

## IRAN (ISLAMIC REPUBLIC OF): Law No. 1770 of 2011 on Energy Consumption Pattern Reform

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 Law No. 1770 of 2011 on Energy Consumption Pattern Reform (EN and FA)

(<https://policy.asiapacificenergy.org/sites/default/files/Law%20No.%201770%20of%202011%20on%20Energy%20Consumption%20Pattern%20Reform%20%28EN%20and%20FA%29.pdf>)

 Amendment to the Law No. 1770 of 2011 on Energy Consumption Pattern Reform (EN)

(<https://policy.asiapacificenergy.org/sites/default/files/Amendment%20to%20the%20Law%20No.%201770%20of%202011%20on%20Energy%20Consumption%20Pattern%20Reform%20%28EN%29%20>)

**Overall Summary:**

This Law is focused on altering consumption patterns and it provides information, guidelines, structure around energy consumption. The Law requires the improvement in the use of energy in power plants, industries, transportation, and the establishment of financing measures. The target is halve energy intensity by 2020.

## Related Documents

## Efficiency

**EE priorities:**

The application of different kinds of energies imported and consumed in the country must be managed and optimized in accordance to this law in order to prevent energy loss from the production point to the consumption point without reducing the national production level and social welfare, and in order to increase the output and efficiency, to use energy economically, to use energy better, to help a constant development and to protect the environment.

**EE targets:**

The Ministries of Agricultural Jihad and Industries and Mine are obliged to remove at least twenty percent (20%) of worn out and high-consuming water pumps and agricultural machinery and supply new water pumps and machinery with a standard and optimized energy consumption. [...].

**EE action plans:**

Oil and Energy Ministries are obliged to cooperate with the related Ministries and Institute of Standards and Industrial Research of Iran and determine the monthly consumption pattern of energy carriers for household, commercial, public sections and consumption specialized for industries [...] mines, mineral industries, agriculture and water pumping and submit them to the Board of Ministers for approval, considering the regional conditions, culture and habits of consumption, technology used in industry, mine and agriculture sections and within the framework of the Annual Budget Law and Targeted Subsidies Law.--A group consisting of Energy and Oil Ministers and the Deputy of Planning and Strategic Supervision Department of the President, Institute of Standards and Industrial Research of Iran, and Iranian Department of Environment and related Ministries will prepare the technical criteria and specifications and compulsory energy standard for energy-consuming equipments and machinery, and industrial mineral and agricultural processes, as well as quality standard for kinds of consumable fuels and electricity, according to regulations on the manufacturers and importers for observing these criteria and specifications.--Institute of Standards and Industrial Research of Iran is obliged to take the necessary actions and to foresee the arrangements required to execute the standard criteria for energy consumption labels on the electrical energy-consuming equipments and devices with cooperation of the Energy Ministry in Electricity and Heat fields, and with cooperation of the Oil Ministry in Fuel field.--All the executive department, organization institutions, companies and State industrial units, as well as Security Forces and the Police are obliged to purchase the equipments and machinery which they need, based on the best energy-consumption level.[...].--The Ministries of Electricity and Oil are obliged to prepare energy consumption standard and criteria for each agriculture and garden unit under cultivation with cooperation of Agricultural Jihad Ministry, Environmental Organization and Institute of Standards and Industrial Research of Iran according to the climate, authorized water harvesting and considering the type of product using efficient methods for water harvesting and new watering methods.--The Ministry of Industry and Mine with coordination by the Agricultural Jihad Ministry is obliged to take actions to revise energy-consuming agricultural equipments and machinery manufactured locally, using new technologies [...].--The Ministry of Housing and Urban Development is obliged to follow up and move unnecessary operations from major cities to smaller cities while making explanatory economy and social studies and consider them in regional projects and locate major centers absorbing population in preparing urban development projects in order to decrease the traffic and fuel consumption in the high-traffic urban areas. All the executive departments are obliged to consider traffic issues and transportation methods of the clients and employees in preparing projects and programs within their responsibility field and to take required actions in order to facilitate transportation and reducing energy consumption.

**EE labeling:**

All Manufacturers and importers of energy Consumption labels on the products and its packaging accordance to the technical criteria and specifications issued by Institute of Standards and Industrial Research of Iran. Distribution and selling energy-consuming equipments without energy consumption label are not authorized. [...].

