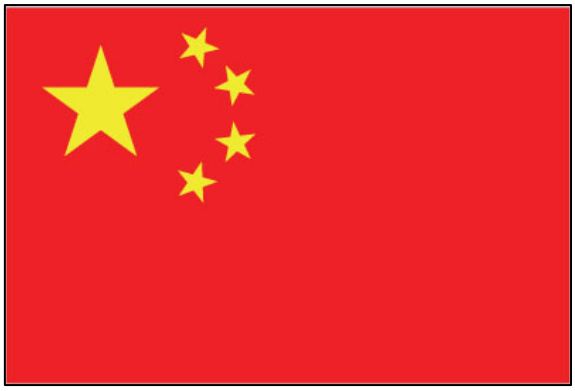
CLIMATE CHANGE LEGISLATION IN

CHINA

AN EXCERPT FROM

The 2015 Global Climate Legislation Study

A Review of Climate Change Legislation in 99 Countries



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China

Legislative Process

China's legal system is largely a civil law system. The national legislative power is exercised by the National People's Congress (NPC) and the Standing Committee of the National People's Congress. The NPC is responsible for criminal law, civil law, state organ law and other basic laws. While the NPC is not in session, the Standing Committee of the NPC is responsible for supplementing and amending parts of the laws promulgated by the NPC, provided they do not contradict with the basic principles of these laws. There is no division of legislative power between the central government and the provincial governments in China. The most important policy documents in China are the Five Year Plans that set the overall direction of China's economy and often include top-level targets. These plans are complemented by laws, passed by the NPC, and policies developed by government ministries.

Approach to Climate Change

China is the world's second largest economy but, with a population of over 1.3bn, its per capita income is still relatively low and levels of development differ widely between regions. China's actions to tackle climate change have focused mainly around energy production and energy efficiency. Climate change was first officially referred to in legislation or regulations in China's National Climate Change Programme of 2007, and repeated in China's Policies and Actions for Addressing Climate Change 2008. In 2009, the National People's Congress passed a comprehensive Climate Change Resolution. Technically these are not laws but policy documents guiding legislation.

Although there is not yet a comprehensive climate change law in China, in 2010 the government announced that China would begin work on climate change legislation. After an initial period of research, a review of international experiences and inputs from several academic organisations, the first formal draft of the law was completed in the second half of 2014 and, as of November 2014, a comprehensive formal consultation was under way with government ministries, industry and other stakeholders. Passage of the law is expected in 2015 or 2016. Meanwhile, China's domestic climate-related laws are dominated by a focus on saving energy, reflecting the need to improve energy efficiency to enable the country to keep pace with energy demand as the economy grows strongly.

China has passed an Energy Conservation Law and the 2005 Renewable Energy Law and is planning a new Energy Law, the official draft of which contains 14 chapters totalling 140 articles. The chapters are: General Principles; Energy Comprehensive Management; Energy Strategy and Planning; Energy Exploration and Transfer; Energy Supply and Service; Energy Conservation; Energy Reservation; Emergency Supplies; Energy in Suburban Areas; Energy Price and Taxes; Energy Technology; International Co-operation; Monitoring and Investigation; and Legal Responsibilities. The goals are relatively vague, with clearer targets to be set by ministries, including the National Development and Reform Commission (NDRC), Ministry of Construction, Ministry of Agriculture, Ministry of Transportation and the Bureau for Tax.

China's 12th Five-Year Plan, published in 2011, includes a target to reduce the carbon intensity of the economy by 17% of 2010 levels by 2015, in line with the 40–45% from 2005 target by 2020 committed to under the Copenhagen Accord. The Plan also increases the number of pollutants included in the "total emissions control" system and sets new targets for energy intensity (a reduction of 16% by 2015), the percentage of non-fossil fuel energy (to increase to 11.4% by 2015 from 8% in 2011) and an increase in forest coverage of 21.6%. The specific policies and mechanisms required to implement these targets are the responsibilities of ministries and provinces.

