

# CLIMATE CHANGE LEGISLATION IN

# TURKEY

*AN EXCERPT FROM*

## **The 2015 Global Climate Legislation Study** **A Review of Climate Change Legislation in 99 Countries**



**Michal Nachmany, Sam Fankhauser, Jana Davidová, Nick Kingsmill,  
Tucker Landesman, Hitomi Roppongi, Philip Schleifer, Joana Setzer,  
Amelia Sharman, C. Stolle Singleton, Jayaraj Sundaresan and Terry  
Townshend**

[www.lse.ac.uk/GranthamInstitute/legislation/](http://www.lse.ac.uk/GranthamInstitute/legislation/)



**Grantham Research Institute on  
Climate Change and  
the Environment**



**G L O B E**  
The Global Legislators Organisation



**Inter-Parliamentary Union**  
For democracy. For everyone.

# Republic of Turkey

## Legislative Process

Turkey is a republic based on democracy, secularism, social state, rule of and fundamental rights and freedoms. Legislative power is vested in the Grand National Assembly (GNAT), a unicameral parliament with 550 deputies elected for four-year terms. GNAT's election system is based on proportional representation determined by the "D'Hondt formula", a mathematical formula which involves the principle of highest average. A political party must have at least 10% of total votes to win seats in Parliament. The Assembly is responsible for the enactment, amendment and repeal of laws. The laws adopted by the Assembly are promulgated by the President within 15 days or referred back to the Assembly for further consideration.

The right to introduce bills belongs to the deputies and the Council of Ministers. The bills introduced by deputies are described as private members' bills. Government bills must contain the signatures of the Prime Minister and all cabinet ministers. The Speaker of the Assembly designates the bill to be considered by a designated standing committee with relevant expertise, which issues a formal opinion to the Assembly before it is put to vote.

Once passed by the Assembly, the law is then transferred to the President. Then the law is sent to the Prime Ministry to be published in the Official Gazette according to the will of the President. Once published, the law takes immediate effect unless otherwise provided in the law. With the exception of budget bills the President may veto all or a portion of a bill, sending the legislation back to the Assembly for re-consideration with justification.

If the President does not approve the publication of the bill in part, the Assembly may debate only the articles that are not approved or the bill as a whole. The Assembly may adopt the text with or without amendments after this debate. If the Assembly accepts the law without amendment, the President must approve promulgation in the Official Gazette. If the Assembly accepts the law with amendments, the President has the right to send the law back to the Assembly.

## Approach to Climate Change

Despite strong economic growth during the past decade and its membership in the Organisation for Economic Co-operation and Development (OECD), Turkey is considered a "middle income" country, a point that the country stresses in international discussions concerning climate change and mitigation of emissions.

Referencing historically low GHG emissions, Turkey has declined to make any commitment to reduce GHGs based on any specific reference year. Reducing emissions is viewed as a threat to further economic expansion. Nonetheless Turkey plans to limit future GHG emissions through measures that will not compromise its sustainable development and poverty reduction priorities. It has also stated that it will carry out mitigation activities in a measurable, reportable and verifiable manner, in accordance with its national programmes and strategies.

Due to disputes over Turkey's mitigation obligations in comparison to other OECD member countries, Turkey was deleted from the list of Annex-II countries under the UNFCCC at the Seventh Conference of Parties (COP7) in Marrakesh in 2001. Turkey became a member to the Convention in 2004 and ratified the UNFCCC by law in 2003 after a Decision that invited all member countries to recognise the special circumstances of Turkey relative to other Annex-I countries. Parliament endorsed the ratification of the Kyoto Protocol and officially became a party to the Protocol in 2009.

In 2001, the Co-ordination Board on Climate Change (CBCC) was established. The CBCC was restructured in 2004 after Turkey became a party to the UNFCCC and in 2010 its remit was expanded with the participation of new members. In 2013 the CBCC was merged with the Co-ordination Board on Air Emissions, and renamed the Co-ordination Board on Climate Change and Air Management. The Board, composed of relevant ministries and industry representatives, determines the policies, measures and activities to be pursued related to climate change. Turkey has put into effect policies and measures to tackle climate change in the energy, agriculture, forestry, transportation, industry and waste sectors.

### **Energy Supply**

The energy sector is the major source of Turkey's GHG emissions and so the main focus of mitigation and adaptation measures. Hydro-power, wind energy and other renewables have been incentivised since 2005 with the passing of The Act on Renewable Energy. The law obliges energy providers to buy a certain percentage of electricity from renewable sources, as well as ensuring that small scale and domestic renewable producers have access to the grid and can sell any surplus electricity.

