

PN-ACJ-492

105976

**FUEL SUPPLY REFORM PLAN FOR THE GEORGIA
POWER SECTOR**

**Georgia Power Sector Reform
Contract No. LAG-I-00-98-00005-00
Task Order No. 4**

Final Report

Prepared for:

U.S Agency for International Development
Bureau for Europe and NIS
Office of Environment, Energy and Urban Development
Energy and Infrastructure Division

Prepared by:

Hagler Bailly
1530 Wilson Boulevard
Suite 400
Arlington, VA 22209-2406
(703) 351-0300

Contact

McNeill Watkins

October 19, 1999

A

FUEL SECTOR REFORM PLAN FOR THE GEORGIA POWER SECTOR

Introduction

This plan briefly outlines the steps necessary to establish a viable Georgian national energy policy and indicates what further legislative and administrative reforms are required to complete restructuring, commercialization, and privatization in the oil and gas sub-sectors that supply fuel for electricity generation. We do not address coal or geothermal resources; on the basis of current data, these resources have limited potential for electricity production because geothermal steam and/or hot water lack the requisite heat value, and coal is so costly to extract that it cannot compete economically with other fuels. These resources may, however, merit further study.

As the single greatest cost in the delivery of electricity to consumers, fuel and fuel supply issues are central to the financial viability of Georgia's power sector. Access to adequate supplies of high quality, low cost fuel is essential for power sector enterprises to operate as profitable companies in the restructured Georgian power industry. While the most serious fuel-related problem facing the Georgian power sector in the short term is a lack of cash due to poor customer payments, dependence on foreign sources for all gas and virtually all petroleum products means that steps to develop indigenous sources should be given priority along with efforts to diversify foreign suppliers, especially in the case of gas.

Georgian Energy Policy

Ensuring that the Georgian power sector has adequate supplies of fuels requires continued deep changes to the way the Georgian energy sector is organized and led through the current major reforms. The process of elaborating a new policy recognizing the need for change has begun with the release of a draft report entitled "Georgian Energy Policy Concept" (attached). The draft outlines a general policy for development of the energy sector and addresses the institutional changes necessary in the management of the sector. While not all the suggested changes are as extensive as demanded by a purely market-oriented energy economy, the document does promote a separation of policy formation from operations and endorses privatization of the sector's main components. It also recognizes the need for customers to pay for the true cost of energy and acknowledges the importance of providing energy users with information on energy efficiency and demand side management. Likewise, it recognizes the market as the mechanism best able to establish energy prices except in those cases where natural

monopoly conditions exist. Finally, it affirms the need for open trade in energy and for setting a policy about energy imports and exports with reference to the European Energy Charter in order to entice foreign and domestic investment.

The question of energy conservation and its concomitant benefits for the environment are of critical importance in Georgia. All of the NIS countries, including Georgia, were boundless users of energy during the Soviet era. Energy was priced cheaply, hence, efficiency of utilization was ignored. Georgia's energy consumption per unit of GDP during the Soviet era was virtually double that of most Western countries. Per capita consumption remains high in most former Soviet countries, and a major reason that Georgia is now an exception in this regard is that it lacks indigenous oil and gas resources.

Under the command economy system, concepts of supply, demand and markets were either distorted or non-existent. State enterprises carried out regulation on behalf of the Government. Fuel use was dictated without regard for economic cost or threats to the environment. The population became used to artificially low pricing and to a system of subsidies. Conservation in the Soviet Union was a neglected concept since the elimination of the law of supply and demand, together with supply being controlled by State monopolies, made it "unnecessary."

Given these conditions--and the mindset of the policy-makers of centrally-planned that the conditions would remain in perpetuity--there was no need for an energy policy mandating the rational planning of resource acquisition, utilization and value.

The continuing energy crisis in Georgia, however, has forced an awareness of these questions and the "Georgian Energy Policy Concept" is a good beginning in addressing the policy issues raised by the reform process. Nevertheless, formulation of an official energy policy remains an unfinished task, and new legislation is appropriate in several areas.

Energy Legislation

Oil And Gas Exploration And Production

Enactment of an internationally acceptable petroleum law and related regulations is an essential step in the reform of the energy supply industries. The law must provide a legal framework for streamlined investment in the oil and gas sector without the possibilities of voiding existing agreements or licenses through renewed reviews. It must ensure that anti-monopolistic practices in the petroleum industry are kept in check, including those in the segments known as natural monopolies. A specialized regulatory agency charged with contract approval authority, as well as operational and safety standards, could serve this purpose.

Natural Gas Regulation

As in the case of electricity transmission and distribution, development of a regulatory framework for the operational entities involved in natural gas transmission, transit, supply and distribution is necessary. Enactment of internationally acceptable natural gas regulatory legislation is thus important. Such a law should also promote investment and permit the elimination of regulatory risk before privatization of the gas transport and distribution sectors. Extending the regulatory jurisdiction of the existing Georgian National Electricity Regulatory Commission (GNERC) is a recommended way to achieve these goals

Energy Efficiency, Environmental Protection and Public Safety

Enactment of energy efficiency legislation that would promote the use of conservation and efficiency measures in energy forecasting, power generation expansion plans, and household and industrial energy consumption should be given a high priority. Such a law should also require energy efficiency standards applicable to new construction and the sale of electric and gas appliances.

Considerable relief from the problems created by the current energy deficits could be obtained simply by making the population aware of the need for and the economic (and other) benefits of energy conservation. However, providing financial incentives (preferential loans, pricing or tax breaks) for energy audits, energy conversions, conservation, metering, utilization of waste, and similar measures may also be appropriate. Likewise, the promotion of renewable energy development (in addition to geothermal energy) through proper tax incentives plus the general promotion of energy research and development (innovation) need to be objectives of energy efficiency legislation.

Legislation is also desirable in two other areas associated with energy reform. One is protection of the environment from hazardous wastes generated from the production and use of energy. Such legislation should prescribe the introduction of emission standards and require regular emission inspections. It might also provide for the evaluation of past environmental damage.

Finally, public safety issues associated with energy production, transport and use must also be the subject of legislative attention. Whether in an all-encompassing act or scattered among various pieces of energy legislation, provision must be made for, among other things, public participation in major energy facility siting, and the introduction of international standards and certification in equipment manufacturing, use and maintenance procedures.