The State Council approved a package of policies and measures aimed at meeting the energy and carbon targets included in the 12th Five-Year Plan. This package included provincial and municipal-level carbon and energy intensity targets, recognising that the provinces and municipalities have different economic structures, efficiency options and levels of wealth.

In July 2013, to strengthen top-level planning on climate change, the State Council adjusted the composition and personnel of the National Leading Group for Addressing Climate Change, led by Premier Li Keqiang. All provinces have established their own leading groups to address climate change with the provincial governors chairing them.

To underpin China's top-level planning on climate change, the NDRC has developed a National Plan to Address Climate Change (2014-2020) that outlines the framework for addressing climate change in China, including targets, tasks and safeguarding measures. Under this framework, all provinces and municipalities must develop their own plans. Anhui, Gansu, Guangxi, Jiangxi, Liaoning, Ningxia, Qinghai, Sichuan, Xinjiang and Yunnan Provinces plus Chonqqing and Tianjin Municipalities, among others, have already published their plans.

In November 2014 at the Asia Pacific Economic Co-operation (APEC) leaders' meeting in Beijing, the US and Chinese Presidents made a joint announcement on climate change and clean energy co-operation. President Xi Jinping announced targets to peak CO_2 emissions around 2030, with the intention to try to achieve the goal earlier, and to increase the non-fossil fuel share of all energy to around 20% by 2030. The joint announcement marked the first time China has agreed to peak its CO_2 emissions.

The future of China's climate policy will be heavily influenced by the 13th Five Year Plan (2016-2020), which is under development and will be endorsed by the NPC in March 2016.

Sub-National Activity

China often pilots policies and mechanisms at the sub-national level and, if successful, scales up these initiatives to the national level. The emissions trading pilots referred to below are a good example. Legislation is also tested in this way. For example, in 2012, Shenzhen Municipal People's Congress passed the Provisions of Carbon Emission Management of the Shenzhen Special Economic Zone to strengthen the management of carbon emission trading, the first such legislation in China. Similarly, the provinces of Shanxi and Qinghai (with economies the size of Hungary and Bolivia respectively) have, in the last two years, passed provincial climate change laws and legislation is being developed in Sichuan and Jiangsu provinces (economies the equivalent size of Malaysia and Switzerland). These sub-national efforts will inform the development of national law.

China has also been piloting the concept of low carbon cities and provinces. Initially, five provinces and eight cities were selected to pilot low carbon communities. In 2012 this was expanded to include 29 new provinces and cities, including Beijing, Shanghai, Hainan Province and Shijiazhuang in Hebei Province. The pilots are required to develop goals and principles, including exploring "low carbon green development models". They are also required to establish measuring and reporting systems for GHG emissions and plans to curb those emissions.

Carbon pricing

The 12th Five-Year Plan encourages the use of market mechanisms to encourage emissions reductions. Seven provinces and municipalities (Beijing, Chongqing, Guangdong, Hubei, Shanghai, Shenzhen and Tianjin) are piloting emissions trading systems, the experiences of which will inform the design of a national scheme, due in 2016. Consideration is also being given to introducing a carbon tax but it is unclear whether, and how, this might be implemented.

Energy demand

Since 2012 China has invested CNY4.9bn (USD801m) within the central government's budget and CNY 2.6bn (USD425m) of the central fiscal bonus to support 2,411 projects on high-efficiency, energy-saving technologies, model products and industries, contracted energy management, developing energy-saving monitoring institutions, energy-saving buildings and green lighting. The government estimates that these projects have saved the energy equivalent of more than 19.79m tons of standard coal compared with the baseline scenario.

The Ministry of Housing and Urban-Rural Development issued the Special Blueprint for Conserving Energy in the Construction Sector during the 12th Five Year Plan Period. By the end of 2012, heat metering and energy efficiency renovations on 590m m^2 of existing housing stock in northern China had been completed, saving the energy equivalent of 4m tons of standard coal and reducing about 10 million tons of CO_2 emissions compared with the baseline scenario.

