

**CLIMATE CHANGE LEGISLATION IN**

**THAILAND**

*AN EXCERPT FROM*

**The 2015 Global Climate Legislation Study**

**A Review of Climate Change Legislation in 99 Countries**



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# Thailand

## Legislative Process

Thailand is a constitutional monarchy. Its legislative branch (National Assembly) is modelled after the Westminster System and consists of a lower house (House of Representatives) and an upper house (Senate).

The House of Representatives has 480 members, who are elected in general elections every four years. The voting system is a mixed-member majoritarian system. Voters have two votes. With their first vote, they directly elect 400 members of parliament in single constituency elections through the first-past-the-post system). The second vote is then based on proportional representation. According to the overall share of second votes obtained, each party gets a proportion of the remaining 80 seats. The upper house or Senate has 150 members, of which 76 are directly elected from Thailand's 75 provinces and Bangkok. The remaining senators are appointed by a Senator Selection Committee. The Committee members include the President of the Constitutional Court, the Chairperson of the Election Commission, and the Chairperson of the State Audit Commission. Senators are non-partisan and are elected for six years.

Thailand has experienced a lot of political turmoil in recent years. After the Parliament was dissolved by Royal Decree, early elections were held on 2 February 2014. However, on 21 March 2014, the country's constitutional court declared the result invalid. After a military coup, a new election date was cancelled and an alternative date has not yet been determined.

In Thailand laws are introduced to the National Assembly in the form of bills, typically by the Prime Minister or ministers. Bills can also be introduced by a minimum of 20 members of the House of Representatives, a court (judiciary) or by petition (> 10,000 signatures). The legislative cycle begins in the House of Representatives, where a bill is debated, possibly amended and voted on. If approved, it is passed on to the Senate. If the Senate gives its approval, the bill is passed. In the case of rejection, it is returned to the House of Representatives for reconsideration. In the case of persistent disagreement between the two houses a joint committee is formed. The committee prepares a report and the bill is resubmitted. It passes if both houses give their approval. Before a bill is formally enacted it must be signed into law by the King (Royal Assent) and published in the government Gazette.

## Approach to Climate Change

Over the last decade, Thailand has experienced extreme weather phenomena and natural disasters on an unprecedented scale. In 2004, a tsunami hit its coastline, leaving large stretches of land devastated and thousands of people dead. In the 2011/2012 monsoon season, severe flooding paralysed large parts of the country, including its capital Bangkok. In combination with other factors, these events have increased awareness of climate change in Thailand, making it an important policy issue addressed in the country's National Economic and Social Development Plans (NESDP).

The 10th NESDP (2007-2011) defined objectives and targets to mitigate the impacts of climate change and developed a policy framework to increase energy efficiency and to reduce greenhouse gas (GHG) emissions. The Plan included measures to promote sustainable transport (e.g. electric vehicles) and expand green areas in Thailand's cities. Climate change is also one of the defining themes of the current NESDP (2012-2016), which developed three guidelines in the area of climate

change policy: 1) change the development paradigm toward a low-carbon and environmentally friendly economy (with a focus on energy efficiency in the transport sector); 2) upgrade adaptation capacity by enhancing knowledge and management tools to handle and respond to challenges from climate change; 3) foster economic resilience by developing a plan to deal with the negative economic consequences of climate change and international environmental agreements.

To further develop and implement Thailand's climate policy objectives, various bodies and mechanisms have been created. The National Committee on Climate Change (NCCC) was established in 2007. Chaired by the Prime Minister, the NCCC serves as an important forum for discussing and formulating climate policy. An Office of Climate Change Co-ordination was also established. Another important mechanism is the Greenhouse Gas Management Organisation (TGO). Established in 2007 by royal decree, the TGO serves as the Designated National Authority (DNA) for Clean Development Mechanism (CDM) projects in Thailand. It reviews CDM projects for approval, provides technical assistance, plays an important role in development of a GHG database, engages in capacity building, and promotes low carbon activities.

The Strategic Plan on Climate Change was approved by the Cabinet in 2008 and provided a framework for national responses to climate change, outlining six strategies: (1) build capacity to adapt and reduce vulnerabilities to climate change impacts; (2) promote GHG mitigation activities based on sustainable development; (3) support research and development to better understand climate change, its impacts and adaptation and mitigation options; (4) raise awareness and promote public participation; (5) build capacity of relevant personnel and institutions and establish a framework of co-ordination and integration; and (6) support international co-operation to achieve the common goal of climate change mitigation and sustainable development.

In 2009, the Office of Natural Resources and Environmental Policy Planning (ONEP) developed a draft policy titled the National Master Plan on Climate Change (2010-2019), later replaced by the Climate Change Master Plan (2012-2050). For several years ONEP has been conducting stakeholder consultations across the country in order to finalise the policy. Not yet approved by the NCCC, the policy will outline strategies for climate change adaptation, mitigation, and capacity building for climate change management as well as policy recommendations in several key areas, including urban areas, coastal zones, inland freshwater ecosystems, public health, agriculture, forest ecosystems, and public infrastructure.