Anti-Trust and Consumer Protection

In an industry as important and capital intensive as energy supply, there exists a natural tendency toward concentration. In some cases, utility service may be provided by natural monopolies. In most large economies general antitrust legislation may be adequate to address potential problems in the energy as well as other industries. In small economies like Georgia's, antitrust laws specifically targeted on energy may be appropriate. Such legislation would prevent collusion, anti-competitive mergers and acquisitions, and unfair practices that could jeopardize supply reliability or quality. Such legislation would also provide transparent goals and schedules for privatizing State Owned Enterprises (SOE's) and require public announcements of tenders and awards of major contracts by energy supply companies.

Liberalized Trade and Adherence to International Conventions

Although specific energy legislation dealing with international trade is not necessary, legislation liberalizing trade in general must always recognize the importance of energy supplies as a major component in Georgia's imports and, likewise, the potential role of hydro power as an export. While the reduction of import dependence requires increased domestic energy production and conservation, trade legislation that facilitates the diversification of foreign supply sources can help both to lower costs and enhance energy security for Georgia. In this regard, it will be beneficial for Georgia to complete negotiations for entry into the World Trade Organization and to adhere to international standards and policies that harmonize its energy policy with international conventions.

Energy Security

Georgia, like any country dependent on foreign suppliers for the bulk of its energy, needs a policy addressing the stockpiling of crude oil and natural gas for emergencies and force majeure conditions. Legislation is required to identify the authority responsible for determining emergency quantities and which entities will actually be responsible for maintaining the stockpiles. If these are to be operating enterprises in the particular fuel sub-sector, then appropriate tax or other incentives must be extended to them.

Georgia apparently has an important future as an energy transit country. Indirectly, legislation facilitating energy transit across the country can be structured to provide additional measures of energy security by tying transit rights to the delivery of minimum amounts of energy to the Georgian market.

General Economic Reform

Among the most important general economic legislation affecting the energy industries is that dealing with taxation. It is especially critical to the attraction of foreign capital for investment in capital-intensive projects; The tax code must allow the introduction of non-punitive taxation and royalty regimes and the elimination of unduly burdensome taxation and tax collection procedures. The fiscal burden of budgetary outlays for such things as roads and environmental protection must be borne by the final consumer of petroleum products if the illegal importation of these products is to be discouraged.

Non-Legislative Actions Required

In addition to the need for basic legislation, administrative steps must be taken to further the reform processes initiated by parliamentary action. These are concentrated in two areas: 1) institutional structures and management; and 2) restructuring of ownership.

Institutional Structures and Management

Among the administrative actions necessary to complement legislated reform measures are:

- Introducing International Accounting Standards and other commercial management systems in all energy supply enterprises. Carrying out training courses for sector accountants.
- Instituting public auditing requirements compatible with the needs of international investors, developing standard charts of accounts for regulated enterprises, carrying out scoping audits immediately, and expanding public relations activities including the expansion of monthly data reporting on the operations of energy enterprises.
- Requiring annual internationally recognized audits on all SOE's.
- Focusing energy company efforts on attracting, training, and keeping qualified personnel.
- Assisting energy sector companies to develop business plans to guide activities and improve technical and financial performance.
- Assisting energy sector companies to implement strategic planning.
- Supporting enforcement of service termination in case of non-payment by electricity users in order to increase cash collections to ensure adequate supplies of fuels and to develop competitive fuel markets. Simultaneously, cash flows within the industry must be improved

to ensure that electricity producers are paid the full value for the power that they produce. Establishment of a wholesale electricity market is needed for this purpose.

- Amortizing past investments and setting rational depreciation schedules;
- Corporatizing and regulating the railroad to ensure that energy consumers are protected from monopoly abuse and to provide similar conditions for all suppliers. The GoG should encourage the development of alternative transportation and import options to give energy traders and consumers more supply options. The current lack of supply options reduces competition within the fuel market and lowers supply reliability.
- Liberalizing domestic fuel prices by removing any residual administrative pricing controls in favor of market pricing, or prices regulated by appropriate regulatory commissions.
- Increasing the operational and financial autonomy of SOE's and putting them on a profit-making basis. This will require training of management in specialized topics such as economic principles, accounting, financial analyses and projections, management techniques, international agreements and commercial relations, and industrial safety.

Restructuring Ownership

The enormous requirement for capital to rehabilitate and modernize the fuel supply enterprises in Georgia will require significant foreign investment. Developing a flexible plan for evaluating the merits of strategic vs. financial investors and domestic vs. foreign investment will thus be necessary. Which firms are considered strategic and to what extent they need to be represented in the ownership structure and for how long must be carefully evaluated.

The question of possible excessive concentration of market powers in fuel supply vs the need for capital and technical expertise is a delicate one. In this regard, a decision should be taken whether Saknavtobi should be privatized via foreign strategic investment or converted into a truly commercialized SOE.

Conclusion

Georgia needs strong and dynamic oil and gas sub-sectors both importing fuel and developing the indigenous resource bases. This will require major legislative action to create the legal framework that will attract the requisite strategic investment. This framework must include regulatory bodies and mechanisms that are perceived to be independent and objective.

Numerous administrative measures should also be taken to diversify supplies, commercialize and privatize SOE's and to provide supply security against both political and force majeure contingencies.

Attachment

Georgia Ministry of Fuel and Energy, "Georgia Energy Policy Concept," Draft Paper, July 1999.

ATTACHMENT

**Georgia Ministry of Fuel and Energy,
“Georgia Energy Policy Concept” Draft Paper**

Draft

THE MINISTRY OF FUEL AND ENERGY OF GEORGIA

GEORGIAN ENERGY POLICY CONCEPT

Tbilisi, 1999

STRATEGIC RESEARCH CENTRE

Preamble

During the current reform of the Georgian economic system, the Ministry of Fuel and Energy of Georgia has developed a concept of state policy for the formation and development of country's Energy Complex. The document provides the content of problems, solution directions and priorities, as well as the role of the government in the corresponding processes.

The present document has been developed by a working group including leading specialists of the Ministry of Finance, members of the Parliamentary Committee on Sectoral Economics, experienced energy specialists and scientists. The document includes results of research conducted by local specialists. The document considers Presidential Decrees concerning this sphere, other legal regulations, analytical studies done by experts of the World Bank, European Union and other international organizations.

The document is designed for discussion among energy sector professionals, politicians, scientists and the public. After the document is discussed in the Georgian Parliament and the President approves it, it will become the basis for a program for the formation and development of country's energy sector.