Energy supply

In late 2014 the State Council published an Energy Action Plan, the most important element of which was a target to cap coal use. The plan calls for capping annual coal consumption by 2020 at 4.2 billion tons and also reducing coal's share of China's primary energy mix to less than 62% by that year.

According to Chinese government figures, as at the end of 2013 the carbon intensity of China's GDP had fallen by 28.5% from 2005 levels, non-fossil fuels made up 9.8% of primary energy consumption and forest coverage had increased from 18.21% in 2005 to 21.6%.

In 2012 the State Council published a White Paper on energy policy. At the same time it announced that China's nuclear programme, suspended after the Fukushima disaster, would resume but at a slower pace than initially planned. The NDRC's Natural Gas Development Plan during the 12th Five-Year Plan Period, says that the supply capacity of natural gas will reach 176bn m^3 in 2015 and that 18% of urban residents will use natural gas. The NDRC, along with the National Energy Administration, also announced the Development Plan for Shale Gas (2011-2015); The Ministry of Finance and the National Energy Administration announced the Notice on Issuing the Subsidy Policies of Exploring and Utilising Shale Gas and allocated special funds to support shale gas projects. In 2013, the State Council issued the Airborne Pollution Prevention and Control Action Plan, which aims to control the consumption cap of coke and increase the use of clean energy.

In 2012, the Ministry of Science and Technology released Specific Plans for Clean Coal Technology. The 12th Five-Year Plan highlights clean coal technology as a priority in advanced energy, focusing on efficient clean coal-fired power generation, advanced coal conversion, advanced energy-efficient technology, regulation of pollutants and resource use technology. The Government Offices Administration of the State Council has carried out research projects on new energy and renewable energy applications for public institutions, building the energy efficiency of government and public institutions. The Ministry of Land and Resources has carried out a series of research programmes on geothermal investigation and exploration, geological traces of climate change and geological carbon sinks, as well as initiatives to make technological breakthroughs on the geological storage of CO_2.

In 2012 the State Council issued a note entitled Several Opinions on the Sound Development of the Photovoltaic Industry, articulating policies and measures to accelerate the uptake of solar energy and the National Energy Administration issued 'Development Plans' for Solar, Biomass and Geothermal energy. In 2012 China invested CNY127.7bn (USD21bn) in hydropower, CNY 77.8bn (USD12.7bn) in nuclear power and CNY61.5bn (USD10.1bn) in wind power.

By the end of 2012, total power generation capacity had reached 1,147GW, up by 7.9%. The generation of non-fossil fuel, including, hydro, nuclear, wind and solar energies, represented 28.5%

of the whole, 4.2 percentage points higher than in 2005. China had 54 supercritical coal-fired power stations in operation, the highest number in the world.

The announcement in November 2014 at the APEC leaders' Summit in Beijing, setting a target to expand total energy consumption coming from zero-emission sources to around 20% by 2030, will require China to deploy an additional 800-1,000GW of nuclear, wind, solar and other zero emission generation capacity by 2030 – more than all the coal-fired power plants that exist in China today and close to total current electricity generation capacity in the United States.

According to Chinese government figures, at the end of 2013 the carbon intensity of China's GDP had fallen by 28.5% from 2005 levels, non-fossil fuels made up 9.8% of primary energy consumption and forest coverage had increased from 18.21% in 2005 to 21.6%.

REDD+ and LULUCF

The State Council has approved the second stage of the plan to curb the source of sandstorms in Beijing and Tianjin. The plan covers six provinces and municipalities and 138 towns. The State Forestry Administration issued the Plan on the Division of Work on Enhancing the Forest's Role in Tackling Climate Change to Implement the Durban Climate Change Conference Agreement, and has begun to draft the fifth stage of the plan on constructing a 'shelterbelt' in north-east, northern and north-west China. The country also continues to promote afforestation and, from 2012 to the first half of 2013, 10.25m ha was greened in the afforestation drive, and 4.96bn trees were planted in a volunteer tree-planting drive. In addition, the State Forestry Administration has carried out research on how forests can mitigate the impacts of climate change, and organised potential and process studies of carbon sequestration in a typical ecosystem.

