The amendment of the energy consumption pattern Act

The Islamic Consultative Assembly has taken measures relative to notify the amendment of the energy consumption pattern Act on the 4/12/1389.

The ministries of Power, Petroleum, Agriculture, Industries and Mines are obligated to identify and provide all needed technologies in the specialized areas for supply and energy consumption in its specialized field in the next twenty years and preparing possibility for planning and improving them for use by domestic manufacturers and producers.

Article 3- determination, amendment and review of essential policies is to conduct on each of the areas of consumption and production of energy by the Workgroup composed of the Minister of power and Minister of Petroleum and vice president of planning and strategic monitoring.

Article 5- the policies in the energy section, including renewable energy and optimization of production and consumption of the varieties the energy carriers are only the responsibility of the Energy Supreme Council.

Chapter Four: Energy consumption standard of the subscribers, processes and energy-consuming equipments.

Article 10- Ministry of Power and Ministry of Petroleum is obligated to determine and approve the monthly consumption pattern of the energy carrier in the Cabinet for residential, commercial, public sectors and especial consumption of industries' energy (including petroleum and power industries) mines, mining industry, agriculture industry and water pumping with cooperation relevant ministries and the Institute of Standards and Industrial Research of Iran considering of the annual budget framework and the Targeted Subsidies Act, consider to climatic, cultural conditions and consumption habits. Article 11- standards and technical specifications and compulsory standard for energy equipment and energy-consuming machinery and industrial processes for mining and agriculture, as well as the quality standard for varieties of consumed fuel and electricity shall be developed by a Workgroup, consisting of representatives of the Ministry of Petroleum, Ministry of Power, Deputy of President for Planning and Strategic Monitoring, the Institute of Standards and Industrial Research of Iran and Iran's Environmental Protection Organization and the relevant ministries. As a way that these standards could force the producers and importers to observe of those mentioned items and then these developed standards are approved by Cabinet.

Article 12- The Institute of Standards and Industrial Research of Iran is obliged to take all appropriate measures and predict of required arrangements for the implementation of standards and criteria to the energy consumption labeling of energy-consuming electrical devices in cooperation with the Ministry of Power for electricity and heat subjects and in cooperation with Petroleum Ministry for the fuel subject.

Article 13- All manufacturers and importers of energy-consuming equipment is obliged to take action based on notifying standards and technical specifications by the Institute of Standards and Industrial Research of Iran to prepare and attach the energy consumption labeling scheme on the products and packaging of the products. Distribution and selling of energy-consuming equipments is prohibited without an energy consumption labeling. Institute of Standards and Ministry of Commerce is responsible for monitoring and investigating the offending distributors and resellers according to law.

Article 17- To consider supporting the energy service companies, the Cabinet must approve the needed regulations based on providing

common proposal of the Ministries of Petroleum, Energy, Economic and Finance and deputy of President for planning and strategic monitoring, in a way that such approval be able provide motivation for establishing and development of these companies and its relative services throughout the country within six months after the enactment of this law. Financial resources for the implementation of this Article will be secured from the Article (73) of the Act. Also The executive agencies referred to in Article (4) in the civil services Act can provide the commitment for the conclusion of the consumed energy contracts from the achieved savings and the credit resources of Article (73).

Article 18- To enforcement of the Construction Engineering Disciplinary Organization law, the Ministry of Housing and Urban Development must approve in the Cabinet the energy consumption, saving regulations in buildings with orientation toward green building and also urban planning in accordance with the mentioned model in collaboration with the Ministries of Petroleum, Power, and the Interior and Department of Planning and Strategic Monitoring of the Republic President, within a year after the enactment of this legislation.

Article 19- Issue of the certification for finishing of building construction by municipalities or other relevant authorities is subject to observe the rules, laws and regulations referred to in Article (18) of this Act.

Article 20- all public institutions must take measures to embed the required control systems for the consumption of the varieties of energy carriers in their office buildings in accordance with the regulations of Article (18) within five years after the enactment of the Act.

Article 21- all the enforcement and public agencies must audit the energy for controlling the energy management system in their respective buildings and they must train their employees. Article 22- Institute of Standards and Industrial Research of Iran in cooperation with the Ministry of Housing and Urban Development must prepare and provide the standards related to building materials with priority of related items to building energy-consuming and then the Workgroup that referred to in Article (11) must approve it.