Table of Contents

1. INTRODUCTION	3
1.1 General Goals of the Georgian Energy Sector Reform	3
1.2 Transition Period	4
2 EXISTING STATUS OF GEORGIAN ENERGY SECTOR AND GENERAL PROBLEMS	5
3 GENERAL POLICY FOR DEVELOPMENT OF THE ENERGY SECTOR	7
3.1 Strategic Incentives for the Development of Georgia's Energy Sector	7
3.2 The Role of the Georgian Energy Sector	8
3.3 Requirement regarding the Energy System	8
3.4 Main Strategic Goals for Development of the Energy Sector	8
4 CERTAIN ASPECTS OF ENERGY MANAGEMENT POLICY.....	10
4.1 Economic Policy	10
4.2 Policy for Rationalization of Customers Sector	12
4.3 Regional (Internal and Foreign) Policy.....	13
4.4 Energy Corridor Formation Policy	14
4.5 Energy Security Policy	14
4.6 Scientific-Technological and Staff Policy.....	15
4.7 Public Relationship Policy.....	15
4.8 Environmental Protection Policy in the Energy Sector.....	16
5 MAIN PRIORITIES OF THE ENERGY POLICY.....	17
5.1 Main Priorities of Short-term and Middle-term Strategy of the Energy Policy	17
5.2 The Main Long-term Priorities of the Energy Policy	19
6 INSTITUTIONALIZATION OF THE MANAGEMENT SYSTEM	20
6.1 Principles of Management and Organization of Energy Complex.....	20

6. 2 Role of the Government in the Management of the Energy Sector 21

6.1 Policy for the organization of Management System 22

7 LEGAL FRAMEWORK..... 23

8 NEAREST GOALS 25

Concept of the Energy Policy of Georgia

1. Introduction

Georgia is on the way to formation of a new social system. It is developing a new system of political and economic relations that shall provide a new environment for sovereign existence and consistent development of the country. In this process Georgia shall gain a new role in providing political stability and economic development in the region. This process shall set appropriate conditions for integration into the world's community of nations.

1.1 *General Goals of the Georgian Energy Sector Reform*

Currently, Georgia is undergoing structural reorganization of the entire economic system. In this process it is essential to create an effective environment for restructuring and development of the sector. The primary task of Georgia's energy sector is to create the basis for the stable functioning and development of the country's economy. At the same time in the environment of current global political and economic processes, Georgia has an opportunity to participate in the international and particularly regional distribution of labor due to the unique conditions, existing energy background and strategic political and economic circumstances in the region. The energy complex of Georgia is able to effectively participate in production, transportation and consumption of energy; participate in building conditions for economic integration and political stability in the region; play important role in production of export commodity; and become a powerful instrument for the development of the country.

In the process of reforming the Georgian social system, the principles of public administration have radically changed. In the new political and economic circumstances the management system of the energy sector proved to be inefficient.

Under the new circumstances, systematic restructuring of the entire energy system, establishment of new management capabilities, and the revision of energy policy of Georgia became essential.

In this situation the primary goal for the development of country becomes obvious: *under new circumstances create an effective energy sector that will provide social and economic conditions for the development of the country; particularly, create a governing system for the processes of formation and development of the sector.*

1.2 Transition Period

Georgia is in the process of reform. Current radical changes of the system are related to major social and political difficulties. At this stage government, like in every country in the transition period, is not able to ensure implementation of its political decisions. Economic activity is insubstantial. The role of the public in the process of reform is small.

The current process of reform is characterized by peculiarities of the problems. In particular, the following tasks are to be accomplished:

- The territorial integrity of Georgia must be reestablished and the Constitution must be enacted in full;
- A system for the territorial arrangement must be created and the structure and function of local governmental bodies must be determined;
- Develop new forms of public administration and determine the roles of governmental institutions; political and economic functions must be separated;
- Develop a socially oriented legal framework that will be consistent with a market type economy;
- Carry out privatization on a large scale and establish all forms and rights of ownership;
- The private sector must be strengthened, market relations and efficient financial markets must be established;
- Improved economic conditions must be established;
- The formation of international relations and regional communions must be completed;
- Georgia must be integrated into the world's economic system;

The Concept of Energy Policy is created based on these specific problems of the country's transition period.

2 Existing Status of Georgian Energy Sector and General Problems

Currently energy sector of Georgia operates in extremely difficult conditions. Structural reform and technical rehabilitation of the sector is under way. Work is carried out on legal framework. Conditions for wide scale privatization and attraction of investments are provided.

Energy Sector of Georgia with its current structural form has been developed during the soviet period. It reflects the soviet political direction of society's development that has very little to do with economic rationale. Such conditions encouraged inefficient consumption. As a result specific energy capacity per national product is 3-4 times more than similar indicator of the developed country.

Social and political cataclysms during the first years of independence of Georgia affected entire economy and particularly energy sphere. Considerable part of assets were destroyed and damaged (situation has even worsened due to the absence of maintenance and capital repairs); Administrative and labor discipline has dropped; quality of energy production has significantly worsened.

There is a dissimilar situation in the particular spheres of energy under circumstances of overall fall of production.

In the past decades usage of cheaper imported natural gas led to the reduction of coal production and destruction of coal mines. Market for the coal industry is destroyed, technical equipment is damaged, program for the development of the sphere is not achieved.

Oil production has significantly reduced; Natural gas production has stopped. Soviet policy of utilization of oil resources caused irrational utilization of discovered fields. exploration of new reserves was carried out with insufficient scale and low technical level. As a result country met the period of the crises with the exhausted oil fields and without reserves prepared for operations. Currently explorations were intensified as a result of attraction of foreign investments modern exploration technologies.

Great value to the country has system of natural gas mains and distribution network. Failure to operate in full-scale affects economy and ecology of the country. Delay in development of legal framework for privatization led to the inefficient privatization process. Infrastructure of transportation and distribution of oil products has to be improved. Batumi oil refinery is obsolete.

Despite economic crises energy system remains one of the largest operating industry. At the same time sector faces severe crises: connection with the neighboring energy systems is damaged, there are frequent accidents at generating stations, technical support and

operation regimes are destroyed, management of the energy system has considerably worsened. Nonpayment for the consumed electricity by residential customers made existing economic problems even more difficult. Termination of heat and gas supply caused increase of demand on electricity in the residential sector. Such increase in the environment of weak administration and overall technical difficulties resulted in severe problems. Operation of energy system at unacceptably low frequency resulted in irreversible damage.

Georgia has high voltage system with considerable transmission capacity. This system has an important export-import and transit potential. Distribution network is in much worse shape. Its current condition is unsatisfactory. There is a need of rehabilitation of existing lines, construction of new lines (specially to Turkey).

Efficiency of utilization of energy resources decreased. Electric energy is widely used for heating and other residential needs. There is a necessity to recover the heat supply system.