Increasing the production of geothermal energy is a government priority and as such legislation incentivising and regulating the market was passed in 2007. Turkey is also retrofitting power plants and using low-carbon fuels.

### **Energy Demand**

After passing the Act on Renewable Energy, legislative efforts turned towards energy efficiency, and in 2007 the Act on Energy Efficiency was passed with the aim of avoiding 75 million CO<sub>2</sub>-e tonnes of emissions by 2020. The Act on Energy Efficiency contains a regulation that lays down principles and procedures for

standardized energy performance in residential, commercial and service buildings. In accordance with the By-Law on Heat Insulation in Buildings published in 2006, buildings are insulated to reduce heating and cooling needs.

### **Carbon pricing**

Although Turkey cannot benefit from the market-based flexible mechanisms of the Kyoto Protocol, voluntary carbon projects have been developed and implemented. By January 2013, Turkey had 218 registered projects in the voluntary carbon market, leading to annual GHG reductions of 16.2 million tons of CO<sub>2</sub>-e.

### **Transportation**

Initiatives being launched in the transportation sector include enhancing the quality of motor vehicle fuels, increasing the use of biofuels and new engine technologies, withdrawing old vehicles from use, expanding metro and light rail networks in big cities in order to encourage mass transportation, the Marmaray Sub-sea Tunnel Project in Istanbul connecting the Asian and European sides of the city (which started operating in 2013 and will reduce GHG emissions by 130,335 tonnes per year, as well as the expansion and improvement of the railway network, including high-speed train lines.

### **REDD+ and LULUCF**

Agriculture occupies an important role in the economy of rural areas, and negative effects of climate change on water resources will be reflected in water scarcity and an increased need for irrigation. Adaptation actions include protection of water resources, expansion of irrigation systems to increase efficiency, and early flood warning systems.

The government is promoting use of biomass instead of fossil fuels and use of best available agricultural and irrigation techniques to reduce emissions and conserve natural resources in agriculture. A desired effect of the Law on Soil Conservation and the Act on Grassland and Pasture Conservation is to contribute to carbon sequestration. In 2008, Turkey adopted the Action Plan on Drought Preparedness and Combating Drought.

Turkey is committed to reforestation and regulates deforestation, striving to improve economic and social conditions of people living in forest villages and provide funds to install renewable energy sources (especially solar systems) to prevent deforestation. An ambitious reforestation campaign ran from 2008 to 2013 with a target of 2.3m ha of land and the goal of sequestering 181.4m tonnes of CO<sub>2</sub> over the course of 20 years.

### **Adaptation**

In 2011, The Ministry of Environment and Urbanization published “Turkey's National Climate Change Adaptation Strategy and Action Plan”. The document provides an updated risk analysis for the country and identifies challenges to implementation of adaptation strategies. Vulnerability is categorised into six key

areas: water resources management; agriculture sector and food security; ecosystem services, biological diversity and forestry; natural disaster risk management; public health; and crosscutting issues. Broad objectives are listed under each category, and the document offers a comprehensive legal and programmatic analysis of how and where the government may intervene within existing legislation and Ministerial projects.

## Turkey: Legislative Portfolio

<b>Name of law</b>	<b>Act No. 5346 on Utilization of Renewable Energy Sources for the Purposes of Generating Electrical Energy (Renewable Energy Law)</b>
<b>Date</b>	18 May 2005, amended by Law No. 6094, of 29 December, 2010
<b>Summary</b>	This Act (also known as the Renewable Energy Law) encourages the use of renewable energy. This law encompasses the procedures and principles of the conservation of renewable energy resource areas, certification of the energy generated from these sources, and use of these sources.

The measurable objective is to increase the amount of electricity produced by renewable sources by 30% by 2023.

The Act governs the principles for the conservation of renewable resource areas and introduces incentives for domestic energy projects, providing feed-in tariffs for electricity from renewable energy sources. The legal entity holding a generation licence is granted a "Renewable Energy Resource Certificate" (RES Certificate) by the Electricity Markets Regulation Authority (EMRA) to identify and monitor the resource type in purchasing and sale of the electrical energy generated from renewable energy resources in the domestic and international markets.

It creates a broad basis for an emerging domestic renewable energy market. Grid operators are obliged to provide access to the grid for renewable energy generators, and independent power producers can benefit from the feed-in tariff. Holders of energy retail licences are obliged to purchase a percentage of their total uptake from licensed generation companies holding a RES Certificate.

