
In recent years, many consumers across Asia have watched in disbelief as their energy costs have soared through the roof. But homeowners in Thailand, with some support from USAID, have a new vantage point – on the roof, where installed solar panels can help bring energy costs down, way down.

There are challenges to this approach, and so far, not everyone has seen the light. Solar costs have dropped dramatically in recent years, prompting many countries to expand their solar capabilities. However, utilities are concerned that rooftop solar will slash profits as more customers produce their own electricity.

Enter the United States Agency for International Development Clean Power Asia (USAID Clean Power Asia) program, the National Renewable Energy Laboratory (NREL), and Chulalongkorn University’s Energy Research Institute (ERI). They collaborated with Thailand to tackle these financial concerns and help advance Thailand’s solar regulatory policy. At forums throughout 2017, USAID Clean Power Asia, NREL, and ERI met Thai distribution utilities, including the Metropolitan Electricity Authority and the Provincial Electricity Authority, to address their concerns.

NREL and ERI worked with USAID Clean Power Asia on an economic analysis of the effects of increased distributed photovoltaics (DPV) penetration in the country. The results proved that higher penetration levels would have no impact on utility revenue and a limited impact on rates, due to the existing regulatory structure that is well suited for greater investment in DPV. USAID Clean Power Asia’s participation in this analysis brought the process to a tipping point, helping spur action by policymakers. In time, this will lead to greater investment in solar energy.
In September 2017, the Thai Energy Minister announced additional support for rooftop solar investment in order to meet Thailand’s goal to have 20 percent of the country’s electricity come from renewable energy by 2036. Rooftop solar will allow owners to reduce their electricity bills, produce power for their consumption, and sell excess power back to the grid.

According to Ms. Thanyalak Meesap of the Department of Alternative Energy Development and Efficiency, “Understanding the utility revenue and rate impacts was a critical step in getting past barriers to a policy to promote greater investment in rooftop PV, as well as finalizing policy recommendations to the decision-makers.” The official solar rooftop policy is expected to be launched in October 2017, with the Office of the Energy Regulatory Commission regulating the licensing of solar rooftop installations whose owners wish to sell to the grid.

USAID Clean Power Asia is sharing lessons learned from Thailand’s DPV experience across the Lower Mekong and with Association of Southeast Asian Nations (ASEAN) member states. Beginning with a solar workshop in March that resulted in the removal of barriers to DPV self-consumption in Cambodia, Thai bankers and developers then shared their experiences with DPV at a workshop in late August to broker investment in solar energy under Vietnam’s new net metering policy.

So as Thailand steps up its solar energy policymaking, consumers in neighboring countries will be watching carefully to learn how they can aim high to lower their costs.