Existing situation in energy consumption sphere (energy efficiency problem) has not been subjected to the critical analyses. Attention is focused on problems of generation and solutions to these problems are searched aside from the problems of rationalization of existing consumption structure.

Energy sector administration problem needs perfection. The old organizational structure and stereotypes are still powerful. Strategy for development of energy sector of the country is still to be developed. This is the reason why emphasis is given to the goals of rehabilitation of generating units and not systematic fundamental problems. The role of the country's energy system in the regional system is not clearly defined.

There is a severe problem of collection of payments for consumed electricity from commercial and residential customers. Resources of foreign technical assistance are not effectively used. In the management system the process of separation of political and operational functions is not completed. Responsibility for existing situation in the energy sector is not distributed in the entire governmental system. Particularly, responsibility of local governments is not assessed politically. The execution mechanism of laws and governmental decisions is weak.

3 General Policy for Development of the Energy Sector

The concept of Georgian Energy Policy is elaborated according prospective of the Georgian Energy Sector for next twenty years. This concept considers Energy Sector as one of the main factors for Georgia's social and economic development. The main goal of the Energy Policy is to provide reliable, competitive and stable energy structure within the democratic and liberal economic environment.

3.1 Strategic Incentives for the Development of Georgia's Energy Sector

The analysis of prospective for development of the Georgia shows that the intensive growth of energy resources market is expected during the nearest ten years. The development of industry and standards of living will directly cause increase in energy consumption. This will result in interest of foreign investors to invest in Energy Sector of Georgia. In order to satisfy the demand of the region, the export and transit of electricity through the Georgian territory has a significant importance. Also rehabilitation of the Georgia's Generating Facilities (including old generating units of Gardabani Thermal Power Plant) may become attractive for the foreign investors.

Development of the energy resources (including natural gas) of the states located near the Caspian Sea is becoming very beneficial for the Georgia's economy. This gives Georgia an opportunity to conduct the transit of these resources through the territory of the country. It shall be noticed that there are no political obstacles on successful implementation of these projects. It is also important that transportation of natural gas through the pipelines has minimum environmental impact. This project has the similar significance for the country's economy as the well known "Big Oil" transit route.

Georgia has very favorable natural conditions for development of the peak and accumulative hydro capacities. Under these circumstances Georgia has a good prospective (Hydro Plants with reservoirs, high voltage transmission lines, etc.) to conduct export of expensive peak capacities.

To summarize the strategic conditions for development of the Georgia's energy sector are as follows:

- The existing energy capacities of the Country;
- Rich hydro resources;
- The volume and cheap price of the natural gas in the region;
- The increasing need of regional energy market;
- The possibility of development of the energy corridor in the region;
- Prospective of peak electricity export;

- The local coal resources (if rational technology is put in place);
- The rich resources of non-traditional energy resources;
- Prospective to increase energy efficiency.

3.2 The Role of the Georgian Energy Sector

Energy industry of Georgia creates conditions for functioning of country's economy. Energy industry of Georgia has a possibility to become a profitable sphere of country's economy. Georgian energy system has a potential to satisfy demand on basic energy resources of the country, serve as a regional corridor for energy resources, implement export of electricity. Furthermore, Georgia's energy system is capable to play an important role in the economic integration of the region. Thus energy sphere has an important role in the state policy, becomes an important political and economic resource of the country. Energy sector of Georgia shall create a background for the development of industry, shall become an important factor for the country's scientific and technological development.

3.3 Requirement regarding the Energy System

Considering political and economic conditions of the region and the state, the main requirements regarding the energy system of Georgia are as follows:

- provision of energy security of Georgia (development of energy production and rationally balanced and diversified export-import);
- increase of energy efficiency and rationalization of energy use;
- provision of continuous development of the energy sector;
- liberalization of the energy sector.

3.4 Main Strategic Goals for Development of the Energy Sector

Main strategic goals of the Energy Policy of the state, in accordance with the role of the energy sector, are as follows:

- rational rehabilitation and modernization of the energy sector;
- rational development of all fields of the energy sector;
- creation of legal, organizational and economic conditions of rational development of local energy resources;
- rational development of energy resources transit potential in the region – performance of functions of energy corridor;

- prioritize issues on development of hydro energy, first priority if given to improvement of export of energy during peak generation;
- changing of energy wasting infrastructure into economically effective and balanced consuming system;
- development of untraditional energy resources;
- introduction of rational methods for generation and utilization of thermal energy;
- introduction of environmental protection technologies in the energy generation-consuming system;
- completion of restructuring and privatization of energy sectors;
- provision of political conditions for operation of fair economic mechanism in the energy sector;
- organizational development and improvement of the state management system of the energy sector;
- creation of reserve capacities in the energy sector, for provision of reliability and stability of the system in case of autonomic functioning;
- implementation of policy on enhancement of economic conditions for provision of regional security system.

4 Certain Aspects of Energy Management Policy

Implementation of detailed state policy is required for realization of certain objectives of the State Energy Policy. The State Management System shall coordinate implementation of the Policy, generally the State Management System shall ensure:

- continuous development of the energy system by effective utilization of available economic potential (including import-export-transit of energy resources);
- continuous improvement of effective utilization of energy (energy efficiency);
- establishment of market system in the sector, creation of economic system of state regulation, and adjustment of interests of power producers and customers;
- review of public ideological, legal, organizational and economic terms and conditions for resolution of energy problems of the country;
- the process of continuous negotiations regarding energy problems with different political authorities;
- coordination of operation of political and executive bodies of the State Management in the sector.

4.1 Economic Policy

The most important issue of the state policy in energy sector is determination of terms and conditions of private property, free production and competition, also development of fair market system. It comprises exemption of the state management from production functions, which shall be ensured by means of implementation of the large-scale privatization process in the sector. At the same time the state management at certain extend is required due to specific nature of the energy sector, social importance of its products and great impact of the environment, also due to existence of natural monopolies.

Attraction of credits and financial assistance form international financial institutions, state-donors is required at the starting stage of rehabilitation of the sector, and implementation of large-scale investment programs is vital for its further development.

a. Economic Reforms

Economic basis for formation of a new energy system of the country is effective implementation of property divisions within the sector. The privatization process shall be carried out in the following manner: restructuring (change of organizational structure, including division of big organizations into smaller ones), commercialization (change of organizations into enterprises and promotion of their self-financing) privatization (full of partial privatization of enterprises by investors).