The price of the electricity to be purchased under the Act should be the nationwide average of the electricity wholesale price of the previous year (determined by the EMRA). However a producer can sell the electrical energy generated for a higher price in the market if they are able to.

Some highlights of the law include:

- The reduction or cancellation of service fees as an incentive for those willing to build energy generation facilities to meet their own energy consumption needs.
- Further incentives are available through a Council of Minister's Decree, such as investments for energy generation facilities, procurement of electro-mechanic systems within the country, research, development and production investments concerning solar energy units, and research and development investments for biomass energy.
- Where there are sufficient geothermal energy resources, demand will be primarily met by geothermal and solar thermal energy resources.
- In the event that the forests and the lands under private ownership of the Treasury or under the control or disposal of the State are used to generate electricity from renewable energy resources, these areas are leased to or right of way is given to the relevant parties. Any fees required for using this land is reduced by 85%.

The law also stipulates that development plans that might have a negative impact on the use and efficiency of renewable energy resource areas can no longer be created on public land.

<b>Name of law</b>	<b>Act No. 5686 on Geothermal Resources And Mineral Waters</b>
<b>Date</b>	13 June 2007
<b>Summary</b>	<p>In order to increase the production and consumption of geothermal energy 10-fold, the Act was passed as a specific act to this renewable source in addition to the Act on Renewable Energy (see flagship legislation).</p> <p>The Act outlines the procedure, elements and sanctions for issuing transferring and revoking operation licences, auditing the actions of firms while safeguarding resource and the environment. The Act also regulates natural gas that is produced during the process of geothermal production.</p> <p>The Act sets forth the rules and principles for rightful ownership of the resources, during the exploration and operational periods of the geothermal and natural mineral water resources that are/will be specified along with gases with geothermal origins, their turnover, abandonment, bid tendering and terminating the use of resources and protection and extraction of resources.</p>

<b>Name of law</b>	<b>Act No. 5627 on Energy Efficiency</b>
<b>Date</b>	18 April 2007
<b>Summary</b>	<p>The purpose of this Act is to increase energy efficiency, avoid waste, ease the burden of energy costs on the economy and protect the environment.</p> <p>It aims to do this by increasing and promoting energy efficiency in energy generation, transmission, distribution and consumption phases at industrial establishments, buildings, power generation plants, transmission and distribution networks and transportation, raising energy awareness and implementing training of citizens, and using renewable energy sources.</p> <p>One of the main aspects of the Act is the establishment of an administrative structure for efficient policy, monitoring, analysis, and projections of energy efficiency, through the creation of a General Directorate of Renewable Energy.</p> <p>The role of the General Directorate is to prepare and issue inventories and future projections for the development of energy efficiency, industrial establishments and buildings by region and sector, and annual reports containing facts and assessments for the public sector. This General Directorate also establishes and facilitates the framework for energy efficiency auditing, which is conducted on industry.</p> <p>The Act also sets out energy efficiency management legislation for industrial establishments, commercial buildings, service buildings or public sector buildings. It stipulates that these establishments are required to nominate one of their employees as an energy manager who will be responsible for compliance with energy efficiency legislation.</p> <p>An energy identity certificate is issued to building owners or managers by the Ministry of Energy and Natural Resources. The energy identity certificate holds information on the building's energy requirements, insulation characteristics, efficiency of heating and/or cooling systems, and energy consumption, and is an important component of the energy efficiency administrative process.</p> <p>The Act contains a regulation that lays down principles and procedures for standardized energy performance in residential, commercial and service buildings. The regulation contains norms, standards, minimum performance criteria, data collection and control procedures on architectural design, heating, cooling, heat insulation, hot water, electrical installation and lighting. For example, buildings with a central heating system are required to use systems that allow the distribution of heating costs based on the quantity of heat consumption by central or local heat or temperature control devices.</p>

On an industry specific level, a regulation within the Act lays down the principles and procedures relating to increasing the efficiency of electric generation plants and transmission and distribution networks, demand side management, utilisation of waste heat in thermal plants, and it encourages the blending of fossil fuel distribution with fuels such as biofuel and hydrogen.

Implementation of voluntary agreements with industry involves production efficiency targets, and is expected to increase energy efficiency by 10% over a three-year period.

A regulation within the Act sets out stipulations on unit fuel consumption of vehicles manufactured in the country, raising efficiency standards in vehicles, rolling out mass transportation, installing advanced traffic systems for increasing energy efficiency in transportation.

Training and awareness activities are considered under the Act on Energy Efficiency, which aims to promote effectiveness of energy efficiency services and energy awareness. Activities are focused across producers, importers, and consumers, with practical and theoretical information available for all stakeholders.

