurial corporation (SEC) will act as regional development institutions through participation in conjunction with business in implementation of investment projects, attraction of foreign investors, development and replicating of network projects that are not attractive for private business but that have important social importance (for example, establishment of a service-procuring centers, and others).

SEC and structures of KazAgro are also concentrated on the following:

organisation of sales and procurement cooperation;

support of the market and commodity producers through purchases of raw materials and food;

export and promotion in foreign markets of products of Kazakhstan producers under the "umbrella" brandings including consolidation of small lots, certification and other operations.

DAMU activities will be focused on providing a wide range of business support services:  
 lending of business entities through second-tier banks by conditional placement of funds;  
 direct lending within the program “Damu-Koldau”;  
 concessional financing of leasing transactions and conditional placement of funds in the leasing companies;  
 performing the duty of the fiscal agent of the local executive bodies to subsidize the percentage rate of loans;  
 formation of a system of guaranteeing and surety on liabilities of businesses entities to second-tier banks;  
 securitization of lending portfolios of entrepreneurship under the guarantee of DAMU and other financial instruments;  
 development of franchising;  
 provision of information and consulting support of entrepreneurship activities by creating a network of advisory and training centers, issue and distribution of specialized publications on entrepreneurship.  
 assistance to development of specialized financial institutions, including microfinance institutions, credit and rural cooperatives will be executed by the structures of KazAgro.

The “National Innovation Fund” JSC and national holding “Parassat” will focus on supporting and promoting innovations through:  
 provision of technology transfer, knowledge transfer, purchase and transfer of licenses, start-up & spin-off of projects;  
 provision of innovative projects with grant financing;  
 development of venture financing;  
 development of research and development activities;  
 creation of system of information-analytical support and maintenance of innovative processes including the involvement of foreign experts;  
 implementation of comprehensive program on propaganda of innovation and efficiency drive.  
 support for business processes will be implemented within the framework of activities of the specialized service organisations by:  
 rendering of services of technological parks and business incubators;  
 rendering of consulting services in the field of management, business development, including through the establishment of the network of consulting and training centers;  
 rendering of engineering services in the field of development, justification and implementation of projects, provision of training services;  
 carrying out of marketing researches;  
 carrying out of technological expertise of the projects;  
 assist to entrance to the foreign markets.

#### **4.2.2 Mechanisms of implementation of the Program at the regional level (Business road map up to 2020)**

Implementation of the budget program “Business Road Map 2020” will be focused on development of entrepreneurship, primarily the small and medium entrepreneurship, and the creation of permanent job places. Financing of this program will be made from the state budget in the following directions:

- recovery of business sector;
- subsidization of percentage rate on loans;
- guaranteeing of loans;
- development of industrial infrastructure;
- service support to conduct of business;
- personnel training for entrepreneurship.

The entrepreneur can apply for a combined package of state support measures envisaged in this program, as well as other budget programs stipulated in the Program.

The main criteria for support:

- Export-orientedness and/or increase of local content with further access to foreign markets;
- creation of new job places.

For each region, the central executive body established by the Government, on the basis of the developed technique will determine the total limits of financing, calculated with regard to the region's economic potential.

The akimats will independently distribute the total limit of financing on directions of this program.

Within the framework of activity of the regional coordination council the selection and review of projects to subsidize and guarantee, ensuring the coordination of industrial infrastructure development, service support and personnel training for entrepreneurship will be carried out.

Steps will be taken for recovery of business sector.



Subsidization of percentage rate on loans will be carried out on projects aimed at modernization, expansion and organisation of new productions with high added value in the priority sectors of the economy.

Both new and previously granted credits on implemented projects will be subsidized with the maximum subsidy period 3 years with possibility of extension up to 10 years.

Mandatory condition of support will be the participation of the project applicant's own funds.

Subsidization of the percentage rate on loans will be made in accordance with decisions of the regional coordination council on the basis of the positive conclusions of the second-tier banks.

Financial support of subsidization of the percentage rate on loans and monitoring of the purposeful effective and timely use of funds will be carried out by the financial agent identified by the Government of the Republic of Kazakhstan, with the execution of the relevant procedures under the general agreement concluded between akimats, second-tier banks and financial agent.

The cost of agency services will be reimbursed from the budget.

Mechanism, procedure and conditions for subsidizing of fee rates will be determined by the Government.

Guaranteeing of loans to entrepreneurship will be made by the financial agent identified by the Government of the Republic of Kazakhstan, according to the decisions of the regional coordination council on the basis of the positive conclusions of the second-tier banks directed in organizing of new enterprises with upper limit of not more than 50% of the amount of loan and with guarantee period of no more than the duration period of the loan agreement.

Mandatory condition of support will be participation of the project applicant's own funds.

Reserves to cover losses of the financial agent will be formed at the expense of this program.

Mechanism, procedures and conditions of guaranteeing the loans will be determined by the Government.

Industrial infrastructure will be provided to support the implementation of projects included in this program, as well as to implement the potentially perspective projects on the basis of decisions of the regional Coordination Council.

Staff retraining for entrepreneurship including advanced training and organisation of work places will be funded through the allocation of funds by akimats based on the provisions and criteria approved by the Government of the Republic of Kazakhstan.

Monitoring of this program will be held in conjunction with the National Economic Chamber "Atameken" and other public organisations of business.

#### **4.3 Increase of the role of business combinations**

Within the framework of development of interaction between the government and business will be provided the following:

- representation and protection of interests of members of business associations in the central and local executive bodies, the Parliament of the Republic of Kazakhstan and international organisations;

- implementation of the expert-consultative functions of associations of entrepreneurs to develop the regulatory and legal framework in the field of entrepreneurship on economy red-tape reduction, removal of unnecessary administrative barriers, optimization of licensing-authorization system and control-review services of the government bodies;

- participation in improving the public procurement system;

- improvement in terms of business.