Currently, companies in the Energy Sector are under different stages of reforms. Presently, the oil product market is completely liberalized. Establishment of legal base for restructuring of natural gas economy and oil sector is almost finalized. Current reforms in the energy sector carried out in accordance with the Law "On Electricity". Privatization strategy of the sector envisages phased implementation of works, commencing with privatization of municipal energy companies.

In order to finalize reforms in the energy sector and get effective results from it, electricity market shall be established concurrently to privatization process, first priority is given to the wholesale electricity market and second priority is – the retail market.

Considering peculiarities of Georgian Energy Sector and its current conditions, the most important goal of formation of the wholesale electricity market is adjustment of accounting system and phased development of competition in power generation sector. Second goal may be creation of competition environment in power distribution sector.

b. Regulation of natural Monopoly

A part of energy sector, which performs network transmission and distribution services (electricity, natural gas industry) represents natural monopoly in economic system of the country, therefor introduction of accepted regulation systems is required.

Regulatory body for electricity sector – Georgian National Electricity Regulatory Company - is set up. Rights and obligations of the company are determined under the Law "On Electricity", currently the issue regarding regulation of gas sector is being finalized. Provision of continuous and consequential development of the process is required.

c. Customs and Taxation Policy

Important trend of development of Georgian electricity sector is export, import and transit of energy resources. Creation of a special customs service is required for performance of functions of transit corridor of energy resources in the region. It is also vital to draw up the energy sector (private and state companies) requirements regarding customs and taxation services and to establish an effective system considering the requirement (especially at the rehabilitation stage of the sector); international norms shall be taken into consideration in this regard. The State policy shall be elaborated to encourage development of the sector, which is very important for rehabilitation and rationalization of coal industry, as well as for increase of efficiency and effective use of untraditional sources.

d. Policy for Import-Export of Energy Resources

Aim of the policy for import-export of energy resources is to make energy resources cheaper, increase reliability of energy supply by means of diversification of sources of power supply.

The policy for import-export of energy resources is based on Georgian legislation and international obligations of Georgia (namely the Energy Treaty). Import of fuel and electricity is regulated by the state only in case of unfair competition, or if energy supply is mainly within power of a supplier or a region.

e. Investment-Credit Policy and Technical Modernization of the System

Risk of making investments in the sector is increased due to anticipated difficulties regarding energy system development. It is obligations of the state to reduce the risk and create favorable environment for attraction of investments and its most important factor is a stable process of economic reforms.

Attraction of investments for development of the whole energy system is more favorable than just for a power plant, therefore the investment-credit policy of the state shall be based on a clear and fair strategy for development of the energy sector.

In the transmission period the strategy shall be focused on rehabilitation and modernization of existing capacities. The state shall create favorable and fair environment for attraction of local and foreign investments, assist development of financial market and its infrastructure, insure security of attracted investments, and elaborate terms and conditions of free disposal of received income.

f. Price Formation Policy

The main trend of the price formation policy is liberalization of prices. At the same time, the state shall regulate prices in places of natural monopoly; but such regulation shall be minimal and only if interests of producer and customer can not be balanced by means of market system, or if inter-governmental tariff agreements are violated.

In the transmission period, prices of energy resources shall be brought in conformity with actual expenditures, together with de-monopolization and privatization of the sector. The process shall be guided by state regulation of natural monopolies and utilization of market system.

4.2 Policy for Rationalization of Customers Sector

Conditions of energy customers sector is very important for efficiency of Georgian energy sector. The following factors influence conditions of the customers sector: physical and moral depreciation of customers sector, policy for distribution of energy resources, rules for energy use, introduction of equipment for energy saving, efficiency of economic mechanisms regulating energy use, participation of public in a program of economic use of energy resources.

Georgia shall be freed from traditional stereotypes regarding wasting of energy, this is the primary goal of the first stage.

Modernization of energy technologies (in production and utilization sectors) is a long process, which may take several tens of years, so the adjustment process of economic and energy infrastructures, in case of intensive efforts of the government, may last for 10-15 years.

In new social-economic conditions, structure of energy use will be significantly changed. New methods for energy use shall be introduced, and forms and mechanism of state regulation shall be established. The state strategy of industry development and programs for development of energy production shall be brought in conformity. Special attention shall be paid to perspectives of development of huge energy consuming enterprises, as well as to the issue regarding energy provision to the transport corridor of Eurasia, passing via Georgia. Assessment of energy conditions for stable functioning of the system and its infrastructures is required. Reconstruction of building and reduction of expenses for heating is needed, continuous increase of energy efficiency by means of introduction of updated energy saving facilities is required, also training programs of management shall be elaborated and implemented.

The main goals of the state policy for rationalization of energy utilization sector are given below:

- elaboration of the state program for increase of energy efficiency and creation of political, organizational and economic conditions for its implementation, considering issues regarding environmental protection;
- increase of energy efficiency and energy saving, both in industrial and residential sectors; including bringing the price formation mechanism in conformity with actual economic expenses, technical and structural improvement of power metering and the payment collecting system;
- performance of audit of power enterprises, and elaboration and implementation of programs for increase of energy efficiency of power enterprises;
- elaboration and implementation of programs for improvement of heating characteristics of buildings;
- elaboration and implementation of plans on substitution of certain part of building material industry with coal
- economic and organizational stimulation of programs on increase of energy efficiency in some enterprises.
- introduction of updated methods of energy management in residential sector.

4.3 Regional (Internal and Foreign) Policy

Rational energy integration in the region (foreign policy) is a strategic issue of energy sector development. Main purpose of the integration is fundamental enhancement of the energy sector. Fundamental enhancement (security, reliability, quality, etc.) shall be

encouraged by structural changes within the sector. Aim of the foreign regional policy is to receive the maximal return of the energy potential of Georgia within scopes of international economic integration and co-operation.

The internal regional policy envisages provision of active participation of local governmental bodies in elaboration of energy programs, that will assist in creation of favorable environment for optimal utilization of social, natural and ecological peculiarities of the region. Conditions for coordination of regional energy programs shall be worked out, and first priority shall be given to programs of national importance.

4.4 Energy Corridor Formation Policy

Performance of energy resources transit functions is vital for efficient utilization of geopolitical potential of Georgia. Georgia can perform functions of transit corridor for electricity, oil and natural gas, provided that all issues regarding environmental protection are observed.

Performance of energy corridor functions will assist in integration of the country, both, in regional and global systems of economic relations. At the same time, the integration will enhance security in the region, create economic conditions for political stability.

In the process of formation of the energy corridor, special attention shall be paid to protection of the country from carrying out only energy transit functions. Energy resources passing on the territory of Georgia can assist in industrial development of the country, namely primary energy resources can be reproduced into electricity on spot; also chemical industry for reproduction of the resources shall be developed. The Georgian Government shall use efficiently the new possibilities connected with the energy corridor.