Transportation

The Ministry of Transport has made efforts to improve energy efficiency and emission reductions in key areas of the transportation sector. It continued to undertake the "special action on low-carbon transportation" for 1,000 companies dedicated to vehicles, ships, roads and ports. The ministry issued the Guidelines for Pedestrian and Bicycle Transportation to encourage local governments to showcase model pedestrian and bicycle transportation systems. The Ministry of Science and Technology has rolled out a pilot green car project, billed as "10 cities, 1,000 green cars," in 25 cities across the nation. It is estimated that the equivalent to 4.2m tons of standard coal or 9.17m tons of CO_2 emissions could be saved in the transportation industry.

Additionally, the government has selected 26 cities including Tianjin, Chongqing, Beijing and Kunming to establish pilot low-carbon transportation systems, with 26 trial projects and 40 harbours of "drop and pull" transportation, pushing forward pilot projects in inland water transportation using natural gas-fuelled boats and establishing gas and petroleum pilot recycle stations at crude oil terminals. Studies have also been commissioned to establish an evaluation index system for low-carbon transportation cities, ports, and the construction of low-carbon ports and sailing routes and low-carbon highways.

Adaptation

Given its size and geographic diversity, China's climate is complex. In recent years China has suffered from an increase in frequency of extreme weather conditions. Many areas in the south have experienced extremely high temperatures, and there have been increased urban, regional and mountain floods, landslides and mudslides. Many typhoons have hit land at the same time, affecting a broad area. And there have been moderate to severe droughts in central and north-west Yunnan Province, with impacts on agriculture and people's lives. In 2013, reflecting China's vulnerability to climate change impacts, the NDRC published China's National Strategy for Climate Change Adaptation. The strategy, which sits under the 12th Five Year Plan, lays out clear guidelines and principles for climate change adaptation and proposes some specific adaptation goals. Provinces including Zhejiang, Henan and Liaoning have also carried out their own regional strategic

studies for addressing climate change. Reflecting China's water shortage, the Ministry of Water Resources has undertaken more than 10 significant research programmes such as the impact of climate change on water resources security and how to respond to it. The Ministry of Health and the State Family Planning Commission has initiated research on adaptation mechanisms, assessment and prediction to address the impact of climate change on human health.

China: Legislative Portfolio

Name of law	**The 12th Five-Year Plan for the Development of National Economy and Society (2011–2015)**
Date	12 March 2011
Summary	The Five-Year Plan aims to create more socially inclusive and environmentally sustainable growth and boost domestic consumption that will begin to re-orientate the economy away from heavy industry and resource-intensive production towards a more consumption-based and resource-efficient economy. The plan's targets are to decrease the carbon intensity of GDP by 17% by 2015; to decrease the energy intensity of GDP by 16%; to increase the share of non-fossil fuel primary energy consumption to 11.4%; and to increase forest coverage by 21.6%.

Name of law	**Renewable Energy Act (Legislative)**
Date	1 January 2006, amended 26 December 2009
Summary	This Act describes duties of the government, business and other users in renewable energy development and use. It includes measures and goals relating to mandatory grid connection, price management regulation, differentiated pricing, special funds and tax reliefs, and sets the goal to realise 15% of China's energy from renewable sources by 2020. Energy – supply-side policies: The Act requires the government to encourage and support the application of renewable energy in various areas. Research and development: The Act requires that the government budget establishes a renewable energy development fund. Monitoring arrangements: It requires that energy authorities of the State Council are responsible for organising and co-ordinating national surveys and management of renewable energy resources, and work with related departments to establish technical regulations for resource surveys. Relevant departments of the State Council, within their respective authorities, are responsible for related renewable energy resource surveys. The survey results will be summarised by the energy authority in the State Council. Energy authorities of the State Council must set middle- and long-term targets for the total volume of renewable energy at the national level, which shall be implemented and released to the pubic after being approved by the State Council.

