

# Impacts of Our Expert Policy Assistance

Asia



#### **Contents**

Section 1: Country-Specific Impacts:	
India	2
Malaysia	3
Mongolia	3
Nepal	4
Pakistan	5
South Korea	6
Vietnam	7
Section 2: Additional Assistance Provided	q

# **Section 1: Country-Specific Impacts:**

## India

#### 1. Structuring Industrial Efficiency Programs

The Clean Energy Solutions Center assisted and collaborated with the Bureau of Energy Efficiency (BEE) on a <u>webinar</u> <u>training focused on industrial efficiency programs</u>. The Solutions Center organized and hosted the webinar that provided information on policy best practices for industrial efficiency. The content of the webinar was tailored to



address India 'specific needs. Information on industrial efficiency policies developed in India. The presentations included best practices and lessons learned resulting from industrial efficiency polices implemented in other countries.

#### **Impact of Assistance**

The training webinar provided a framework under which policymakers in India were able to discuss policies and programs structured to advance industrial efficiency efforts in their country, and provided an opportunity for participants to learn from successful policies and program implementation around the world.

#### 1. Battery Recycling and Reuse in West Bengal

The Department of Environment of West Bengal, India requested support from the Clean Energy Solutions Center on best practices for battery recycling to reduce environmental and health damages from expected growth in batteries used in the transport sector. The assistance evaluated global practices in battery reuse and recycling programs including incentives, labelling, disposal regulation, setting goals, and explore purchasing used batteries for re-sale.

#### **Potential Impacts**

The Solutions Center provided advice to the government into battery recycling and reuse practices to reduce the environmental and health impacts from expected growth in disposal of used batteries in the transportation sector.

# Malaysia

Supporting Effective Feed-in Tariff Development in Malaysia

# Mongolia

## 1. Integrating Renewables into Mongolia's Power Grid'

The Clean Energy Solutions Center supported the government of Mongolia by providing expertise on increasing integration of renewable energy into the grid to meet their 20% renewable energy capacity by 2020 through participating in capacity building workshops and meetings with government stakeholders.

#### **Potential Impacts**

Assistance delivered through the Solutions Center provided the Mongolian Government with information and increased understanding on the opportunities and challenges associated with increased integration of variable renewables into their grid. As such, the opportunities can be pursued with and knowledge in hand of how to mitigate challenges before they occurs.

# Nepal

### 1. Helping Nepal Build a Solar Energy Future

The Clean Energy Solutions Center, under its Ask an Expert program, collaborated with the Asian Development Bank (ADB) to provide expert support during a workshop designed to scale up Nepal's renewable energy sector.

Held in Kathmandu, the ADB workshop convened a wide range of stakeholders and funders, including the Clean Energy Development Bank based in Nepal. Workshop participants examined key issues and challenges Nepal faces in developing renewable energy and energy efficiency projects. Currently, Nepal's power generation is met predominantly by river-run hydropower, which is constrained during dry seasons.



The second primary focus of the workshop addressed the challenges faced by independent power producers (IPPs), in particular issues such as securing financing, accessing debt and equity, and controlling costs.

Support provided through the Solutions Center highlighted the benefits of photovoltaic (PV) systems and how solar technologies can support the power needs of Nepal, especially during dry seasons. The Solutions Center expert, Mr. Toby Couture, also provided advice on the basic structure and design of a successful solar policy.

#### **Impact of Assistance**

Through the collaboration with ADB and the Nepal Government, support provided by the Solutions Center Ask an Expert program will help Nepal make objective, informed decisions on the development and implementation of a solar policy.

With PV costs now broadly competitive, Nepal has an opportunity to deploy solar projects that will provide the country a reliable source of electricity during the dry and sunny seasons when hydropower dependability is compromised. Additionally, IPPs now have the information they need to work toward developing greater regulatory certainty and a clear framework for selling to the network power generated from PV and other clean energy technologies. IPPs can also structure power purchase agreements to include protections against currency risks and other investment factors.

## 2. Implementing Net Metering in Nepal

The Clean Energy Solutions Center assisted the government of Nepal on policy training on integrating solar PV into the distribution grid. The assistance included training on different solar PV integration policies including net metering, net billing, and net feed-in-tariffs (NET-FIT) in addition to contract length and underlying processes and administration procedures.

#### **Potential Impacts**

The Solutions Center assisted the government by providing a training workshop on solar net-metering policy design, process and practices which had contributed to the government's decision in agreeing to finalize a policy mechanism.

#### **Pakistan**

# 1. Sharing Best Practices on Industrial Energy Efficiency in Pakistan

The Clean Energy Solutions Center provided K-Electric, a government-supported utility in Pakistan, with several reports on best practices in industrial energy efficiency within the region. The reports provided examples of industrial energy efficiency policies from China and India, along with contact information for additional follow-up with someone who works on industrial efficiency within the Pakistan government. Additionally, the Solutions Center and a team of experts from Carbon Trust developed a report with recommendations for improving the design and execution of this existing Energy Efficiency Advice Programme. The key recommendations identified to address the barriers to

implementing energy efficiency in both developed and developing markets included developing an awareness raising strategy, improving energy efficiency expertise within the audit team, improving the quality of the audit service offering, developing a tracking mechanism to assess impacts and creating a suppliers/installers database.