4.5 Energy Security Policy

The energy security policy of the country envisages restructuring, rehabilitation and modernization of the sector and phased increase of energy security level of the country. Transmission period envisages provision of minimal guarantees of energy security; provision of energy security of the country shall be completed later, on the stable economy development phase.

Challenges regarding development of energy sector of the country are as follows: foreign and foreign-economic relations of the country; internal political and social-economic conditions; commercial and technical conditions of the sector; structural changes in supply with, and production of energy resources; climate; natural calamity; and issues regarding environmental protection.

All activities connected with improvement and development of the energy sector, also assist enhancement of energy security.

Efficient development of local potential of energy resources is important for creation of reliable security system of the energy sector. Mainly it applies to hydro resources of the country. Rehabilitation program of installed capacities envisages their utilization at the starting phase. Efficient development of local coal reserves and analyses of their rational conservation potential is required; besides programs for exploration and utilization of local oil and natural gas reserves shall be elaborated. All above issues shall be viewed considering the energy security policy of the country.

4.6 Scientific-Technological and Staff Policy

The scientific-technological and staff policy is aimed at creation of favorable conditions for development of intellectual potential in the sector. The intellectual potential shall be used effectively for rehabilitation and further development of the sector.

Elaboration of programs for dealing with problems in the sector and creation of normative base shall be financed from revenues of the sector; their selection and distribution shall be carried out by the Ministry of Fuel and Energy.

While prioritizing exploration issues, preference is given to creation of ecologically friendly energy efficient technologies and their introduction. Special attention shall be paid to effective development of local energy resources and introduction of renewable and untraditional energy sources and updated energy saving technologies.

Aim of the staff policy is establishment of effective system for personnel training. Attraction of state and private financial means is required for realization of state programs. The staff policy shall become an integral part of the general policy for enhancement of the energy sector. Special attention shall be drawn to training of managers according to international standards, for provision of effective management process at the transmission period.

4.7 Public Relationship Policy

Public role in development of the energy sector of Georgia is vital, which shall be stimulated by the government. Responsibilities for current situation on the energy sector shall be divided between the government and the public. The government shall assist in: a) formation of a new public role according to new responsibilities imposed on the public; b) creation of organizational, informational and consulting environment for effective realization of public activities; c) establishment of relevant legal conditions.

The government shall: a) ensure provision of full information regarding the present situation of the energy sector to the public; b) clearly determine goals of the current state energy policy; c) explain and agree the goals with the public. Available plans and forms

25

of their implementation shall be agreed with the public too. The governments shall ensure transparency of the policy implementation process, also submission of full reports on performed works from all state officers responsible on conditions of the energy sector. Information on actual results and unperformed obligation shall be available to public.

Corruption is the most dangerous event in the process of restructuring of the public system. all political systems and public institutions, except administrative discipline methods and repression, shall participate in the anti-corruption policy.

4.8 Environmental Protection Policy in the Energy Sector

Issues regarding environmental protection are important for development of the energy sector. These issues are especially important for developing countries, because it is not always easy to settle politically the conflict between a short-term efficiency and a long-term development requirements. Short-term efficiency may be very seductive for Georgia, due to vast economic importance of energy resources, which gives possibilities of budget income increase.

While considering ecological issues, principles of causing the minimal environmental impact shall be used. It means that uncompromising mottoes on maximal ecological protection can not be used, as they restrict implementation of any technical plan causing ecological impact. It should be taken into consideration, that the most dangerous thing causing environmental impact is decrease on the state economy. Rationally balanced environmental protection policy shall be utilized in the course of planning and construction of new energy enterprises.

The government shall assist all initiatives regarding increase of energy efficiency and a project of modernization of energy production, which are connected to significant reduction of environmental impact, and in this regard special attention shall be paid to the policy of technology modernization aimed at reduction of air pollution, that supports creation of favorable conditions for attraction of additional financial resources to the country and introduction of new technologies for the energy sector.

One of the main issues of the environmental protection policy is determination of compensation of harm caused to the environment, it means that compensation amount of any harm caused to the environment in the process of production, reproduction, transportation and utilization of energy resources shall be included in the final price of such resources.

5 Main Priorities of the Energy Policy

Rehabilitation, modernization and further development of the energy sector is a long-term process. In case of lack of energy resources, distribution of the resources are vital. All general issues for development of the energy sector are given below:

5.1 *Main Priorities of Short-term and Middle-term Strategy of the Energy Policy*

The short-term and middle-term strategy of the energy policy comprises 7-10 years. It envisages overcoming of results caused by crises and implementation of radical reforms in parallel. Generally the short-term and middle-term strategy envisages settling of all issues connected with the transmission period.

The general priority of the strategy is economic utilization of local energy resources and provision of primary stage of security of the energy sector.

Main issues connected to reforms of the energy sector are as follows:

- general technical rehabilitation, provision of ecological and technical security;
- finalize restructuring and implementation of optimal privatization process;
- foundation of bodies for implementation of the state energy policy and for regulation of natural monopolies;
- bring the price formation mechanism of energy resources in conformity with actual expenditures, by means of both, regulatory issues and market principles; and provision of complete transparency of economic relations;
- improve recording system of production and utilization of energy resources; and regulate payment of price for utilization of updated technical means;
- creation of a legal and normative base for the energy sector;
- improve investment environment and conditions for attraction of local and foreign investments;
- enhancement of the sectoral state management system

The main issues of the stage are prioritized according to sub-sectors:

Electricity Sector

- rehabilitation and modernization of the Hydro Plants, Gardabani and Rustavi TPPs and of other components of the Georgian electricity sector; increase of the annual production to 12-14 billion kWh, through the efficient management of the internal and external energy markets;
- increase of reliability and economic efficiency of the system, through the development of the internal transmission and distribution networks, strengthening of

the relations with the neighboring systems (particularly with Turkey), also through efficient management of import-export and Transit transactions;

- elaboration of the general plan for development of the Georgian electricity sector. Elaboration and implementation of the projects related to the export of peak energy.
- developments of the project on efficient operation of the thermal plants by using coal from Tkibuli mines and construction of the new units;
- development of the project on construction of the generators operating on the wind energy and construction of such facilities.

Natural gas Supply

- rehabilitation, modernization and expanding of the existing pipelines and the city networks; utilization of gas in public transport; increase of natural gas supply to the internal customers up to 4-5 billion c^3 .
- projection and construction of the facilities for reserving of the natural gas.