### **Energy supply**

The energy sector in Thailand is managed by the National Energy Policy Council (NEPC), with the National Energy Policy Office (NEPO) acting as the secretariat. In 2002, it launched a programme to purchase energy from very small producers of renewable energy (capacity of less than 1 MW). These energy producers received a subsidy on top of the base tariff, a so-called "adder". In 2007, the programme was extended to producers with a capacity of up to 10 MW. Thailand was one of the first Asian countries to implement such a modified feed-in tariff system. Another important policy initiative was the Renewable Energy Development Plan (REDP). A first version of the REDP was adopted in 2008. Covering 2008-2022, the Plan aimed to "develop renewable energy as one of the country's major energy sources" and to increase Thailand's share of renewable energy, including solar, wind, hydro, biomass, biogas, hydrogen energy and biofuels (biodiesel and bioethanol), to 20% by 2022. In 2011, the cabinet approved the Alternative Energy Development Plan (2012-2021), increasing the renewable energy target from 20% to 25% of total energy consumption by the end of the planning period. The plan was accompanied by high government subsidies, in particular for solar energy projects.

Another important supply-side measure was the Energy Services Company (ESCO) fund. Launched in 2008, the ESCO fund provided financial assistance to small and medium sized companies in the renewable energy sector. Equipped with initial funding of THB500m (USD15.2m), the fund provided assistance in various forms, including equity investments, equipment leasing, and credit guarantees.

### **Energy demand**

A central piece of legislation on the demand-side is the Energy Conservation Promotion Act 1992 (amended 2007), which promotes energy conservation in designated factories and buildings. As a framework policy, it defines the scope, requirements and responsibilities for designated factories and buildings. Its three main objectives are (1) the promotion and support of energy conservation measures, (2) the promotion and support of energy efficient equipment, and (3) the provision of financial assistance. The Act consists of several components: A compulsory programme that requires designated industrial facilities and buildings to conduct energy audits, to analyse energy use, and to set targets and develop plans for energy conservation. The Act created a voluntary programme with a focus on small- to medium-sized companies and a complementary programme covering research programmes and awareness raising activities. To support energy conservation projects and research, the Act established the Energy Conservation Promotion Fund. The Energy Industry Act 2007 established the Energy Regulatory Commission to regulate the use of energy by industry, including the purchase of energy.

In response to an agreement on energy conservation targets for 2030 by government leaders at the Asia-Pacific Economic Co-operation (APEC) Summit in 2007, the Ministry of Energy developed the 20-year Energy Efficiency Development Plan (EEDP) (2011-2030) to provide a national framework and guidelines for Thailand's energy conservation activities. The EEDP set short-term (2011-2015) and long-term (2011-2030) energy conservation targets at the national- and sector-level (industry, transportation, commercial, and residential sectors). Formally approved in 2013, the EEDP includes a target to reduce energy intensity by 25% by 2030, compared to the 2010 baseline.

### **REDD+ and LULUCF**

The central pieces of legislation in the forestry sector are the Forest Act 1941 and the Forest Protection Act 1992. The National Park Act 1961, the National Forest Reserve Act 1964, and the Conservation and Protection of Wildlife Act 1992 are also relevant to forestry management and protection. In 1985, a national committee was established to develop a strategy for forest resource development and conservation. Policies formulated by this committee required that the government maintain 40% of the total land area under forest, divided into 25% for economic forests and 15% for conservation forests. The 7th Economic Development Plan (1992-1996) reversed the allocations to 25% of conservation forests and 15% for economic forests. This afforestation target has been repeatedly confirmed in policy documents such as the latest Economic Development Plan (2011-2016).

### **Transportation**

The AEDP set a goal to increase ethanol consumption to 9m litres per day by 2021. For biodiesel, the target was 5.97m litres per day. Implementation measures included provision of state subsidies for E20 gasohol, extension of the E20 service station network, compulsory biodiesel blending requirements in form of a B5 blend and government support for the manufacturing of eco-cars and E85 cars in form of tax incentives. In 2012, the Cabinet approved a new vehicle excise tax structure that switched the focus away from rates based on engine size to rates dependent on the quantity of CO<sub>2</sub> emissions. It will take effect in 2016 but a 20% higher tax rate for luxury motorbikes and motorcycles will take immediate effect. The Ministry of Transport is developing a Master Plan for Sustainable Transportation. The draft plan envisions "an efficient transport model that is

environment-friendly, appropriate for the development of sufficient and sustainable socio-economic infrastructure for Thailand”.