**EE building standards:**

For executing the Engineering System and Building Control Law, the Ministry of The Ministry of Housing and Urban Development is obliged to prepare the bylaws on energy saving in buildings with tendency toward green buildings as well as urbanization [...].---All the executive and public department are obliged to make assessments on energy in order to execute and control energy management system in the related buildings and to train their personnel.[...]---Institute of Standards and Industrial Research of Iran with cooperation of the Ministry of Housing and Urban Development is obliged to take actions in order to prepare and write the standards on building materials taking into considering priority of the items related to building energy consumption and get them approved by the group under article 11 of this law.

**EE transport standards :**

In order to optimize fuel consumption the Ministry of Industries and Mine is obliged to cooperate and supervise in order to develop manufacturing supply and after sale services on light diesel operated automobiles with the priority for public trucks and public transportation vehicles according to the current standards worldwide and technical criteria and specifications under article 11 of this law.

**Energy Service Companies (ESCOs):**

In order to support energy-services providing companies, according to the common proposal by the Ministries of Oil, Energy, Economy and the Deputy of Planning and Strategic Supervision Department of the President, the Board of Ministers is obliged to get the required bylaws approved by any means motivating these kinds of companies to be established and developed and the related services to be provided in the country within six months upon approving this law. [...].

**EE financial incentives:**

In order to persuade consumers to use equipments, sets and processes with less energy consumption and lower environmental pollution, there will be some financial incentives considered [...].---The energy and gas consumption more than the consumption pattern will be liable to maximum one hundred percent (100%) overcharge. The extra amounts which are obtained this way will be transferred to the public income account in the State Total Treasury and will be charged according to the law for Targeted Subsidies Law and Annual Budget Law, respectively under articles 73 of this law [...].

**EE public awareness/promotional programmes:**

The Ministries of Educational Training, Science, Researches and Technology with cooperation of Ministries of Energy and Oil are obliged to include educational units for Energy Management Course at all educational levels and the related majors and to update the subjects. ---Ministries of Labor and Social Affairs and Education and Training are obliged to consider related vocational and technical courses, effective training or efficiency methods to apply energy under supervision of Ministries of Oil and Energy while preparing and executing educational programs. The Ministry of Science, Researches and Technology is obliged to plan and take action to establish develop branches related to energy management in Masters' and Doctorate levels in the State universities and to contain educational subjects titled Energy Management in Bachelors' and Associate Degree in engineering majors and other related majors within one year upon approving this law.---The Ministry of Islamic Culture and Guidance, Islamic Republic of Iran Broadcast, Islamic Propaganda Organization and Municipalities are obliged to distributing energy logical consumption culture and consumption pattern and behavior modification with cooperation of the Ministries of Energy and Oil in planning and executing cultural and advertising activities.---The Ministry of Housing and Urban Development is obliged to take actions in order to prepare educational materials required for applied training of energy efficiency methods in buildings and mechanical and electrical installations and to hold educational courses for engineers, holders of associate degrees and practical architectures working and building section and to consider the above mentioned items at their qualification tests. ---The Ministry of Energy, with cooperation of Ministry of Industries and Mine is obliged to prepare and hold informative courses and applied training on general specialized energy management of electricity and heat for the managers of energy in industrial units as well as graduated students [...].

## Renewable Energy

**RE priorities:**

The Ministry of Energy is obliged to support developing to use energy renewable sources, including wind, sun, earth, heat, small water (up to 10 megawatt), sea and biomass (including agricultural and jungle wastes, urban trash and sewage, industrial wastes, animal wastes, biogas, and biomass) energies and conclude long-term contracts for guaranteed purchase from nongovernmental electricity producers from renewable resources through the related organizations.

**RE prioritization, portfolio standards:**

The Ministry of Energy is obliged to support developing to use energy renewable sources, including wind, sun, earth, heat, small water (up to 10 megawatt), sea and biomass (including agricultural and jungle wastes, urban trash and sewage, industrial wastes, animal wastes, biogas, and biomass) energies and conclude long-term contracts for guaranteed purchase from nongovernmental electricity producers from renewable resources through the related organizations.

**RE heat obligation/mandate:**

The Ministry of Energy is obliged to take actions in order to support non-governmental companies which distribute and sell heat and extend it all over the country in order to purchase heat recycled from electricity generating power plants and to sell them to the industrial and constructional units.

## Environment

**Pollution control action plans:**

All the executive departments are obliged to consider traffic issues and transportation methods of the clients and employees in preparing projects and programs within their responsibility field and to take required actions in order to facilitate transportation and reducing energy consumption.[...] Ministry of Interior, City and Municipality Islamic Councils are obliged to establish regional centers providing urban services within the framework of the comprehensive transportation project in order to decrease commuting, to reduce fuel consumption and to protect environment.---All executive departments are obliged only to purchase and use qualified vehicles according to the technical and specifications under article 11 of this law.---develop, revise and equip the State refineries, the Ministry of Oil is obliged to cooperate and supply kinds of fuel required for the State transportation section, observing environmental standards. The Environmental Protection Organization with cooperation of Ministries of Interior, Road and Traffic and Oil, Institute of Standards and Industrial Research of Iran and municipalities is obliged to take actions to reduce fuel consumption and air pollution by executing environmental standards.