#### **Impact of Assistance**

The support provided to K-Electric will assist them in advancing their existing Energy Efficiency Advice Programme in order to help unlock energy efficiency from the top one hundred consumers in the local market.

#### **South Korea**

# 1. Guiding South Korea's Renewable Portfolio Standard

The Clean Energy Solutions Center provided the Korea Electric

Power Corporation with information on how to successfully meet
and exceed renewable energy requirements subsequent to the
recent implementation of a national renewable energy portfolio
standard (RPS). The request focused not only on how to meet the
standard's percentage requirements overall, but also on how to comply with a mandate
that a certain amount of renewable electricity generation must be produced within the
country.

#### **Impact of Assistance**

Clean Energy Solutions Center <u>policy experts</u> provided guidance to the Korea Electric Power Corporation that will allow it to comply with South Korea's RPS requirement in a way that is most cost-effective to the utility and its customers. The support provided by the Solutions Center will also increase South Korea's probability of successfully meeting or exceeding its RPS targets.

## **Vietnam**

## 1. Establishing a Renewable Energy Action Plan in Vietnam

The Clean Energy Solutions Center provided high-level technical assistance to Vietnam through the Ask-an-Expert program. The Solutions Center supported five requests, including assistance on the development of renewable energy action plans and road maps, as well as advice on financial mechanisms in determining the suitability of large-scale or small-scale solar PV development.

- Good Practices for National Renewable Energy Action Plan Development. This
  assistance, delivered for the Vietnamese Ministry of Industry and Trade's Electricity
  and Renewable Energy Authority, identified elements that are needed in the
  process of developing a national renewable energy action plan. The assistance
  draws on learnings from other countries.
- 2. **Policy Considerations for Vietnam's Renewable Energy Action Plan.** This assistance, delivered for the USAID V-LEEP program in their assistance to the government of Vietnam, provided a comprehensive and objective review and gap analysis on their existing renewable energy action plan.
- 3. **Distributed rooftop PV finance and analysis for Vietnam.** Assistance was delivered to the national electricity utility, Electricity Vietnam (EVN), to support decision-making in state or non-state investment models for rooftop solar deployment in Vietnam.
- 4. **Review draft legislation for Renewable Energy Action Plan.** The Solutions Center provided additional assistance at a critical moment in reviewing draft legislation put forward to authorize their renewable energy action plan and roadmap.
- 5. **Review Renewable Energy Road Map Matrix.** The Solutions Center provided a review into the renewable energy road map featuring advice on both regulatory and market policy mechanisms, renewable energy grid integration and pricing, monitoring and evaluation, energy access policies, private sector opportunities, capacity building, and renewable energy supply chains.

#### **Potential Impacts**

Assistance provided by Solutions Center policy experts will help the Government of Vietnam to make informed decisions on their clean energy planning and implementation actions as they advance reductions in emissions through cost-effective clean energy solutions.

# **Section 2: Additional Assistance Provided**

- The Solutions Center developed a renewable energy e-learning training program for the Asia Pacific Economic Cooperation Energy Working Group, which informs energy policymakers, draws advice from the business community and industry experts, and collaborates with other international bodies.
- The Solutions Center provided consultation to **Kazakhstan** on commercialization policies to attract investment in clean energy projects.
- The Solutions Center supported Ulaanbaatar City, Mongolia, with the
  development of building codes for the city's building retrofits and new construction
  projects related to the integration of renewable energy and energy efficiency. The
  Solutions Center provided recommendations on programs and strategies for
  developing affordable energy-efficient residential structures and incentives to
  mobilize private investment for energy-efficient exterior lighting.
- The Solutions Center provided consultation to the **Philippines** on its energy efficiency and renewable energy policy portfolio, as well as regulations and mechanisms for attracting increased private investment.
- The Solutions Center delivered in-person training and assistance in **South Korea** on good-practice strategies for promoting renewable energy, including sector-by-sector approaches.
- **Turkmenistan** requested assistance on energy efficiency schemes for the residential sector.
- The Solutions Center worked with the United National Economic and Social
   Commission for Asia and the Pacific (ESCAP) to identify and fill gaps in its 2017
   policy theme study, <u>Regional Cooperation for Sustainable Energy in Asia and the Pacific.</u>
- The Solutions Center provided Viet Nam examples of good practices on policy development for solar thermal and PV for urban applications and clean energy technology transfer practices.

- The Solutions Center provided recommendations to **Viet Nam** on the implications of the Viet Nam's wholesale market design for integrating renewable energy into the grid.
- The Solutions Center reviewed Viet Nam's existing energy regulatory and policy frameworks and developed recommendations for policy reform, technology transfer and investments to support Vietnam's Nationally Determined Contributions action plan.