

grant *funding*, of solar PV and other renewables. Illustrative examples of such programs include the following:

*United States of America:* USAID has been funding the Renewable Energy Project Support Operation (REPSO) through Winrock International, resulting in a number of early stage financial support actions in India, Brazil, Indonesia, and elsewhere. USAID explored the possibility of establishing an \$18 million fund in South Africa for the Productive Uses of Renewable Energy (PURE Fund), focused on business uses for photovoltaics. In 1999, the US Export–Import Bank established a \$50 million allocation to China, earmarked for renewable energy exports, including photovoltaics.

*Germany:* Kreditanstalt für Wiederaufbau (KfW), the German bank for reconstruction, has extended a DM 120 million loan to India’s IREDA including DM 30 million allocation for photovoltaics.

*Netherlands:* The Ministry of Economic Affairs has supported a number of PV programs around the world, including a 20 000 unit solar home system program in Bolivia and a 30 000 unit program in China, supplied by Shell Solar. A new project in the Philippines is reportedly in the pipeline.

*France:* The French government had a special tax deduction for investments in the former French colonies, resulting in a subsidized flow of capital to PV projects in such countries. The French electric utility, Electricite de France (EdF) is involved in the financing of fee-for-service programs in Brazil, Indonesia, Morocco, and South Africa.

*Spain:* In 2001, the Spanish government extended a \$48 million soft loan to the Philippines for the installation of 2 MW of photovoltaics in 100 villages, comprising approximately 150 000 homes, all to be supplied by BP Solar Madrid. One-half of the funds will be loaned under the credit conditions of the OECD: a 10-year loan at just-below market rates. The other half will come from the Spanish Development Aid Fund (FAD): a 30-year loan, with a 10-year grace period, with an interest rate less than 1.0% (see Reference [21]).

*Australia:* USAID extended a \$30 million soft loan to Indonesia in 1998 for the installation of 50 000 solar home systems supplied by BP Solar Australia.

*Japan:* The Japanese aid agency, Overseas Economic Cooperation Fund (OECF), was reported to have begun providing aid in support of photovoltaics in developing countries in the year 2000. Reports suggest that the program might be substantial in scope and scale. OECF has prepared a \$100 million funding package for India’s IREDA for renewable energy on lending, including photovoltaics.

*Others:* The aid agencies of Austria, Denmark, Italy, Sweden, Switzerland, and the United Kingdom have funded a variety of PV programs in the developing countries, generally of the grant-for-demonstration kinds of activities. This kind of aid is being coordinated in Europe by the new EC directorate for international aid.

## 24.6.2 United Nations

UNDP supported demonstrations of solar home systems, PV water pumping, PV-powered health clinics, and other projects in the developing countries, generally with GEF grant support. UNDP-sponsored projects include

*Bolivia:* rural electrification with renewable energy

*China:* renewable energy capacity building