**Land use change for energy production purposes:**

-The Ministries of Electricity and Oil are obliged to prepare energy consumption standard and criteria for each agriculture and garden unit under cultivation with cooperation of Agricultural Jihad Ministry, Environmental Organization and Institute of Standards and Industrial Research of Iran according to the climate, authorized water harvesting and considering the type of product using efficient methods for water harvesting and new watering methods.

**Energy-water nexus:**

-The Ministries of Electricity and Oil are obliged to prepare energy consumption standard and criteria for each agriculture and garden unit under cultivation with cooperation of Agricultural Jihad Ministry, Environmental Organization and Institute of Standards and Industrial Research of Iran according to the climate, authorized water harvesting and considering the type of product using efficient methods for water harvesting and new watering methods.--The Ministry of Energy upon executing expert analysis and feasibility and reasonable technical and economic justification is obliged to supply the heat required by distilled water-sweetening units from recycling heat power plant wastes. [...].

## Pricing

**Energy pricing:**

The energy and gas consumption more than the consumption pattern will be liable to maximum one hundred percent (100%) overcharge. The extra amounts which are obtained this way will be transferred to the public income account in the State Total Treasury and will be charged according to the law for Targeted Subsidies Law and Annual Budget Law, respectively under articles 73 of this law [...].--to align the behavior of electricity generating against with the national interests, the fuel price sold to the power plants is determined with the annual leverage output for electricity and heat as thirty percent (30%) and less, with twenty percent (20%) increase computing to the price determined in the Targeted Subsidies Law and fuel sale price to the power plants with the annual average output for electricity and heat as seventy percent (70%) and more, with twenty percent (20%) discount comparing to the price determined in the Targeted Subsidies Law. Other power plants pay an amount which proportionately decreases upon increasing the power plant output according to the related bylaws, as the fuel price. The extra received amounts will be transferred to the public income account in State General treasury after deductions for the discounts, in order to be spent to develop the power plants loss recovery.--The price and terms for purchasing electricity produced from renewable resources are determined as proposed by the Ministry of Electricity and approved by the Board of Ministers.

## Energy Supply and Infrastructure

**Energy supply priorities:**

In order to improve efficiency, increase security to supply energy ,and make a widespread partnership in non-governmental section at energy supply, A) The Ministry of Oil with cooperation of the Ministry of Energy is obliged to take actions in order to support research, investment, and to develop those units which produce electricity, heat and cooling simultaneously through non-governmental section. B) Supporting the related research centers and industries, the Ministry of Industries and Mine is obliged to take actions in order to develop local technical science and the country self-dependency in supplying the equipments for producing electricity heat and cooling simultaneously.--Using resources exporting fuel oil in excess of domestic consumption, finance, partnership by the private sector or by public resources, at the framework of annual budget, the government is obliged to improve technology and complete crude oil refining chain in refineries in a way to achieve the average annual production of crude oil by the refineries to maximum ten percent (10%) delivered crude oil, with reduction of production minimum as two percent (2%) crude oil, within 15 years and the gasoline, gas oil, kerosene, liquid gas and fuel oil and other products are will be produced in accordance to the global standards.

**Infrastructure development priorities:**

The Ministry of Oil is obliged to establish, develop and revise the gas distribution network in each region with full coordination with the heat distribution network.

## Investment

**Investment climate development:**

The Ministry of Energy is obliged to support developing to use energy renewable sources, including wind, sun, earth, heat, small water (up to 10 megawatt), sea and biomass (including agricultural and jungle wastes, urban trash and sewage, industrial wastes, animal wastes, biogas, and biomass) energies and conclude long-term contracts for guaranteed purchase from nongovernmental electricity producers from renewable resources through the related organizations.

## Governance

**National policy structure:**

A group consisting of Energy and Oil Ministers and the Deputy of Planning and Strategic Supervision Department of the President will determine, revise and review the major policies about each of the energy consumption and production areas.