Coal Industry

- rehabilitation and modernization of Tkibuli coal mines and increase in production to the level of 0.8-1.0 million Tons. Maintaining of the State and foreign financial assistance in conservation and closing of the coal mines.
- elaboration and implementation of the program for modifying of the technologies for production, reprocessing and transportation of the coal.

Production of oil and natural gas, refining of oil and oil products and their transportation:

- development of oil and natural gas exploration, increasing oil production to the level of 0.7-1.0 million tons, and 0.5-0.6 billion c^3 for natural gas.
- development of the oil and oil products' transportation facilities;
- modernization and expanding of production and on the basis of high quality Georgian oil production of expensive oil products;
- providing of the State reserves of oil and oil products;
- further development of the oil products' Markets, through utilization of the advanced and efficient technologies;
- development of the economic relations in the sphere of export and import of oil products

Heat Supply

- rehabilitation and development of economically efficient parts of centralized heating and hot water facilities; development of co-generation systems (mostly gas);
- popularization of the modern, efficient, economically reasonable and environmentally safe autonomous and individual heating systems;

- production of efficient and environmentally safe devices for heating and food preparation, using liquid gas, coal and wood;
- full and efficient utilization of the thermal water resources. Preparation of the plan and program for supply of heat to Tbilisi generated from thermal water resources. Reasonable utilization of solar energy.
- elaboration of the economically justified program for using the wood as the energy resource.

Rational Disposal of Energy Resources

- increase of energy efficiency in industry and among residential customers. Establishment of such pricing policy which would promote efficient consumption of electricity.
- conducting the energy auditing of the energy companies and elaboration and implementation of the energy efficiency policy.
- introduction of the new style management methods in energy consumption sphere.

5.2 The Main Long-term Priorities of the Energy Policy

The long-term strategy of the energy policy is the integral part of the country's State Policy. The main priorities of the state's energy policy are as follows:

In the sphere of economic and legislative development:

- the maximal development of the competition within the energy sector, establishment of the fuel and electricity markets; further development of the transit and export/import of energy resources through the liberal international trading mechanisms.
- development of the tax, pricing and regulatory mechanisms within the sector, in order to achieve strategic goals, like: constant increase of energy efficiency, development of the non-traditional energy resources and strengthening of the environmental protection.
- development of the legislative framework within the energy sector, according the international tendencies; transparency of the normative acts issued within the sector.
- providing with high level of energy forecast, energy planning and energy management; Using State program for achieving these goals.

In Development of the Energy Sector

- wide development of the hydro energy sub-sector, thought the attracting of the necessary investments;
- providing with State's energy security;

- construction of the economically efficient and environmentally safe thermal generating plants;
- providing with the economically efficient level of coal, oil and gas production.
- more efficient utilization of wind energy;
- development of the geothermal and solar energy generating technologies;
- determination of reasonability of introduction in Georgia of the modern energy technologies;
- popularization of the latest technologies of heating and air-conditioning systems.
- providing with the high level of training of the energy specialists.

In Consumption of Energy Resources

- instant increase of the energy saving level, through introducing of the latest and environmentally safe technologies;
- reduction of the energy usage for heating of the buildings, through introduction of the special isolation materials in construction.

6 Institutionalization of the Management System

6.1 Principles of Management and Organization of Energy Complex

The Effective functioning of Georgia's energy system will be possible only by organizing it in the way that will be adequate to the existing conditions of the sector's development. In particular, principles for the organization and management of the country's energy sector shall be as follows:

Systematic structure . Energy sector of the country shall represent the united production and consumption system, operating in harmonized and coordinated manner and consistent with the governmentally approved principles of organization and management. Coordinated functioning of the system shall be implemented through balancing production and consumption spheres in the conditions of their diversity. In the circumstances of diversity of power production such internal balance is reached in correspondence with the customer demand and through rational changes in power production sharing.

Regional Integration. Integration of the country's energy sector with the regional energy system means its inclusion in the complex with the specific function. Such integration shall be reflected in structural changes of the country's energy sector that are related to the efficient operation.

Separation of Political and Operational Functions of Management. Public administration institutions that develop and enact regulations shall not perform the operational functions.

Government Decentralization. Responsibility for making political decisions in the sector shall be shifted to the lower levels of government hierarchy that already have a competence for making decisions.

Distribution of Responsibilities Between Public and Private Sector. In the process of insuring the functioning of the energy sector government shall retain only those functions that will be inefficient to transfer to the public investor. System shall encourage inclusion of private interests and personal initiative in the sector's functioning.

Distribution of Responsibilities in the Entire Governmental System. Functioning of energy sector is determined by the activities of many different political entities (local governments, government executive authorities, political institutions, scientific and research institutions and public organizations). Therefore, in the given circumstances of the public system and government administration it is necessary to assign appropriate responsibilities, role and functions in the energy sector as well as to develop the mechanism for coordination of activities of different entities.

Separation of the Government's Social Obligations from the Sector's Economic Functions. Social policy of the government of Georgia that includes obligations of social security of the population shall include the provision of socially unprotected population with free or discounted power. It is essential to separate organizational implementation of these obligations from operational activities. This shall be implemented by shifting such responsibility from executive authorities, governing energy sphere to the governmental social security institutions.

Political collaboration. This includes readiness for the compromise during the dialogue between different governmental authorities, local governments, public, business groups, foreign governmental and business entities).

6. 2 Role of the Government in the Management of the Energy Sector

Role of the government in the management of the energy sector is determined by the strategic importance of the sector and its role in the country's economy. Government shall participate in the development of the direction in the energy sector that can not be implemented only based on mechanisms of market economy.

According to the present concept, government participation in the energy sector is as follows:

- Protection of state interests in the process of formation and development of the energy complex of the country;
- Development of strategy for the energy complex of the country. Development of accordant programs and their implementation;
- Compliance with the requirements of energy security and constant development of the entire complex;

- Provision of the political background for the functioning and the development of country's energy sector;
- Administrative bases for the implementation of the efficient power consumption policy;
- Institutional mechanisms for coordinated activities of governmental bodies (parliament, executive authorities of the economic sphere, ministries of social security sphere, local governments, government regulation institutions of privatized monopolies) and business effecting the operation of the energy complex;
- management of shares of the governmentally owned enterprises;
- Development and implementation of credit, investment, tax, tariff and export-import policy;
- Government regulation of natural monopolies in the energy sphere;
- Technical and scientific development of the sector and staffing with the professionals;
- Implementation of integration policy in the regional energy system;
- Political background for the formation of Georgian energy corridor;
- Regulation and protection of the Georgian power market;
- Rational restructuring and privatization of energy sector; Creating conditions for fair and effective distribution of property in the process of privatization;
- Development of legal framework for the functioning of energy sector;
- Special management regime for the transition period to insure the formation of new energy complex of the country.

