

U.S. GOVERNMENT ACTIVITIES: TECHNOLOGY COOPERATION & CLIMATE CHANGE

In keeping with its obligations under the United Nations Framework Convention on Climate Change (UNFCCC), the U.S. Government works through a range of agencies to implement technology cooperation activities designed to promote the transfer of climate-friendly technologies to developing and transition countries worldwide. In the U.S. view, technology cooperation extends beyond the simple sale or transfer of hardware. Successfully establishing a program of technology transfer requires the development of in-country enabling conditions and capabilities that support the sustained flow of technologies and expertise.

Since the private sector is the source of most climate-friendly technologies, and the vehicle for their transfer, U.S. technology cooperation activities directly engage the private sector to accelerate the development of markets by removing barriers to investment and facilitating the commercial deployment of technologies. Specific activities focus on policy reform, institutional strengthening, capacity building, information dissemination, technology assessment, technology demonstration and research.

Background

Under the UNFCCC, developed countries have agreed to assist in transferring climate-friendly technologies to developing countries to help them meet their commitments.¹ Technology transfer under the UNFCCC has been defined as both “soft” and “hard” aspects of technology transfer, and address both the mitigation of greenhouse gas emissions, and adaptation to the impacts of climate change.²

To promote technology cooperation under the Convention, the Parties are currently engaged in a consultative process to develop a common under-

standing of technology cooperation models. The U.S. views the consultative process as an important opportunity to establish effective programs that meet UNFCCC goals.

U.S. Government Activities and Projects

Public sector programs can be important vehicles for expanding technology transfer in the area of climate change. In particular, the public sector can play a pivotal role promoting market-based technology transfer by assisting in the removal of market barriers and building human capacity. In recognition of this, the U.S. Government supports a range of bilateral programs that promote the diffusion of climate-friendly technology in developing and transition countries worldwide. Agencies participating in climate technology cooperation activities include the U.S. Agency for International Development, U.S. Department of Energy, U.S. Environmental Protection Agency, U.S. Department of State and U.S. Department of Agriculture.

The U.S. Government also actively participates in multilateral efforts to

strengthen technology cooperation under the UNFCCC. The U.S. Government plays a lead role in the Climate Technology Initiative (CTI), a multilateral initiative of 23 IEA/OECD countries and the European Commission to promote the technology cooperation objectives of the UNFCCC. The U.S. Government is also deeply committed to working to further UNFCCC negotiations on technology transfer and actively participates in the consultative process on technology transfer.

Approach and Tools

Consistent with the role of the private sector as the main vehicle for technology transfer, U.S. government-supported technology cooperation programs focus on creating conditions for expanding markets for clean technology (see “Technology Cooperation Agreement Pilot Project”). Technology markets and institutional conditions, however, are enormously complex and variable from country to country. There is no generic strategy for removing barriers to the diffusion of technology. Rather, measures and activities must be customized to suit the needs and constraints of each country and in many cases the specific technology market within a country. Among the lessons learned by the U.S. from existing programs are the importance of engaging in-country stakeholders, developing public-private partnerships, disseminating information, and ensuring sustainable programs through capacity building.

Public-Private Partnerships. The primary agent of technology transfer is the private sector. Through its technical capabilities, financial resources, and commercial networks, the private sector provides a worldwide mechanism for technology transfer. Public-private partnerships can be important platforms for governments to experiment with various measures and mechanisms for increasing technology transfer. In addition to the removal of policy, economic, legal, and

Technology Cooperation Agreement Pilot Project

Launched in 1997, the *Technology Cooperation Agreement Pilot Project (TCAPP)* is an interagency effort that establishes a model for implementing technology transfer under the United Nations Framework Convention on Climate Change (UNFCCC). TCAPP helps developing and transition countries attract investment in clean energy technologies that meet their existing development priorities. Through TCAPP, the U.S. Government has established partnerships between governments, firms, and the donor community. Participating countries include Brazil, China, Egypt, Kazakhstan, Korea, Mexico, and the Philippines. TCAPP is also assisting 14 countries in the Southern African Development Community with a regional technology cooperation needs assessment initiated by the OECD and the Climate Technology Initiative.

technical barriers, governments can help promote private sector technology transfer by sharing information on investment opportunities that can lead to technology transfer.

- **Capacity Building.** Effective capacity building focuses on strengthening both human and institutional capacity through training and technical assistance. To ensure success, U.S. Government capacity building programs are country specific, depending on the priorities and needs of a particular country. Participants include members of the regulatory, non-governmental, financial, technical, business, and NGO communities. Training and assistance activities are typically linked to technology priorities that have been developed by in-country stakeholders and show commercial promise.

- **Information Dissemination.** Ready access to accurate technical, commercial, and legal information is critical to the technology transfer process. Specific information needs depend on the requirements and priorities of each country, and information centers play an important role in identifying and meeting these needs. U.S. Government programs work to establish comprehensive and effective systems for organizing and coordinating the flow of technology transfer information.
- **Pilot Projects.** Establishing new markets for technologies can require in-country technology demonstration and verification. U.S. Government programs identify and implement pilot projects for a range of technology applications worldwide.

¹ Article 4.5 reads in part, “[t]he developed country Partners...shall take all practicable steps to promote, facilitate and finance as appropriate, the transfer of, or access to, environmentally sound technologies to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention.”

² In a decision adopted under CoP-2 in Geneva, the Parties defined technology transfer for the purposes of Convention activities. In particular, the term “*transfer of technology*...encompasses practices and processes such as ‘soft’ technologies, for example, capacity building, information networks, training and research, as well as ‘hard’ technologies, for example, equipment to control, reduce or prevent anthropogenic emissions of greenhouse gases in energy, transport, forestry, agriculture, and industry sectors, to enhance removals by sinks, and to facilitate adaptation.”