



USAID
FROM THE AMERICAN PEOPLE

THAILAND

CASE STUDY

Renewable Energy Boosts Economy

New regulations allow small energy generators to sell excess electricity to national utilities



Photo: Chris Greacen, Palang Thai

Small-scale producers in Thailand are tapping alternative energy sources, including water, to reduce air pollution and decrease the country's reliance on energy imports.

“Our outreach efforts have led to at least 3 MW of additional planned installations in Thailand — enough electricity for 12,000 homes,” says Palang Thai’s Chris Greacen. “USAID’s support throughout has been essential to our efforts.”

Telling Our Story
U.S. Agency for International Development
Washington, DC 20523-1000
<http://stories.usaid.gov>

Challenge

Thailand currently relies on imports, mainly crude oil, to satisfy about half of its energy needs. With a view to reducing pollution and strengthening energy security and competitiveness, the country is increasingly exploring ways to meet growing consumer and industrial needs with domestic renewable resources. Water, solar, wind, biomass and biogas generation are economically viable and could meet more than a tenth of Thailand's demand. Adopting these technologies, however, has been limited by various obstacles, including a lack of support for small-scale renewable energy producers, who were not allowed to sell electricity to utilities due to concerns about safety and compatibility.

Initiative

With assistance from USAID, a group of volunteers drafted legislation in 2002 to allow small community- or entrepreneur-owned renewable energy generators to connect to the grid and sell excess electricity to utilities. Due in part to dialogue sparked by a USAID-sponsored study tour to the United States and training course in Bangkok for government representatives, the new regulations were approved later that year. USAID helped supply expertise and guidance through a partnership with California-based utilities with substantial experience in small-scale renewable energy. USAID also supported the organization Palang Thai in ensuring smooth implementation of the new regulations by supplying energy experts to work with the government on policy, and helping small-scale generators resolve technical and contractual barriers.

Results

The new legislation has encouraged the development of clean energy resources while improving Thailand's environment, building local economies and reducing reliance on imported fuels. Eight small-scale generators have started to sell power to the national grid, while more than 40 others, with a combined generating capacity of over 6 MW, have been given permission to connect to it. With this steady increase in renewable energy sources coming on line, the Thai government is now expanding the regulations to include larger renewable energy generators that can produce up to 5 MW.