**Energy institutional structures:**

Supreme Council of Energy is responsible to determine the policies at the State energy section such as new energies and conservation of producing and consuming kinds of energy carriers. The structure of Supreme Council of Energy must be revised in order to provide the possibility for the energy supplying and demanding parties to attend in the Council meetings regularly and to determine their common policies in the energy section.--Revising internal organizations required for promoting research and development system according to the article 4 of this Law, within the framework of Five-Year Planning Law and State Services Management Law suggested commonly by the Oil and Energy Ministries will be approved by the Board of Ministers within 6 months after this Law is approved.--The Ministry of Energy may establish an independent organization or legal entity to promote efficiency and utilize renewable resources as much as possible [...].--To Manage demands and to execute the policies related to conservation of fuel consumption in different consumption sections, the Ministry of Oil is obliged to assist developing application of kinds of new technologies for converting energy in different consumption sections, reducing long-term costs resulted by energy demands, preparing criteria, regulations and instructions related to energy consumption conservation, replacing energy carriers economically and developing application of local energy capacities and renewable energies, preparing a proposal for revisions on the Articles of Associations and duties of fuel consumption conservation company and submit them to the Board of Ministers for approval.--Oil and Energy Ministries are obliged to cooperate with the related Ministries and Institute of StandJrds and Industrial Research of Iran and determine the monthly consumption pattern of energy carriers for household, commercial, public sections and consumption

specialized for industries [...] mines, mineral industries, agriculture and water pumping and submit them to the Board of Ministers for approval, considering the regional conditions, culture and habits of consumption, technology used in industry, mine and agriculture sections and within the framework of the Annual Budget Law and Targeted Subsidies Law.

**M&E of policy implementation:**

The related Ministries are obliged to supervise proper execution of this article.---The government is obliged to take the necessary actions in order to decrease energy special consumption industry, agriculture, public transportation, commercial, and household sections annually and notify annually.--- [...] 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, [...]

**Statistics collection and management:**

The Ministries of Oil and Energy and other in charge Ministries and Organizations in this law are obliged to submit the annual report on the extend of effectiveness of policies and actions for energy saving, classified by the carriers and economic sections which consume energy.

**Public database availability:**

Deputy of Planning and Strategic Supervision Department of the President is obliged to obtain information for the energy section (oil, gas, products and electricity) from the Ministries of Oil and Energy every six months, and to inform people through public media.

## Technology

**Clean energy technology priorities:**

In order to manage electricity, gas and water production and consumption in the country, the Ministry of Energy and Oil, per case, are obliged 1- to determine issue and execute similar technical instruction on design, construction, supply, installation and utilization of substructure and measuring and control equipments of the smart network. -2 To install only smart counters equipped with smart reading and control of load and updated information technology facilities for all the new applicants of subscription. [...] Reading control and information technology systems for electricity, gas and water will be designed, executed and utilized harmoniously and inclusively.---To recycle energy from heat loss by nuclear power plants as heat, cooling or sweetened water, before establishing atomic power plants Atomic Energy Organization is obliged to make feasible studies on application of simultaneous production of electricity and heat in the above mentioned power plants, and in case the outcome of these studies is positive, to establish and utilize these power plants only according to the above mentioned method. This organization is obliged to execute research projects and studies in order to reduce energy consumption in fuel cycle installations, to localize constructing nuclear power plants and the research projects related to nuclear fusion.

**Clean energy technology deployment:**

Energy, Oil, Agriculture and Industries and Mine Ministry is obliged to identify and provide facilities for all the technologies required at the specialized area for providing and consuming energy for the next twenty years at their specialized field and provide the possibility to design and improve them in order to be utilized by the internal manufacturers and producers.---In order to improve efficiency, increase security to supply energy ,and make a widespread partnership in non-governmental section at energy supply, A) The Ministry of Oil with cooperation of the Ministry of Energy is obliged to take actions in order to support research, investment, and to develop those units which produce electricity, heat and cooling simultaneously through non-governmental section. B) Supporting the related research centers and industries, the Ministry of Industries and Mine is obliged to take actions in order to develop local technical science and the country self-dependency in supplying the equipments for producing electricity heat and cooling simultaneously.

**R&D energy efficiency:**

In order to support and encourage to upgrade research and development system on new technologies by providing required research finance up to the prototype and a economizing stage, appropriate executive solutions by the Oil and Energy Ministries are prepared and approved as annual budget by the Board of Ministers.---In order to improve efficiency, increase security to supply energy ,and make a widespread partnership in non-governmental section at energy supply, A) The Ministry of Oil with cooperation of the Ministry of Energy is obliged to take actions in order to support research, investment, and to develop those units which produce electricity, heat and cooling simultaneously through non-governmental section. B) Supporting the related research centers and industries, the Ministry of Industries and Mine is obliged to take actions in order to develop local technical science and the country self-dependency in supplying the equipments for producing electricity heat and cooling simultaneously.

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