To consolidate the business environment the following will be stimulated:

- growth of membership base of the associations of entrepreneurs;

- support of small enterprises through large corporations by institutional mechanisms of business associations;

- coordination of activity between sectoral, regional associations for enterprisers and their unions.

Development of social partnership will continue within the framework of tripartite cooperation between the Government, trade unions and employers.

To reduce transaction costs when resolving commercial disputes between economic agents the following will be supported:

- activity of reference tribunals and the arbitration courts, including under the chambers of commerce and industry;

- mechanisms of non-legal proceedings.

As the business-integrators the associations of entrepreneurs will carry out various functions for support of members of associations:

- joint promotion of exports;

- development of various forms of cooperation;

- provision of services;

- support to markets and other functions.

### **5. Financial provision of the Program**

For successful implementation of the Program the financial resources of the state and the private sector will be consolidated, in this connection the state will focus on financial security system and sectoral support measures, infrastructure development, and the private sector and national managing holdings, national holdings, national companies will focus on project financing.

To achieve the target values of the Program the estimated volume of direct costs for investment projects implementation will amount to about 6.5 trillion tenge and will be provided from the following sources:

funds from private domestic and foreign investors;

funds of the national managing holdings, national holdings, national companies and other organisations with state participation;

the state budget for implementation of the infrastructure projects, as well as the financing of sectoral and system-wide measures of state support for industrialization.

## **6. The results of the Program**

Successful implementation of the Program for accelerated industrial-innovative development will contribute to ensuring sustainable and balanced growth through its diversification and competitive growth in the long-run period.

The main qualitative results of the Program will be the increase of productivity of production factors, development and strengthening of the national innovation system, reducing the level of concentration of the economy and strengthening of the role of small and medium enterprises in the industrialization process, the rational organisation of the productive forces of the industrial sector, the growth of human capital quality.

Traditional export-oriented industry sectors will perform the role of locomotive of industrialization through development of productions of subsequent processing and provision of broad multiplicative effect of their development on the jointed economy sectors.

Enterprises of new sub-sectors of industrial productions - petrochemicals, aerospace industry, information communications, production of fertilizers, pharmaceuticals, specialized machinery, ceramics, and glass production will have sustainable development.

Accelerated development of agro-industrial sector and light industry based on innovation introduction will reduce the economy's dependence on import of goods of consumer demand and will expand their export potential taking into account the market of the Customs Union with a capacity of 170 million people.

Creation and implementation of high technology and competitive products of the sectors "of the economy of the future" will enable Kazakhstan to create the foundations of postindustrial economy.

In the structure of the economy the share of non-raw sectors will be increased with growth of the share of non-raw export up to a level not less than 40% in the total volume of export.

Faster growth of energy, transportation, information communication infrastructure will be achieved.

By reducing administrative barriers and creating of conditions for the development of free competition, increase of local content, conduction of effective tariff policy, the purposeful creation of a network of small and medium-sized businesses around the major industrial producers, there will be a decisive turning point in the development of domestic entrepreneurship.

Systemic conditions will be created for the transfer of standard technologies and development by the domestic industry of innovation elaborations through further development of innovation infrastructure, the creation of infrastructure of quality, the formation of the normative legal base in the field of energy saving, introduction of results of research and development activities in the priority sectors of the economy.

Due to a balanced fiscal burden the level of investment attractiveness of Kazakhstan in non-raw export-oriented and high-tech production will be increased.

The formed unified system of instruments and measures of state support which includes a special budget programs will allow coordinating and focusing efforts of government and business and will lead to synergetic effect in the industrialization of the country and will allow achieving the targets of the Program.

Active carrying out of the accelerated industrial-innovation policy will increase the stability of the domestic economy relative to the cyclical crises and improve the welfare of Kazakhstani citizens.

ANNEX

To the decree of the President  
of the Republic of Kazakhstan  
dated March 19, 2010 # 985

### **LIST of certain cancelled decrees of the President of the Republic of Kazakhstan**

1. The decree of the President of the Republic of Kazakhstan dated May 17, 2003 # 1096 "On the Strategy of Industrial-Innovation Development of the Republic of Kazakhstan for 2003 - 2015" (Collection of acts of the President and the Government of the Republic of Kazakhstan, 2003, # 23-24, art. 217).
2. The decree of the President of the Republic of Kazakhstan dated April 11, 2006 # 86 "On the Transport Strategy of the Republic of Kazakhstan up to 2015" (Collection of acts of the President and the Government of the Republic of Kazakhstan, 2006, # 13, art. 121).
3. The decree of the President of the Republic of Kazakhstan dated December 29, 2006 # 231 "On State program of tourism development in the Republic of Kazakhstan for 2007-2011" (Collection of acts of the President and the Government of the Republic of Kazakhstan, 2006, # 47, Art. 499).
4. The decree of the President of the Republic of Kazakhstan dated July 2, 2008 # 627 "On introduction of changes in the Decree of the President of the Republic of Kazakhstan dated May 17, 2003 # 1096" (Collection of acts of the President and the Government of the Republic of Kazakhstan, 2008, # 33, art. 340).
5. The decree of the President of the Republic of Kazakhstan dated February 11, 2009 # 735 "On introduction of amendments to the Decree of the President of the Republic of Kazakhstan dated December 29, 2006 # 231" (Collection of acts of the President and the Government of the Republic of Kazakhstan, 2009, # 9, art. 35).