Chapter Six: Energy consumers in industry

Article 24- all energy consumers with annual consumption more than 5 million cubic meters of gas or its equivalent for liquid fuel and demand more than one megawatt of electrical power must take measure to create energy management unit by save or use the private sector and or without extending governmental organizations, must take measure to audit energy and optimizing it and implementation needed solutions for optimizing energy in order to achieve consumption develop facilities to perform audits and energy saving design for in order to achieve for the standards of Article (11)

Article 25- Petroleum and Power Ministries must penalize the units which consist compulsory standard regulations that they are not in limitation of determined standards after receiving the report from the Institute of Standards and Industrial Research of Iran, accordance with Article (26). If there is a postpone for collection and notify the standards of the Institute of Standards and Industrial Research of Iran, Petroleum and Power Ministries can dispatch inspectors for monitoring activities, the quality of energy unit's activities and giving advice and guidance directly or through consultants under contract based on random sampling or other methods stipulated in the approved standards to industrial units referred to in Article 24.

Article 26- industrial units will be penalized as a percentage of the energy carriers price, in the event of non-compliance with standards, technical standards and energy consumption standards at the discretion of the Ministries of Petroleum, Power and Mines & industry, since the starting year for the reform of the consumption pattern, based on the technical and regional conditions. Received funds taken into the treasury of the country and will be spent under the general revenue account to implement the optimizing strategies for the industrial sector under this Act.

The relevant regulations for obtaining fines and quality to use it will be approved by the Cabinet within the framework of targeting subsidies and the annual budget law.

Article 27- all industries, institutions and units that allow access to the electricity network from The Ministry of Power and they have the possibility for implementation of production systems of electricity power, such as simultaneously of heat and electricity production, expansion turbine or an independent unit, if they produce electricity in accordance with Ministry of Power standards, this ministry must buy electricity through their excess production on the basis of the approved regulation by Article (44) of this law.

Chapter Seven: Energy consumers in agriculture

Article 28- Ministry of Power and Petroleum must compile the criteria and standards for energy consumption for per unit of agricultural and horticultural land in terms of climatic conditions, extracting allowed water and to depend on the type of product and using efficient methods for extracting water and new irrigation methods in cooperation with the Ministry of Agriculture, the Environmental Protection Agency and the Institute of Standards and Industrial Research of Iran.

Article 30- Ministry of Industries and Mines in coordination with the Ministry of Agriculture must take measures to improve the domestic production of energy consumption, agricultural machinery and equipments in using new technologies in accordance with standards and technical specifications of fuel consumption in Article (11) of this Law until the end of the fifth five-year development program.

Ministry of Commerce must observe the same standards for all imported agricultural machineries and equipments.

Article 41- Environmental Protection Agency must take measures to reduce fuel consumption and air pollution through the implementation of environmental standards in cooperation with the Ministries of Interior, Transportation and Petroleum, Institute of Standards and Industrial Research of Iran and municipalities.

Chapter Nine: producers and distributors of energy

Article 44- Ministry of power must guarantee to purchase electricity to extent of electricity production capacities from producers at the supply place through subsidiary companies by signing contracts of five years or more to the following conditions:

(a) - Connecting the generator referred to this article to the network is done without any general costs for installation the branch

(b) - The installed branch is used to provide the common power to the extent of the generating capacity in an emergency exit or exit for repair, with the discretion of the Ministry without subscription fee.

(c) - The subscribers who take measures to install the generator at the consumption place, will be getting out from the priorities of cutting power at the time of shortage power in all around the network.

Article 45- Petroleum and Power ministries must provide the public facilities for industrial, construction, agricultural and public units which produce electricity and heat & cool simultaneously.

Article 46- all natural and legal persons who they are the executor of projects in power plant, refinery, petrochemical and subordinate industries of petroleum and gas and industrial units which produce electricity must take measures to evaluate the technical and economical studding for using the regaining energy systems in the their studies, including the production of electricity simultaneously,

heating and cooling and using of expansionary gas turbines, parallel with the supporter pressure breaker valves as the station for reducing the pressure of gas entering into the power plant for producing electricity without fuel. If the results of the evaluation, technical and economic studies become positive, these mentioned persons must establish the above-mentioned units as the energy regaining systems since inception.

Article 47- To manage the production and consumption of electricity, gas and water in the country, Ministry of Power and Petroleum are required:

1- Determine, notify and perform the similar technical instruction for design, manufacture, supply, installation and utilization of infrastructure and measurement equipments and controlling the smart network.

