Renewable Energy Development

- Dissemination of 6.9 million small biogas digesters, 17 GW of small hydro, 15 million sqm. of solar water heaters, 13 MW of photovoltaics (PV), and 160,000 micro wind turbines.
- The draft of the Tenth Five Year Plan (2001-2005) proposes a renewables portfolio standard of 5.8%, use of renewables in the Grand Western Development Initiative, and increased deployment and development of renewable energy systems.
- Other rural renewables projects include the World Bank/GEF solar home systems/wind farm project, Asian Development Bank’s wind farm/solar thermal/bagasse cogeneration project, the Deutsche Gesellschaft fur Technische Zusammenarbeit (GTZ) wind turbine and hybrid systems technology transfer project, and the Ministry of Agriculture’s Hundred Counties Program.

Brightness Program

- Goal is to provide electricity to 23 million rural people by 2010 with wind and PV technologies for households and villages.
- Program has begun in several provinces/regions: Gansu, Qinghai, Inner Mongolia, Tibet, and Xinjiang. In Phase 1 of the program (2000-2004), 1.8 million home systems (serving 8 million people), 2000 villages, and 200 stations will be electrified. This will reduce CO2 emissions by 415,000 tonnes. The total investment will be about 10 billion yuan.
- State Development Planning Commission and regional commissions; Beijing Jikedian Renewable Energy Development Center. Assistance from the Netherlands, Shell, DOE/NREL, GTZ.

UNDP/GEF Capacity Building for Rapid Commercialization of Renewable Energy

- State Economic and Trade Commission, Netherlands, Australia, UN Department of Economic and Social Affairs, UNDP, CRED
- $25 million, five-year project began in 6/99.
- Activities include capacity building (training/workshops in business, finance, hybrids); pilot projects (wind/diesel and wind/PV/diesel hybrids for islands, biogas for pig farms, bagasse cogeneration); technical assistance (resource assessment and GIS, standards and certification, wind farms); and establishment of China Renewable Energy Industries Association and Investment Opportunity Facility.


- Ministry of Science and Technology and U.S. Department of Energy (DOE) signed protocol in 2/95. Components include rural energy (Ministry of Agriculture), wind (State Power), business (State Economic and Trade Commission, Center for Renewable Energy Development [CRED]), and policy and planning (State Development Planning Commission, Beijing Jikedian Center).
- Activities include pilot projects (600 Gansu PV systems, 341 Inner Mongolia wind/PV hybrids, Xiao Qingdao Island wind/diesel hybrid, 200 Tibet PV home systems); capacity building (resource assessment, hybrids, policy, life-cycle analysis); analyses (biomass assessments; business, technology and market assessments); and events (business workshops/study tours/Renewable Energy Forum).

Undeveloped Population = Approximately 65 million people

Southeast China - Central Coast of Fujian