



energy *in* action

What is e7?

The E7 is a non-profit organisation consisting of nine leading electric utility companies that spearheads projects and human capacity building activities in developing nations worldwide that exemplify E7's mission:

"To play an active role in global electricity issues and to promote sustainable development."

This diverse international group offers electricity sector expertise and practical competency in electricity generation, transmission and distribution. With field proven expertise in the planning, management, design, operation and maintenance of energy facilities, member companies together provide an all-encompassing scope of the global electricity industry to assist developing countries.

E7 members are:

American Electric Power (USA)
Electricité de France (France)
ENEL (Italy)
Hydro-Québec (Canada)
Kansai Electric Power Company (Japan)
Ontario Power Generation (Canada)
RWE (Germany)
ScottishPower (UK)
Tokyo Electric Power Company (Japan).

Associate Partner

RAO-UESR (Russia)

Sustainable Rural Electrification in Indonesia

In 2000, the E7 completed the Indonesia Renewable Energy Supply Systems, a rural electrification project undertaken as an Activity Implemented Jointly registered with UNFCCC.

Between 1997 and 2000, socio-economic, financial and technical studies were implemented in a remote part of Indonesia. A total of four micro hydropower plants, one photovoltaic/wind-hybrid system and 195 solar home systems were then installed. These facilities generate about one million kWh per year in total, provided a limited amount of electricity to eight remote communities, touching roughly 5000 people in the province of Nusa Tenggara Timur and South Sulawesi.

One of the major objectives of the project was to develop and introduce an innovative, sustainable, and decentralised management concept for rural electrification that could be replicated elsewhere. Independent, village-run micro-utilities were created to manage the electrification schemes, assuming responsibility for technical aspects, operations and maintenance, and financial management.

With the assistance of non-governmental organisations and users groups, the E7 provided a wide range of training to enhance the capacity of the micro-utilities and to raise general awareness for electricity use and its benefits among the users. The aims of these training sessions were to ensure a high acceptance of the electrification schemes and to create conditions under which commercially oriented rural electrification schemes could be developed and maintained with a high level of grassroots participation and user responsibility.

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Houses in Tana Toraja

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In essence, the E7 sought to address the socio-economic intricacies of rural electrification to sufficiently strengthen the local capacity to ensure the long-term sustainability of the facilities, integrating concerns for economic viability, environmental protection and social benefits.

In this way, villagers in remote areas were encouraged to routinely pay for electricity services. An electricity tariff was set to cover all costs of operation and maintenance, management and replacement of system components over the installations' lifetime, while avoiding the need for ongoing subsidies for system operation, a minimum 'must' in terms of rural electrification. District governments assist the village-based micro-utilities in managing revenues.

In 2001, the E7 decided to embark on a two-year multidisciplinary monitoring programme to evaluate the effects of the training and capacity building that were provided, analyse the ancillary socio-economic development resulting from the technology transfer, document greenhouse gas emissions reduction and follow-up the performance of the institutional framework and technical expertise in their critical relation to the project's financial sustainability.

In July 2002, the E7 Indonesia project received the 2002 ASEAN Energy Award for Excellence in Project Management of New and Renewable Sources of Energy for the micro-hydropower systems installed in Sulawesi. The E7 Indonesia project has also received awards in recognition of its excellence in multi-stakeholder partnerships and project management.

Mounting a solar panel



The project's two-year monitoring phase was completed in 2003, and following the positive results of the monitoring, the Regional Government in the South-East Indonesian province of Nusa Tenggara Timur has decided to electrify more remote villages with 1000 solar home systems, applying the E7's model.

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Partnerships can help bring energy to two billion people worldwide who are without electricity. Governments, financial institutions and other organizations can

work with electricity companies to make it happen. Put energy into action for sustainable development around the globe.

April 2004

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