6.1 Policy for the organization of Management System

Rational structure of the energy complex can not be formed by single political decision. Restructuring of social-political and economic system requires adaptive changes of this process.

Current reform of public administration is directed towards maximum decentralization of this system that implies political and economic independence of entities on the different levels of government hierarchy. At the same time it is important that formation of country's energy capacity and their operation is occurring in the conditions of shortage of all kind of resources. Rational and effective distribution of resources is related to the centralization of the management. Such controversy between actual conditions and political goals of the government can be overcome only through the flexible organizational environment. Accordingly, energy sector management system shall be restructured gradually by establishing such organizational forms that are consistent with the existing management culture, economic situation and level of the sector's development.

Privatization process of the energy sector creates problems to the management of the energy complex, for which the relevant political decision is already made by the government of Georgia. It shall be taken into account that energy sector has a strategic importance that creates requirements of its efficient management. Fore effective

privatization process in the sector it is important to continue the restructuring of energy spheres and distribution of ownership forms and management responsibilities of different enterprises.

Beyond this, the government of Georgia takes political obligations in the process of integration in the regional energy complex. Implementation of such liabilities requires relevant management environment. Accordingly, privatization of energy enterprises shall be conducted within the clearly defined strategy for the development of the energy sector of Georgia.

All institutions that participate in the development of the energy sector have authority and influence in the formation of energy policy of the country. Therefore participation of all appropriate parties in decision making process is essential. There is no doubt that Ministry of Fuel and Energy shall be responsible for organization of such processes.

For the purposes of managing the energy sector it is important that Ministry of Fuel and Energy implements constant monitoring of all spheres of energy and have all necessary resources for the analyses of the situation, as well as consistent organizational and political competence.

It is important to determine political tasks of the Ministry of Fuel and Energy, the executive functions required for their implementation and establishment of relevant organizational structure.

7 Legal Framework

Concept of energy policy of Georgia creates logical bases for the legal framework of the energy system of the country. Conditions determined under the legislation shall ensure viability of the present concept and create legal guarantees for its implementation.

Integration of Georgia's energy complex in the international regional system is the most important strategic goal of the country. Accordingly legal framework shall satisfy international norms existing in this sphere. It shall assist agreements between the states on import, export and transit of energy resources; establishment of simplified norms of customs procedures (bilateral and multilateral) and establishment of uniform foreign trade rules for all types of entities.

In the process of formation of the legal base, the current conditions of the country shall be taken into consideration. The present period is characterized by unclear political and economic conditions, as entities are reorganized constantly. In the process of institutional construction many social-political-economic systems are formed.

During formation of the legal base, process of restructuring in general political and all economic fields of the state management shall be compatible with each other. Institutional conditions shall be established for provision of the compatibility.

The following is required in this regard:

- improvement of normative base of the energy sector, considering international (namely European) unification trends;
- legislative acts and state resolutions shall become public for creation of favorable political conditions for international integration of Georgia economy.
- creation of favorable economic environment, for implementation of free entrepreneur activities, competition, long-term investments.

Currently relations in the energy sector are regulated by Georgian legislation, including the Law “on Monopolistic Activities and Competition”, the Law “on Energy”, the Law “on Electricity”, the Law “on Oil and Gas”, Decrees and Resolution of the President of Georgia, legislative acts passed by the Ministry of Fuel and Energy and other bodies. But improvement of the legal base is required due to restructuring.

Creation of a legal base is required, which will provide development of oil and gas resources and implementation of uniform state policy in the sector; and which will create favorable conditions for attraction of investments, ensure state supervision and control of all technological operations connected with oil and natural gas consumption, determine main principles of oil and gas exploration and production agreements made between the state and an investor.

Legislative principles and norms shall be determined for construction of trunk pipelines, in order to ensure efficient utilization of transit potential of Georgia, determine main trend of the state policy in the trunk pipeline sector, and enhance investment conditions.

Special attention shall be drawn to improvement of tariff system in the gas sector and determination of function of the regulatory body.

Enactment of certain legislative acts are necessary for the energy sector, which will support creation of the wholesale energy market, and complete the market structure foundation, assist market relations, besides, electricity will acquire the status of product, which will be protected legally and organizationally.

A legislative act shall be passed in Georgia (like in many other countries), which will regulate the state policy for improvement of efficient use of energy, besides institutional, economic and informative norms for realization of the policy. Legislative base of the energy sector shall envisage environmental protection, be means of balancing ecological and economic requirements of the public.

Legislative systems of other countries shall be taken into consideration while elaboration of the legal base.

8 Nearest Goals

In accordance with above issues the nearest goals of the energy sector are as follows:

- elaboration of a stable development strategy of the energy sector of Georgia and a program for its realization (including prioritizing types of energy carriers);
- enhancement of management system of the energy sector:
 1. institutionalization of formation and realization of the state energy policy;
 2. elaboration of programs for rational planning, realization, introduction of modern accounting systems, introduction of accepted standards of the energy sector and provision of organizational bases for their implementation;
 3. expansion and institutionalization of state regulation of natural monopolies
 4. enhancement of accounting system on production and consumption of energy resources and collection of energy payments from consumers;
 5. creation of a new organizational structure of the Ministry of Fuel and Energy
 6. elaboration of training programs for the Ministry employees and implementation of these programs.
- elaboration of programs for restructuring and privatization of certain fields of the energy sector;
- work out programs for creation of favorable political and economic conditions for attraction of local and foreign investments in the energy sector (including drawing up of a program for effective development of the energy sector of Georgia, working out of investment documentation and presentation of such documentation at the international market);
- elaboration of programs for rehabilitation of energy production, according to development strategy of the sector and implementation of these programs
- elaboration of a training program for the energy sector employees and managers and implementation of the program;
- elaboration of a program for realization of the regional integration policy and implementation of the program;
- provision of favorable conditions for the energy sector functioning; elaboration of a program for establishment of strategy for co-operation with public institutions and local governmental bodies and implementation of the program;
- elaboration of a program for reduction of negative impact on environment by generation and consumption of energy resources and implementation of the program;
- elaboration of programs for stimulation of effective use of renewable and secondary energy resources and implementation of the programs;
- creation of an energy information system, compatible with systems of other EU countries;
- creation of a normative base relevant for new conditions of the energy sector.