---

<b>Name of law</b>	<b>Act No. 5403 on Soil Conservation and Land Use</b>
<b>Date</b>	19 June 2005
<b>Summary</b>	<p>This legislation has the purpose of protecting and improving soil quality, especially in areas deemed at risk of degradation due to climate change. It amends a number of existing laws and regulations by promoting sustainability and adaptation to climate change.</p> <p>The Ministry of Forest and Water Affairs is tasked with undertaking necessary measures by co-operating with related public agencies and institutions and non-governmental organizations on areas in which land degradation has been identified due to climate change or human settlement, agriculture or industrial activities.</p>

---

## ***Turkey: Executive Portfolio***

<b>Name of Policy</b>	<b>Energy Efficiency Strategy Paper 2012-2023</b>
<b>Date</b>	25 February 2012
<b>Summary</b>	<p>This 'strategy paper' is an executive policy annex to the 2007 Energy Efficiency Law. The Paper was approved by the Higher Planning Council (YPK) and aims to detail a set of federal policies that decrease energy intensity (the amount of energy consumed per capita) by at least 20% by the year 2023.</p> <p>There should be close collaboration between the public entities and NGOs to implement the measures in the strategy and measure and evaluate the results, the subjected coordination will be provided by General Directorate of Renewable Energy in the name of Ministry of Energy and Natural Resources.</p>

---

<b>Name of Policy</b>	<b>Climate Change Action Plan 2011-2023</b>
<b>Date</b>	2 May 2011
<b>Summary</b>	<p>The Action Plan sets out a road map with short, medium and long-term plans for the fight against climate change encompassing all sectors of the economy.</p> <p>Overall the plan involves providing climate-friendly goals that underpin Turkey's growth. These include: strengthening the existing information structure on low carbon progress, and developing financing models for the transition to a low carbon economy. This is with the aim of improving the fiscal and technical infrastructure to enable the limitation of GHG emissions. Some details of the extensive Plan are highlighted below:</p> <p><b>Energy</b></p> <p>The plan includes a number of measurable goals regarding energy supply, efficiency standards in residential and commercial buildings, and incentivizing renewables. For example:</p> <ul style="list-style-type: none"> <li>• Reducing primary energy intensity by 10% compared to 2008 by 2015</li> <li>• Limiting GHG emissions from coal-fired electricity production, by using cleaner technologies and taking efficiency-increasing measures by increasing the average cycle efficiencies of existing coal-fired thermal power plants until 2023</li> <li>• Issuing “Energy Performance Certificates” to all buildings until 2017</li> <li>• Decreasing annual energy consumption in the buildings and premises of public institutions by 10% until 2015 and by 20% until 2023</li> <li>• At least 20% of the annual energy demand of new buildings will be met via renewable energy resources as of 2017</li> <li>• Reducing GHG emissions in new settlements by at least 10% in comparison with existing settlements (which are selected as pilot regions and the GHG emissions of which are identified until 2015) until 2023.</li> </ul> <p><b>Forestry</b></p> <ul style="list-style-type: none"> <li>• Increase forest carbon sequestration by 15% of 2007 value until 2020 ( 14,500 Gg by 2007, 16,700 Gg by 2020)</li> <li>• Reduce deforestation and forest damage by 20% compared to 2007 values by 2020</li> </ul> <p><b>Land use change</b></p> <ul style="list-style-type: none"> <li>• Integrate climate change in land use and land use changes management strategies by 2015</li> <li>• Increase the amount of sequestered carbon in agricultural forestry activities by 10% by 2020 compared to 2007 values</li> <li>• Quantify the carbon stored in pastures and meadows in 2012. Increase this by 3% by 2020</li> </ul> <p><b>Transportation</b></p> <p>The plan aims to ensure the balanced use of types of passenger and freight transportation, specifically:</p> <ul style="list-style-type: none"> <li>• Increasing the share of railroads in freight transportation from 5% in 2009 to 15%, and in passenger transportation from 2% in 2009 to 10% by 2023</li> <li>• Increasing by 2023, the share of seaways in freight transportation from 2.66% of tonne/km in 2009 to 10%, and in passenger transportation from 0.37% in passenger/km in 2009 to 4%,</li> <li>• Decreasing by 2023 the share of highways in freight transportation from 80.63% of tonne/km in 2009 to below 60%, and in passenger transportation from 89.59% in passenger/km in 2009 to 72%</li> <li>• Developing the necessary legislation, institutional structure and guidance documents until the end of 2023 for implementation of sustainable</li> </ul>



