The Collaborative Labeling and Appliance Standards Program (CLASP)

Case Study
CHINA S&L

Message

The Collaborative Labeling and Appliance Standards Program (CLASP) has collaborated over the years with several Chinese institutions in order to promote energy efficiency in China, enhance the capabilities of Chinese institutions that promote energy efficiency, and understand the dynamics of energy use in China. CLASP, with Lawrence Berkeley National Laboratory (LBNL) as its primary Implementing Partner, has helped China implement a robust energy efficiency standards and labeling program (S&L) that includes minimum standards, voluntary energy labeling, and a residential energy consumption survey. China's S&L program has transformed several product markets, improved the nation's economic efficiency, and accelerated the pace of China's GHG mitigation.

While S&L fosters technology innovation by requiring product improvement and bringing consumer attention to enhanced efficiency, its most direct benefits in China in sustainable development terms are 1) having advanced both the capacity for and the reality of a sounder energy policy and 2) having dramatically increased China's economic efficiency and reduced the growth in its GHG emissions.

Project Story

CLASP has assisted China in implementing S&L programs in the sector of the most rapid energy consumption growth in China's economy. China has now implemented 11 minimum energy performance standards (MEPS) for 9 products and endorsement labels for 11 products, including refrigerators, air conditioners, televisions, printers, computers, monitors, fax machines, copiers, DVD/VCD players, external power supplies, gas water heaters, and set-top boxes (under development). These measures are estimated to save 85 TWh annually by their 10th year of implementation. By 2020, China's S&L program is estimated to save 11% of its residential energy use, reduce CO_2 emissions by 34 million tons of carbon annually, and avoid the need for $20 billion investment in power plant construction.

As China’s capacity for S&L implementation has grown, the nature of CLASP’s support has shifted from technical training and capacity building for the domestic program to assistance in extending market transformation effects internationally through harmonization of efficiency specifications. Most notably, in 2005, China, Australia, and the US adopted a harmonized set of efficiency specifications for external power supplies, based on a single testing standard. Current efforts support both the application of China’s S&L programs into new market transformation programs—such as government procurement—domestically as well as the expansion of China’s outreach internationally in additional harmonization efforts.

The essence of CLASP's work in China is technology transfer, transferring to China the last 20 years of experience and toolkits that have been developed around the world to

support S&L programs. The success relies heavily on cooperation with a wide range of organizations and groups and training of our Chinese counterparts. LBNL has provided 196 person-weeks of training for 90 officials from five agencies, split roughly evenly between training at LBNL and training inside China.

S&L has become a prominent element in China's increasing emphasis on more sustainable energy development and its recently announced energy intensity goals.

Partners

Funding Partners: Energy Foundation, US EPA, UN Foundation, US DOE
Country Partners: China National Institute of Standardization (CNIS); China Standards Certification Center (CSC); National Development and Reform Commission (NDRC); Standardization Administration of China (SAC); State Administration of Quality, Supervision, Inspection and Quarantine (AQSIQ)
Implementing Partners: Lawrence Berkeley National Laboratory