



PIX01870, Credit: Roger Taylor

Academy of Science building in Beijing.

Renewable Energy in China

Renewable Energy Policy in China: Overview

China's policies on renewable energy development fall into three categories. Similar to the way renewable policies are set in the United States, China's central government establishes the first two levels of policy. Local governments, including provincial, municipal, and county governments, establish the third level of policy with overall direction from the central government.

First-level policies: provide general direction and guidance, and include speeches of state leaders about development of renewable energy and the Chinese government's standpoint on the global environment.

Second-level policies: specify goals/objectives and development plans, and focus on rural electrification, renewable energy-based generation technologies and fuel wood. These policies attempt to standardize the directions, focal points, and objectives of renewable energy development from different viewpoints. Some departments propose concrete policies and regulations. Second-level policies have played a very important role in promoting renewable technologies in China.

Third-level policies: consist of practical and specific incentives and managerial guidelines. These outline specific supporting measures for developing and using renewable energy. These third-level government policies provide crucial support to help develop renewable energy in its early growth stages. Since the mid-1990s, many provinces and autonomous regions of China have adopted policies for developing renewable energy, including subsidies and tax reduction. The central government also issued several effective regulations.

China's Policy Objectives

In October 2001, the State Economic and Trade Commission (SETC) proposed its Tenth Five-Year Plan for Sustainable Development, including the Tenth Five-Year Plan for New and Renewable Energy Commercialization Development.

China's Renewable Energy Promotion Law

Renewable energy policy is in the developing stages in China and national impetus is crucial to further renewable energy development goals. Under the direction of the National Development and Reform Commission, China's Center for Renewable Energy Development (CRED) has been given the task of drafting a new law—the Renewable Energy Development and Utilization Promotion Law. The goal of the law is to meet short-term energy needs while strengthening long-term sustainable development objectives. The law aims to reduce air pollution, safeguard human health and the environment, and provide power to off-grid rural areas as well as contribute to mitigating climate change. The law will synthesize basic principles of the market economy and the political objectives of energy security. Incentive policies will be structured to encourage the development of renewable technologies and provide market opportunities for renewable energy companies so that local governments, energy enterprises and the public can themselves promote and utilize renewable energy. CRED will work with various Chinese government ministries, environmental committees and utility companies, as well as a variety of Chinese experts and international organizations, in drafting the new law.

For the period ending in 2005, program goals include:

- Electricity production goals: Reach 13 metric tons of coal equivalent (Mtce) of electricity using new and renewable energy (excluding small hydropower and traditional use of biomass), with corresponding CO₂ reduction of 10 metric tons (Mt) and SO₂ reduction of at least 0.6 Mt.
- Remote power: Provide power for 1.3 million families (5-6 million people) in remote areas, and provide employment for 200,000 people.
- Solar water heating: Increase annual solar water heating to 11 million square meters (m²), with the cumulative amount of 64 million m². There will be 5-10 large-scale enterprises with internationally competitive ability.

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- Solar electricity: Increase production capacity of solar cells to 15 megawatts (MW) each, with a cumulative capacity of 53 MW.
- Wind power: Increase installed capacity of grid-connected wind power to 1.2 gigawatts, with manufacturing capacity at 150-200 MW to meet domestic market demand.
- Geothermal energy: Increase the production of geothermal energy to 20 million m².
- Bioenergy: Increase gas supplies from highly efficient bioenergy, including large- and mid-scale biogas from industrial organic waste water, farm waste, and biomass gasification systems to almost two billion m³.

NOTE: For information on financial incentives for renewable energy, see the fact sheet Renewable Energy Policy in China: Financial Incentives.

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The following fact sheets on renewable energy in China are available on the National Renewable Energy Laboratory's China Web site (www.nrel.gov/china).

- WB/GEF Renewable Energy Development Project
- Grid Connected Wind Power in China
- Renewable Energy Policy in China: Overview
- Renewable Energy Policy in China: Financial Incentives
- Township Electrification Program
- China's Plan for Renewable Energy
- Brightness Rural Electrification Program
- Renewable Energy Business Partnerships in China

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China Policy Documents

First Level

1983	Suggestions to Reinforce the Development of Rural Energy
1992	China Agenda 21
1992	Ten Strategies on China's Environment and Development
1995	State Science and Technology Commission (SSTC) Blue Paper No. 4: China Energy Technology Policy
1995	Outline on New and Renewable Energy Development in China, State Planning Commission (SPC), SSTC, State Economic and Trade Commission (SETC)
1995	Electric Power Law
1996	Guidelines for the Ninth Five-Year Plan and 2010: Long-Term Objectives on Economic and Social Development of China
1996	State Energy Technology Policy
1997	Energy Saving Law
2003	Renewable Energy Promotion Law

Second Level

1994	Brightness Program and Ride the Wind Program, formulated by SPC
1995	New and Renewable Energy Development Projects in Priority (1996-2010) China, by SSTC, State Power Corporation, and SETC
1996	Ninth Five-Year Plan and 2010 Plan of Energy Conservation and New Energy Development by the State Power Corporation
1996	Ninth Five-Year Plan of Industrialization of New and Renewable Energy by SETC
1998	Incentive Policies for Renewable Energy Technology Localization by State Development and Planning Commission (SDPC) and Ministry of Science & Technology (MOST)
2001	Tenth Five-Year Plan for New and Renewable Energy Commercialization Development by SETC
2003	Rural Energy Development Plan to 2020 for Western Areas

Third Level

1997	Circular of the Communication and Energy Department of SPC on Issuing the Provisional Regulations on the Management of New Energy Capital Construction Project
1999	Circular of MOST and SDPC on Further Supporting the Development of Renewable Energy
2001	Adjustment of Value-Added Tax for Some Resource Comprehensive Utilization Products by Ministry of Finance (MOF) and State Tax Administration
2001	Electricity Facility Construction in Non-Electrification Townships in Western Provinces of China or Township Electrification Program by SDPC and MOF

PIX04176, Credit: William Wallace



Solar home system in Gansu Province, People's Republic of China.

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