of local energy and transportation issues. The Asia–Pacific Energy Research Center, an arms-length research organization funded by the government of Japan that facilitates the sharing of energy modelling and analysis expertise among APEC members, provides a useful model for such regional cooperation.

SIEMP Takes a Different Approach in Assisting Energy Efficiency

The Southern Africa Development Community (SADC) Industrial Energy Management Project (SIEMP) is sponsored by the Canadian International Development Agency in partnership with the SADC Energy Sector.

Launched in 1994, SIEMP's approach differs from most other donor-assisted energy-efficiency programs, which tend to emphasize technology transfer from industrial countries. By contrast, SIEMP focuses on developing human resources for practical energy management. Rather than introduce training materials from Canada or other industrial countries, both the materials and the overall framework of the SIEMP training program have been developed and tested in the region, based on close consultation with industry and local training providers.

In order to consolidate its work and ensure sustainability, SIEMP has embarked on an initiative to establish an energy management certification program based on a standardized body of knowledge and a network of certifying organizations. More information is available at *http://www.siemp.co.zw*.

Technology Transfer

Pursuing sustainable development as it relates to energy will require significant technological changes in both developed and developing countries. Governments need to foster the early adoption of energy-efficient and clean energy technologies, since energy infrastructure and equipment can affect patterns of energy production and use for many years and even decades. Enhanced R&D and the transfer of energy-related technologies between and among countries are essential and can be implemented through strategic partnerships, joint pilot projects, and training.

Governments can establish an enabling environment for R&D for technology transfer by eliminating economic and institutional barriers in both supplier and recipient countries. A vital starting point for creating a successful R&D/technology transfer strategy is a fundamental assessment of a given country's particular energy and technology needs and circumstances and a willingness to explore new approaches to providing energy and energy services. This fundamental needs assessment is critical to establishing long-term strategies and approaches to sustainable development.

Canada's RETScreen Software

In many countries, the harnessing of renewable energy has been hampered by a lack of knowledge and information about technologies, opportunities, costs, and benefits, compounded by inadequate institutional capacity to assess and plan viable projects.

RETScreen is a standardized software for analyzing renewable energy projects. It can help decision makers identify and evaluate opportunities for cost-effective implementation of renewable energy technologies. Developed by Natural Resources Canada's CANMET Energy Diversification Research Laboratory, (EDRL), with support from the United Nations Environment Programme and others, RETScreen has been used by hundreds of electric utilities, independent power producers, governments, and development agencies to assess renewable-energy technology projects for electricity generation and space heating around the world.

RETScreen can be downloaded free of charge from http://retscreen.gc.ca.