

Update on Selected Projects by the Beijing Energy Efficiency Center

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China Energy and Carbon Scenarios Project

Partners: State Development Planning Commission, the Energy Foundation, Shell Foundation, Lawrence Berkeley National Laboratory (LBNL)

Status/Schedule: Initiated 1 April 1999 thru 31 March 2002.

The China Energy and Carbon Scenario Project is funded by the Energy Foundation and Shell Foundation. The Basic Industry Department of the State Development Planning Commission (SDPC) functions as the lead government executive organization. BECon is providing technical assistance while Lawrence Berkeley National Laboratory provides training in the modeling efforts.

The main purpose of this project is to provide SDPC with suggestions for formulating China's 10th Five-year Plan (2001-2005) and Medium to Long Term Strategy for Energy Efficiency. These will include policies and actions that promote sustainable and low carbon development. In April 2000, a Chinese team went to LBNL for 4 weeks of model training and methodologies for scenarios analysis. BECon also held an international workshop on social/economic/energy development and carbon emission scenarios from 25-27 May 2000. More than 60 international and domestic experts were invited for discussion of what is likely to be the main factors to influence the social economy and energy development in China's future.

Currently, the Chinese team has completed industrial subsectoral evaluation reports and submitted them to SDPC. The initial results of the economic and energy scenarios will be finished soon.

WB/GEF China Energy Conservation Promotion Project

Partners: State Economic and Trade Commission, World Bank, Global Environment Facility (GEF)

This project attempts to create a market for demand-side energy management companies—also known as energy service companies, or ESCOs—in China. Three previously state-owned energy companies have been transformed into for-profit

energy management companies that finance and upgrade equipment in exchange for a share of the savings in energy costs. The first phase of this project is nearing completion. Through August of 2000, the three EMCs had implemented more than 140 energy saving projects with total investment of over 230 million RMB.

The second phase of the project is now underway. The purpose of phase 2 is to disseminate information on this new concept throughout the country. Funding from the Global Environment Facility will be used to a financing guarantee company that will provide the guarantee for EMCs when they need capital to conduct energy saving projects.

Barrier removal for efficient lighting products and systems in China

Partners: UNDP, GEF, State Economic and Trade Commission (SETC), Ministry of Finance (MOF)

Funding: US\$ 8.14 million (GEF Grant)

Status: to be initiated April 2001

Barrier removal for efficiency lighting products and systems in China aims at addressing identified market barriers to wide-spread use of energy efficient lighting in China. This project broadens the China Green Lights start-up efforts. BECon provides technical assistance. The overall objective of this project is to save energy and protect the environment by reducing energy used in lighting by 10% in 2010 relative to a constant efficiency scenario. Specific objectives include upgrading of Chinese lighting products; increasing consumer awareness of, and comfort with, efficient lighting products; and establishing a vibrant, self-sustaining market in efficient lighting products and services.

China Motor System Energy Conservation Program

Partners: SDPC, the Energy Foundation, other technical assistance organizations

Status: Initiated August 2000

Preparation work (PDF A) of this program is funded by the Energy Foundation. This program is to evaluate the current status of motor system in China. It also consists of evaluation of the existing motor system efficiency (including production, operation design standards, maintaining and policy), and the potentials of improvement. BECon has already completed PDF A. These will lay the base for applying PDF B. Together with China Energy Conservation Investment Cooperation and LBNL, BECon will apply for the UN Foundation to carry out PDF B—including the revise of motor system economy operation, training, information service and pilot project.

Energy Efficiency Improvement Incentive Policy Study in China's Power Industry

Partners: Development Research Center of State Council, the Energy Foundation

Status: Initiated August 2000

This program is a sub-project of China Power System Reform and Sustainable Development Strategy Research project, funded by the Energy Foundation. The Development Research Center of the State Council acts as the lead, while BECon provides research energy efficiency improvement opportunities resulting from power sector reform. A preliminary report has been completed, and the detailed study is now underway.

Electric Power Conservation Incentive Mechanism and Policy Research in China

Partners: the Energy Foundation, Power Economic Research Center of the State Power Corporation

Status: December 2000

This project is funded by the Energy Foundation. It focuses primarily on demand side management (DSM) policy research. It will put forward suitable and practicable policy proposals for relevant China's government institutions, and urge them to formulate and enforce specific power saving policy incentives. It will also encourage electric power end-users to participate in DSM plans, and promote adoption of IRP and DSM.

Strategic Partnership: Energy Efficiency Program in China

Partners: SDPC, MOF, UNDP, GEF

Status: Initiated August 2000

Under the financial support of the GEF, SDPC and MOF together with UNDP are now establishing an integrated program entitled "Strategic Partnership: Energy Efficiency Programme in China". The Program will provide a framework for coordination of the many energy efficiency initiatives and establish priorities for future initiatives. Many of these initiatives will be eligible to receive incremental GEF funding. The framework may also cover domestic-funded projects, projects funded by other donors, and possibly private sector initiatives. Within this framework, GEF funded projects may benefit from streamlined approval procedures. Initiatives in the framework will include both those that target specific market sectors and those that are cross-sectoral. Therefore the benefits of the Program approach, as compared to the project-by-project approach, focuses GEF resources on highest priority areas that have incremental cost implications and enhances coordination of domestic and international players.

BECon and UNDP staff have taken part in the works of PDF A. Efforts in PDF A—focused primarily on analysis and evaluation of energy utilization, energy efficiency, barriers in the key industrial fields, and policy evaluation—is complete. BECon is now preparing a proposal for PDF B and designing the contents of project. In order to prepare this program, BECon assisted the SDPC and MOF to hold a workshop in November 2000 in Beijing. The main purpose of this workshop was to discuss with relevant departments and research institute how to set up the project framework, evaluate the work in PDF A, and strengthen the coordination and cooperation among governmental and international organizations.

Additionally, BECon held a SINO-UK Seminar on Sustainable Development and Sustainable Energy on October 17, 2000 with more than 60 representatives from the UK and China. This seminar aimed to strengthen the understanding of energy conservation and energy efficiency policies of both sides. A key topic of the seminar was how to consider factors of environment protection and energy efficiency during urbanization.