### Adaptation

Climate change adaptation is mentioned in several key policy documents. The Strategic Plan on Climate Change 2008-2012 includes a strategy to “build adaptive capacity to cope with climate change and to reduce vulnerability of various sectors”. Adaptation is also an important part of the draft Climate Change Master Plan 2014-2050 and the 11th National Economic and Social Development Plan 2012-2016. The latter includes plans to support scientific and technological research and innovation in adaptation and to establish mechanisms to evaluate and alleviate climate change impacts. However, as yet, Thailand has not passed any concrete adaptation legislation.

## Thailand: Legislative portfolio

<b>Name of Law</b>	<b>Energy Industry Act B.E. 2550 (2007)</b>
<b>Date</b>	11 December 2007
<b>Summary</b>	<p>The Act established the Energy Regulatory Commission (ERC) to regulate the energy industry, to prevent abuse of power and protect energy consumers and those adversely affected by energy industry operations. In energy efficiency and conservation, the ERC has the following authority and duties:</p> <ol style="list-style-type: none"> <li>1. Establish measures to ensure security and reliability of the power system;</li> <li>2. Inspect the energy industry operations of licensees to ensure efficiency and transparency;</li> <li>3. Promote knowledge and awareness in relation to energy;</li> <li>4. Promote and support human resources development in order to increase efficiency in the energy industry;</li> <li>5. Promote economical and efficient use of energy and the use of renewable energy and low-impact energy, with due consideration of the efficiency of the electricity industry operations and the balance of natural resources.</li> </ol>

<b>Name of Law</b>	<b>Energy Conservation Promotion Act B.E. 2535 and B.E. 2550</b>
<b>Date</b>	3 April 1992, 1 June 2008
<b>Summary</b>	<p>The Energy Conservation Promotion Act has three main components: A compulsory programme that requires “designated” factories and buildings to conduct energy audit, set targets for energy conservation. It includes a voluntary programme with a focus on small- to medium-sized companies and a complementary programme covering research programmes and awareness raising activities. Measures include:</p> <ul style="list-style-type: none"> <li>• Improvement in combustion efficiency of fuels</li> <li>• Energy recycling (waste heat recovery)</li> <li>• Prevention of energy loss</li> <li>• More efficient use of electricity</li> </ul> <p>The act created the Energy Conservation Promotion Fund to finance projects and research related to the issue of energy conservation.</p>

## Thailand: Executive portfolio

<b>Name of Policy</b>	<b>Energy Efficiency Development Plan (2011-2030)</b>
<b>Date</b>	27 December 2011, 19 March 2013
<b>Summary</b>	<p>The Energy Efficiency Development Plan (EEDP) 2011-2030 aims to:</p> <ol style="list-style-type: none"> <li>1. Set energy conservation targets in the short-term (five years) and in the long-term (20 years), both at the national level and in energy-intensive economic sectors, i.e. transportation, industry, commercial and residential sectors;</li> <li>2. Develop strategies and guidelines to promote energy conservation in order to achieve the plan's short-term and long-term targets</li> </ol> <p>The EEDP set the target to reduce energy intensity (amount of energy used per unit of GDP) by 25% in 2030 from 2010 baseline.</p>

<b>Name of Policy</b>	<b>Alternative Energy Development Plan (2012-2021)</b>
<b>Date</b>	27 December 2011
<b>Summary</b>	<p>The Alternative Energy Development Plan (AEDP) 2012-2021 aims to:</p> <ol style="list-style-type: none"> <li>1. Develop renewable energy as one of the country's major energy sources, thereby reducing dependence on fossil fuels and energy imports;</li> <li>2. Strengthen energy security;</li> <li>3. Promote renewable energy at the community-level;</li> <li>4. Support the domestic renewable energy industry; and</li> <li>5. Research, develop and promote advanced renewable energy technology.</li> </ol> <p>The AEDP set a target to increase the share of renewable energy to 25% by the end of the planning period.</p>

<b>Name of Policy</b>	<b>Strategic Plan on Climate Change (2008-2012)</b>
<b>Date</b>	January 2008
<b>Summary</b>	<p>Thailand's Strategic Plan on Climate Change (2008-2012) created a strategic framework for climate change policy-making. The Plan outlines six strategies to:</p> <ul style="list-style-type: none"> <li>• Build capacity to adapt and reduce vulnerabilities to climate change impacts</li> <li>• Promote GHG mitigation activities based on sustainable development</li> <li>• Support research and development to better understand climate change, its impacts and adaptation and mitigation options</li> <li>• Raise awareness and promote public participation</li> <li>• Support international co-operation to achieve the common goal of climate change mitigation and sustainable development.</li> </ul>

<b>Name of Policy</b>	<b>Decree to establish a Greenhouse Gas Management Organization B.E. 2550</b>
<b>Date</b>	7 July 2007
<b>Summary</b>	<p>The royal decree established the Greenhouse Gas Management Organisation (TGO), which serves as the Designated National Authority for Clean Development Mechanism (CDM) projects in Thailand. It reviews CDM projects for approval and provides technical assistance. The TGO plays an important role in development of a GHG database, engages in capacity building, and promotes low carbon activities.</p>

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