

TECHNOLOGY COOPERATION AGREEMENT PILOT PROJECT

DEVELOPMENT-FRIENDLY GREENHOUSE GAS REDUCTION

The Technology Cooperation Agreement Pilot Project (TCAPP) was launched by several U.S. Government agencies (USAID, EPA, and DOE) and programs (USCSP and USIJI) in August 1997 to establish a model for climate change technology cooperation with developing and transition countries. TCAPP is currently facilitating voluntary partnerships between the governments of Brazil, China, Kazakhstan, Mexico, and the Philippines, the U.S. and other OECD countries, international donors, and the private sector, on a common set of actions that will advance implementation of clean energy technologies. The five participating countries have been actively engaged in shaping this initiative along with international donors and the private sector. This program helps fulfill the U.S. obligation to support technology transfer to developing countries under Article 4.5 of the United Nations Framework Convention on Climate Change. TCAPP also provides a mechanism to focus resources across international donor programs on technology cooperation needs of developing and transition countries.

GOALS

- Foster private investment in energy technologies that reduce greenhouse gas emissions and produce economic benefits for the country.
- Engage in-country and international donor support for actions to build sustainable markets for clean energy technologies.
- Establish technology cooperation agreements as an organizing structure for coupling in-country, donor, and private-sector climate change mitigation actions.

TCAPP Approach

TCAPP fosters a coordinated response by OECD countries, international donor organizations, and the international business community to the climate change technology cooperation needs of developing and transition countries through two basic steps. First, interagency teams in developing and transition countries establish frameworks that define their technology cooperation needs and the actions their government is ready to undertake in cooperation with donors and the private sector. Second, international donors and businesses support implementation of actions by the countries for reducing market barriers and directly facilitating private investment.

Technology Cooperation Frameworks

- Country teams identify priority clean energy technologies that will achieve development goals and reduce GHG emissions.
- Country frameworks define in-country, donor, and private sector actions to foster private investment in these technologies.

Coordinated Actions to Remove Market Barriers and Facilitate Private Investment

- Countries, donors, and businesses collect and review market information to refine proposed actions.
- Countries implement actions to address market barriers with donor support and business participation.
- Implementation of investment programs by countries, donors, and businesses (e.g., investment conferences, business match making, and financing, etc.).

TCAPP HIGHLIGHTS

September 1998 Countries completed draft technology cooperation frameworks

September 1998 Established network of 100 international energy companies interested in working with country teams on investment

initiatives

October 9, 1998 Meeting held with 30 international donor agency representatives to present frameworks and review opportunities

for donor participation (Washington, DC)

March 1999 Market assessments completed and immediate investment opportunities identified by countries

June 1999 Investment conferences held in countries to kick off investment programs for priority technologies

September 1999 Countries secure domestic and donor support for initial actions to address market barriers

EXAMPLES OF TCAPP TECHNOLOGY PRIORITIES

Brazil, China, Kazakhstan, Mexico, and the Philippines have identified technology cooperation priorities that integrate greenhouse gas mitigation with other national goals. Below are examples from two countries.

The **Brazilian Ministry of Mines and Energy**, together with other agencies have used a consultative process to identify the following technology cooperation priorities:

- Energy Efficiency in Diesel Truck Cargo Transportation
- · Direct Use of Natural Gas
- · Renewable Energy in Rural Electrification
- · Fuel Cells
- Other Energy Efficiency priorities still under consideration

The **Philippines Department of Energy**, in collaboration with other government agencies, the private sector, NGOs, and academic institutions, have identified the following priorities for technology cooperation:

- Renewable Energy for Rural Development
 - Photovoltaics
 - -Wind Energy
- · Energy Efficiency
 - Energy Efficient Industrial Boilers
 - Energy Efficient Appliances and Equipment
- · Cross-Cutting Technology Support
 - RE/EE Technology Information Center
 - Policy Development

SPONSORING AGENCIES:







Mr. Jeff Seabright

Director, Office of Energy, Environment and Technology

USAID

Phone: 202-712-4370 Fax: 202-216-3174

E-mail: jseabright@usaid.gov

Mr. Paul Schwengels

Program Manager, Climate Policy and Program Division

USEPA

Phone: 202-260-1192

Fax: 202-260-6405

E-mail: schwengels.paul@epa.gov

Mr. Chris Bordeaux

Project Manager, USIJI and USCSP

USDOE

Phone: 202-586-3070 Fax: 202-586-3485

E-mail: christopher.bordeaux@

ee.doe.gov

FOR FURTHER INFORMATION, CONTACT:

Mr. Ron Benioff or Mr. Pat Keegan

National Renewable Energy Laboratory Phone: 303-384-7504/7472

Fax: 303-384-7411/7419 E-mail: ron_benioff@nrel.gov pat_keegan@nrel.gov

Ms. Lisa Jacobson

Business Council for Sustainable Energy

Phone: 202-785-0507 Fax: 202-785-0514

E-mail: ljacobson@bcse.org

LEAD AGENCIES FOR TCAPP COUNTRY TEAMS:

Brazil Ministry of Mines and

Energy

China State Development

Planning Commission

Kazakhstan Ministry of Energy,

Industry and Trade

Mexico National Commission for

Energy Conservation

Philippines Department of Energy

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