PIX04172, Credit: William Wallace

Shangdu wind farm in Inner Mongolia, People's Republic of China.

Renewable Energy in China

Renewable Energy Business Partnerships in China

China is a huge country with rich renewable energy resources including wind, solar, biomass, hydro, and geothermal assets. It is also the second largest coal consumer in the world. Due to both environmental and economic pressures, China is seeking ways to restructure its energy supply. In the future, renewable energy will undoubtedly become a crucial tool for enabling sustainable development. Due to the gigantic market potential and incentive policies for foreign-funded enterprises, China has attracted large foreign investments, up to 300 billion U.S. dollars (USD), during the past 10 years.

China's Policy for Attracting Foreign Investment

The four basic forms of foreign direct investment in China are:

- Wholly foreign-owned enterprises
- China-foreign joint ventures
- China-foreign cooperative enterprises
- Cooperative development

Procedure for Establishing Foreign Investment Enterprises

To establish China-foreign joint ventures and co-operative enterprises, four steps are generally required:

1. Submit item propositions for establishing enterprises; after approval by relevant departments, investors may embark on work based on a feasibility study.
2. Submit reports on the feasibility study. After approval, investors may negotiate and sign documents such as contracts and statutes of establishing enterprises.
3. Submit contracts and statutes of establishing enterprises.
4. After obtaining a license from the approving authorities, investors may begin formalities with industrial and commercial administrations.

Time Limits

The time limit for foreign investment enterprises (usually 10-30 years) may be negotiated by investors according to national regulations for specific industries and items. If approved by the State Council, requirements for stipulating a time limit may be waived.

Foreign investment is encouraged in the following areas:

- new agricultural technologies
- comprehensive agricultural development technology
- energy
- transportation
- important raw and semi finished materials industry
- high technology
- export-oriented items
- comprehensive resource and renewable resource utilization
- environmental pollution protection

Foreign investment enterprises will be terminated at the end of the specified time limit. If investors want to prolong the time of operation, they may apply to approving authorities for permission at least 180 days before the enterprise is terminated.

Limits of Approval Powers

The provinces, municipalities directly under the central government, autonomous regions, and singly-planned cities have the power to approve investments valuing no more than 30 million USD. Investments that fall within a restricted class, as well as those valuing more than 30 million USD, should be approved by the Foreign Trade and Economic Cooperation Administrations.

China's Favorable Taxation Policy

China encourages foreign investment through a combination of income tax and value-added tax (VAT) incentives.

Income tax: The government collects business income tax from foreign investment enterprises at the rate of 33%, but collects only 15% from enterprises in special economic zones, the national hi-tech industrial zones, and national-grade economic and technical development zones.

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Renewable Energy Business Partnerships in China

Foreign investment enterprises may also be eligible for a business income tax waiver during the first two years after they begin to make a profit and for a partial waiver during the next three years. Additionally, foreign investment enterprises in less developed regions may apply to the relevant State Council tax authority for a favorable tax policy after the initial tax exemption and reduction period. After approval, they can enjoy a 15-30% reduction in income tax over the next ten years. Enterprises in the biogas and wind energy fields are eligible for an income tax rate of 15%.

VAT and VAAT: The following table compares general VAT and VAAT rates with those for biogas and wind enterprises.

For more information on tax incentives, see the fact sheet *Renewable Energy Policy: Financial Incentives*.

Items	Value-Added Tax	VAAT (Value-Added Annex Tax)
General	17%	8% of VAT
Biogas	13%	8% of VAT
Wind*	8.5%	8% of VAT

** The VAT on wind power was issued in September 2001.*

Import Duties

Although no governmental policy specifically states that low import duties are applied to renewable energy products, many of the main components of wind turbines, the turbines themselves, and Photovoltaics modules enjoy favorable import duties compared with the average rate of 23%.

In the 1980s and early 1990s, China approved efforts to reduce or exempt imported wind turbines and related equipment from import duty so that the actual duties paid were very low. However, this policy cannot always be applied to all bio-energy equipment. Import duty exemption depends on whether the equipment is considered to be a high-tech product. For example, some bio-energy equipment, like a power generator for biogas, is classified as high-tech and therefore is exempt from import duty.

Foreign Currency Exchange

Foreign investment enterprises can freely exchange foreign currency in appointed banks (Bank of China and other authorized local monetary and financial institutions) without an administrative certificate.

They are, however, required to make known to the bank their working capital and fixed capital. There are also limits placed on the total amount of currency that can be exchanged for working capital. The amount exceeding this maximum should be put in the appointed bank or be exchanged to Chinese yuan (CNY). The Foreign Currency Exchange Management Regulations, which went into effect on April 1, 1996, stipulate that a Foreign Currency Exchange Annual Audit Report conducted by a nationally certified accounting firm is required for all foreign investment enterprises.

Renewable Energy Joint Ventures in China

China has engaged in several successful joint ventures with companies in other countries. For example, the U.S. company Tang Energy Group, Ltd., helped establish ZhongHang (Baoding) Huiteng Windpower Equipment CO., Ltd. in China in 2001. Since then, "Baoding" has captured a dominant share of the Chinese market for blades and nacelle covers for 600 kW to 750 kW wind turbine generators. While to date Baoding has sold only to Chinese wind farms, it is preparing to export blades to other Asian wind farms.

Contacts

Wei Lin
Director of International Relations Department
Chinese Renewable Industries Association
No.A2106 Wuhua Plaza,
A4 Che Gong Zhuang Dajie
Xicheng District, Beijing 100044, P.R.China
Tel: +86-10-68002617/18
Fax: +86-10-68002674
Email: tonilin@public3.bta.net.cn

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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PIX01963, Credit: Simon Tsuo

Developing markets for solar home systems can foster local business opportunities, such as this manufacturing facility for PV controllers in China.

National Renewable Energy Laboratory
1617 Cole Boulevard
Golden, Colorado 80401-3393
303-275-3000 • www.nrel.gov

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