Name of law	**Energy Conservation Law (Legislative)**
Date	1 November 1997 adopted; amended 2007 ; 2008
Summary	The Act aims to strengthen energy conservation, particularly for key energy-using entities, promote efficient use of energy and adoption of energy conservation technology. The Act requires the government to encourage and support the application of renewable energy in various areas. Monitoring arrangements: the National People's Congress serves as the monitoring body.

China: Executive portfolio

Name of Policy	**Energy Development Strategy Action Plan (2014-2020)**
Date	19 November 2014
Summary	Published by the State Council, the Plan aims to reduce China's high energy consumption per unit GDP ratio through a set of measures and mandatory targets, promoting a more efficient, self-sufficient, green and innovative energy production and consumption. The targets include a cap on annual primary energy consumption set at 4.8bn tonnes of the standard coal equivalent until 2020, with a need to limit the annual growth rate of primary energy consumption to 3.5% for the next six years. The annual coal consumption should be held below 4.2bn tonnes until 2020 (16.3% more than the 3.6bn tonnes burned in 2013, according to the National Coal Association), with the main coal consumption reduction to be achieved in regions around Beijing, the Yangtze River Delta and the Pearl River Delta - the three biggest city clusters in China. The share of non-fossil fuels in the total primary energy mix is to rise to from 9.8% in 2013 to 15% by 2020, with an indicative 20% share by 2030. The share of natural gas is to rise to above 10%, while that of coal will be reduced below 62%. In addition, installed nuclear power capacity is to reach 58GW by 2020, with additional 30GW expected to be under construction in 2020. Installed capacity of hydro-, wind and solar power in 2020 is expected to reach 350GW, 200GW and 100GW, respectively. Energy self-sufficiency should reach around 85%.

Name of Policy	**National Plan For Tackling Climate Change 2014-2020**
Date	5 November 2014
Summary	The National Plan For Tackling Climate Change is a comprehensive government strategy that covers mitigation, adaptation, scientific research and public awareness. It includes chapters on "Status and Prospects", "Guidelines And Main Objectives", "Controlling Greenhouse Gas Emissions", "Adapting To The Impacts of Climate Change", "Implementation Of Pilot Demonstration Projects", "Improving The Regional Response To Climate Change", "Incentives And Restraint Mechanisms", "Strengthening Scientific And Technological Support", "Capacity Building", "Deepening International Exchanges And Cooperation" and "Performance and Evaluation". The plan's targets are: by 2020, to cut carbon emissions per unit of GDP by 40-45% from 2005 levels, to increase the percentage of non-fossil fuels in primary energy consumption to 15% and to increase the proportion of forest area and stock volume by 40m ha and 1.3m m^3 respectively from a 2005 baseline.

Name of Policy	**National Strategy for Climate Change Adaptation**
Date	November 2013
Summary	Reflecting China's vulnerability to climate change impacts, the National Development and Reform Commission (NDRC) published China's National Strategy for Climate Change Adaptation in November 2013. The strategy lays out clear guidelines and principles for climate change adaptation and proposes some specific adaptation goals. It outlines a wide range of measures to be implemented by 2020 in order to protect water resources, minimise soil erosion and strengthen disaster prevention, such as early-warning detection and information-sharing mechanisms at the national and provincial levels, ocean disaster monitoring system and coastal restoration. To reduce climate impacts in agriculture the Chinese government plans to develop new farming practices, including controlling plant-eating pests and improving crop adaptability. The plan also includes weather-based financial instruments such as catastrophe bonds and weather index-based insurance.

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