---

transportation planning in cities

- Dissemination of the use of alternative fuels and clean vehicle technologies in the transportation sector by making legal arrangements and building capacity to increase use of alternative fuels and clean vehicles until 2023
  - Increasing efficiency in energy consumption of transportation sector by limiting energy consumption in transportation until 2023.
-

## **Sources**

- National Activities of Turkey on Climate Change. 2010. Ministry of Environment and Forestry. Available online:  
[https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&ved=0CC8QFjAA&url=http%3A%2F%2Fwww.dsi.gov.tr%2Fdocs%2Fiklim-degisikligi%2Fnational\\_activities\\_of\\_turkey\\_on\\_climate\\_change.pdf%3Fsfvrsn%3D2&ei=cVrAUuffF8zfsAS\\_kYGoDA&usg=AFQjCNGqvceybOtZFZ1T-Ba8gB\\_I7Wq1qw&sig2=xsR\\_TU1cYHQ26givEmSKGQ&bvm=bv.58187178,d.cWc](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&ved=0CC8QFjAA&url=http%3A%2F%2Fwww.dsi.gov.tr%2Fdocs%2Fiklim-degisikligi%2Fnational_activities_of_turkey_on_climate_change.pdf%3Fsfvrsn%3D2&ei=cVrAUuffF8zfsAS_kYGoDA&usg=AFQjCNGqvceybOtZFZ1T-Ba8gB_I7Wq1qw&sig2=xsR_TU1cYHQ26givEmSKGQ&bvm=bv.58187178,d.cWc). Accessed on 17 November 2014.
- Republic of Turkey Climate Change Action Plan 2011-2013. 2012 Ministry of Environment and Urbanization. Ankara. Available online:  
[http://iklim.cob.gov.tr/iklim/Files/IDEP/%C4%B0DEP\\_ENG.pdf](http://iklim.cob.gov.tr/iklim/Files/IDEP/%C4%B0DEP_ENG.pdf). Accessed on 17 December 2014.
- Turkey's 5th National Communication under the UNFCCC. Ministry of Environment and Urbanisation. 2013. Available online:  
[https://unfccc.int/files/national\\_reports/annex\\_i\\_natcom/submitted\\_natcom/application/pdf/nc5\\_turkey\[1\].pdf](https://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/nc5_turkey[1].pdf). Accessed on 10 November 2014.
- "Turkey approaching the Kyoto Protocol?" Joint Implementation Quarterly. July 2007. Available online:  
[https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&ved=0CC4QFjAA&url=http%3A%2F%2Fwww.traee.org%2Ftraee%2Fbasin%2Fpanel\\_1.pdf&ei=CVfAUvb mOOqosAS81oDYDA&usg=AFQjCNHRHfnyt2h9qSRJRmHh4TyW57-YCA&sig2=5GA-WR9cMb\\_TEeqz0hE5Sg&bvm=bv.58187178,d.cWc](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&ved=0CC4QFjAA&url=http%3A%2F%2Fwww.traee.org%2Ftraee%2Fbasin%2Fpanel_1.pdf&ei=CVfAUvb mOOqosAS81oDYDA&usg=AFQjCNHRHfnyt2h9qSRJRmHh4TyW57-YCA&sig2=5GA-WR9cMb_TEeqz0hE5Sg&bvm=bv.58187178,d.cWc). Accessed on 17 November 2014.
- Türkmenoglu, Evren. 2012 "Climate change policies in Turkey." Ministry of Environment and Forestry: Climate Change Department. Available online:  
[https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&ved=0CEYQFjAA&url=http%3A%2F%2Fwww.cgseurope.net%2FUserFiles%2Ffile%2FAnkara%2520works hop\\_june%25202012%2Fpresentations%2FEvren%2520Turkmenoglu.pdf&ei=CVnAUrT5H-\\_NsQSovlCgDw&usg=AFQjCNENBLkf9YlBcG4t3SjB\\_7PP3-Alw&sig2=jTQJ5TEmygH6BI0kOgg4Q&bvm=bv.58187178,d.cWc](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&ved=0CEYQFjAA&url=http%3A%2F%2Fwww.cgseurope.net%2FUserFiles%2Ffile%2FAnkara%2520works hop_june%25202012%2Fpresentations%2FEvren%2520Turkmenoglu.pdf&ei=CVnAUrT5H-_NsQSovlCgDw&usg=AFQjCNENBLkf9YlBcG4t3SjB_7PP3-Alw&sig2=jTQJ5TEmygH6BI0kOgg4Q&bvm=bv.58187178,d.cWc). Accessed on 16 November 2014.