2- Install only smart flow meters which are equipped with the smart reader and controller of the load as well as the facilities of updated information technology for all new applicants.

3- Maximum, within five years the flow meters of all existing subscribers shall replace with priorities of high consumption subscribers as well as the distribution and transmission networks shall equip with meters, infrastructure and prepared equipments to smart reading systems and control of the load and upgraded technology of information.

Note- reading systems, control and information technology of electricity, gas and water will be designed, perform and utilize in a coordinated and integrated form.

Article 48- Ministry of Power must take measures to support the establishment of private companies of distribution and sale of heat and also this ministry shall support to develop them across the country

to purchase regaining heat from power plants and sell it to the industrial and construction units.

Article 50- For the purpose of aligning the behavior of produced corporation of power with interests of national, the price of fuel to power plants, with an average annual output of electricity, and thirty percent (30%) heat or less, shall be determined with a growth of twenty percent (20%) than the price set by the targeted Subsidies law and the sale price of fuel to power plants with an annual average output of power and heat production of seventy percent (70%) and or more, with twenty percent (20%) discount to the determined price by the targeted Subsidies law. Other power plants shall pay an appropriate price and this price will decrease when the power plant output will increase based on related regulations. The additional and received amount after deducting the discounted amount shall pay to the general revenue account in the country's treasury and the mentioned amount will be spent to develop of regaining of power plant losses.

Article 52- In order to improve productivity, increasing security of energy supply and widespread participation of the private sector in energy supply.

(a) Petroleum ministry must take measures in collaboration with the Ministry of Energy for effectively supporting of the research, investment, promotion and development of production units for power, heat and cool simultaneously by the private sector.

(b) The Ministry of Industries and Mines must support the research center and related industries for development of the indigenous technical knowledge and self-reliance of country for securing of equipments for simultaneous production of electricity, heat and cool. All executive rules and regulations of this Article are approved by Cabinet three months after the adoption of the law with the proposal of the Ministry of Petroleum, Power and Mines and Industries.

Article 53-The Ministry of Power must provide needed heat of distillation desalination units from the regaining of losses on the site of thermal power plants after undergraduate studies and feasibility and having the technical and economic justification. Water Resources Management Organization and Tavanir company are to execute required arrangements for areas where need the desalination plant and the establish of these units to be integrated with thermal power plants. Ministry of power must issue the annual report of the Article's performance to the Cabinet and the Parliament.

Article 54- all power plants, refineries and petrochemical units must establish the energy management units and auditing the energy action and all non cost, low cost and high cost actions must implement in the framework of the annual budget and with the priority return time of investment.

The above units must take the measure the reprint the energy audit every three years.

Ministry of Power and petroleum must monitor the quality of performance of this Article and report the gained results to Cabinet and Parliament.

Article 57- Ministry of Industry and Mines must receive with the terms of any items, the confirmation of observance for the particular consumption of energy from the Ministry of Power and Petroleum for licensing the establishment of industrial units.

Article 60- The government must take measures each year to reduce the particular consumption of energy in the sectors of industry, agriculture, public transport, commercial and residential and annual report them. Chapter 10: Renewable and nuclear energy.

Article 61- Ministry of Energy must take measures to support the development of renewable energy sources, including wind, solar, geothermal, small water (up to ten megawatts), marine and biomass energy (including wastes, agricultural and forest residue, garbage and sewage of urban, industrial, livestock, biogas and biomass) and the purpose of facility and integration of these matters by the relevant organization, and sign a guaranteed purchase long-term contract with the private producers of electricity from renewable sources.

Note 1: The conditions and purchase price of the generated electricity from renewable sources are to approved by Cabinet with the Ministry of Energy proposal.

Note 2: The Ministry of Energy subsidiaries, including regional electricity companies and distribution companies must take measures to deliver and purchase electricity from the relevant organization in coordination with Iran Power Network Management Company.

Note 3- The required financial resources for the guaranteed purchase of generating electricity from renewable sources will be secured and paid by the value of the saved fuels based on the import liquid fuel price and natural gas export prices and the gained benefits from the prevention of generating the pollutants and protection of the environment, in return for the produced electricity of such as the power plants.

Executive regulation of the Article will be approved by the Cabinet six months after enactment of this Act with the joint proposal of the Ministries of Energy and Petroleum.

Article 62- Ministry of Energy and petroleum must announce their supports publicly in order to promote the economic use of the renewable energy sources for isolated systems of a network such as solar water heater, solar hot bath, wind pumps, wind turbines, photovoltaic systems, extracted gas from the biomass source and also the mentioned ministries shall to provide and pay the necessary expenditures from their annual approved budgets or referred sources of Article (73).

Chapter 11: Education and awareness

Article 64- Ministries of Education and Science, Research and Technology must take measures to insert and update the course unites of energy management at all educational levels and relative fields in cooperation with the Ministry of Energy and Petroleum.

Article 65- Ministry of Labour and Social Affairs and Education must consider effective training to develop and implement programs of the relative technical and vocational courses for optimizing methods of energy usage according to the Ministry of Petroleum and Power.

Article 66- The Ministry of Science, Research and Technology must schedule for the creation and development of related fields with energy management at the master and doctoral levels at the country's universities as well as inserting a course unit as the energy management title in term time of associate and bachelor degree in engineering and other relative fields within one year after the enactment of this law.

Article 67- Ministry of Islamic Guidance, the Islamic Republic of Iran Broadcasting, Islamic Propagation Organization and municipalities must consider the issue of rational use culture of energy and improving the behavior and model of consumption in cooperation with the Ministry of Energy and Petroleum.

Note- Issue of broadcast Commercials about on various energy consuming equipments from IRIB networks, depend on observing standard and technical specifications about energy consuming equipments in Article (11). Article 68- Ministry of Housing and Urban Development must take measures in preparation of needed educational materials to teach functional training methods of energy optimization in buildings and mechanical and electrical installations and holding educational courses for experimental engineers, technicians and architects who work in the building construction sector and the mentioned ministry take into account the above items for holding qualification tests.

Article 69- The Ministry of Energy must take measures to assemble and hold informing and practical training courses for general and professional energy management of power & heat to energy managers of industrial units as well as relative graduates in Articles 64 and 66 in of this law at the National Center of Energy Management Training for Industry. The referred ministry shall cooperate with the Ministry of Industries and Mines and grant certificates to the trainees.

Note- all the industrial units referred to Article 24 of this law must appoint their energy managers, among the certificate holders under this article with the priority of graduates referred to Article (64) and (66) of this law.

Article 73- The Ministry of Petroleum and Energy is authorized to provide the financing facilities from the savings resulting from the implementation of this law, the annual budget and domestic resources of the governmental subsidiary companies in order to support the implementation of optimizing strategies of consumption and promotion of energy efficiency in the framework of the objectives and provisions of this Act. The financing facilities amount of this Article is determined by the Supreme Council of Energy.

The First Development program law

(b) – Policies

4. To provide economic growth for increasing production per capita, productive employment and reduce economic dependence with

emphasis on the production of strategic products and for controlling the inflation through of:

4. In order to increase per capita economic growth, productive employment and reduce economic dependence with an emphasis on the production of strategic crops and curb inflation through:

4-48- To improve the operation of the national electricity industry facilities through of increasing utilization factor, load and thermal efficiency of power plant factor and reduce energy loss in transmission and distribution networks.

4-49- To make policy in the field of sustainable consumption of energy and fuel & energy saving by Petroleum and energy ministries and strict observance of priorities in the energy sector (electricity, oil and gas) by the ministries of industrial and commercial about the devices and equipments of energy consumers.

The Second Development program law

Note 19:

clause (f)

(f) In order to apply the saving and being logical the energy consumption and environmental protection the government must carry out the following actions:

1. Determining the technical specifications and standards about energy-consuming systems and equipment in order that all manufacturers and importers make to observance these specifications and standards. A committee made up of representatives of the Ministry of Energy, Ministry of Petroleum and the Standard Institute and Industrial Research and the relevant industrial ministries shall be responsible for the preparation of the technical specifications and offering the executive regulation to government.

(2) Determining and apply commerce tariffs (for import) and duties (for domestic production) in such a way that in case of noncompliance with governmental technical specifications and determined standards, producers and importers of these devices are subject to pay these duties and tariffs.

3. To set working hours for businesses by Ministry of Commerce to reduce their energy consumption during the power and energy consumption pick and creating social discipline.

4. Setting work seasonal program for factories and industrial by the relative ministries, so that energy will reduce on the months with maximum power consumption.

5. Developing and executive required criteria for granting financial facilities with preferential rates for the industries and Institutions of execution of relative amendment operation to the subject of the energy consumption structure.

6. The allocation 2% of the income from the sale of energy carriers during the program to conduct required research in the field of saving and management of energy consumption by the relevant ministries.

7. Preparation of regulation and criteria that relates to observance of energy consumption standards in the buildings in order to avoid losing the power, adjustment and executive of incentive methods for this item by a committee consists of representatives of the Ministries house and Urban Planning ,Petroleum and power.

8. The allocation of a part of schools and university textbooks for the important subject of water and the types of energy and its necessity for the control of energy consumption and public training of the society through radio and television and the press in this field in order

to promote the culture of savings and avoiding from the dissipation and profusion of resources.

9. To provide criteria which relate to the establishment of the energy management unit in the industries and institutes which their consumption of power is more than 5 MW or annual energy consumption is equal to more than 5000 M³ of petroleum and the experts of this unit will be trained by the Ministries of Petroleum and power.

The Third Development Program

Article 121. In order to apply the savings, rationalization of energy consumption and environmental protection, the government must take the following actions:

(a) Prepare and develop standards and technical specifications related to the energy consumption for equipments, processes and energy consuming systems, in order that all consumers, manufacturers and importers of these equipments, systems processes make to comply observation these specifications and standards. The mentioned criteria are developed by a committee composed of representatives of the Ministry of Energy, Ministry of Petroleum, Iran Standard and Industrial Research Institute, Environmental Protection Agency and relevant ministries.

The Cabinet determines the quality of enactment of these criteria.

(b) Providing the regulation for specify of businesses' working hours during the year, particularly as the season is when the peak of consumption power by the Ministry of Commerce in collaboration with the Ministries of Power and Interior.

(c) Adjusting schedule seasonally the factories and industries' working hours relative ministries so that the power and energy

consumption, reduce in the months of consumption peak, and incentive policies shall apply for consumers in non-peak hours,.

Note: In case of power failure and creating restrict the ratio of loss and damage of consumers will be exempted from payment of Demand and other related payments.

(d) Development the criteria and regulations related to observance of energy consumption standards for design and construction buildings of public and private sector in order to avoid power losing and to adjust and implement the encouraging ways about existed buildings for using of energy consumption standards by a committee composed of representatives of the Ministries of Housing and Urban Development, Interior, petroleum, Industry, Power, the Program and Budget Organization and Iran Construction engineering disciplinary organization.

Note: In the event of non-compliance the mentioned standards, criteria and regulations in the Article, the energy price will increase with providing the appropriate opportunity for the units which their annual consumed fuel is more than five thousand (5,000) cubic meters of fuel oil or their used power is more than five (5) megawatts.

Implement regulation of this Article provide by the Program and Budget organization and the relevant executive agencies and shall be approved by the Cabinet.

Fourth Development program

Article 121- The government must in order to apply the savings, rationalization of energy consumption and environmental protection, take the following actions:

(a) Prepare and develop standards and technical specifications related to the energy consumption for equipments, processes and energy consuming systems, in order that all consumers, manufacturers and importers of these equipments, systems processes make to comply observation these specifications and standards. The mentioned criteria are developed by a committee composed of representatives of the Ministry of Energy, Ministry of Petroleum, Iran Standard and Industrial Research Institute, Environmental Protection Agency and relevant ministries.

The Cabinet determines the quality of enactment of these criteria.

(b) Providing the regulation for specify of businesses' working hours during the year, particularly as the season is when the peak of power consumed by the Ministry of Commerce in collaboration with the Ministries of Power and Interior.

(c) Adjusting schedule seasonally the factories and industries' working hours relative ministries so that the power and energy consumption, reduce in the months of consumption peak, and incentive policies shall apply for consumers in non-peak hours,.

Note: In case of power failure and creating restrict the ratio of loss and damage of consumers will be exempted from payment of Demand and other related payments.

(d) Development the criteria and regulations related to observance of energy consumption standards for design and construction buildings of public and private sector in order to avoid power losing and to adjust and implement the encouraging ways about existed buildings for using of energy consumption standards by a committee composed of representatives of the Ministries of Housing and Urban Development, Interior, petroleum, Industry, Power, the Program and Budget Organization and Iran Construction engineering disciplinary organization.

Note: In the event of non-compliance the mentioned standards, criteria and regulations in the Article, the energy price will increase with providing the appropriate opportunity for the units which their

annual consumption, fuel is more than five thousand (5,000) cubic meters of fuel oil or their used power is more than five (5) megawatts.

Implement regulation of this Article provide by the Program and Budget organization and the relevant executive agencies and shall be approved by the Cabinet.