

ASSISTANCE FOCUS: AFRICA



The Clean Energy Solutions Center, an initiative of the Clean Energy Ministerial, helps countries throughout the world create policies and programs that advance the deployment of clean energy technologies. Through the Solutions Center's no-cost "Ask an Expert" service, a team of international experts have supported more than 130 requests for policy assistance from nearly 70 countries. High-impact examples from Africa are featured here.

COMMENT FROM REQUESTOR

“I testify to everyone my gratitude for the work done by the Clean Energy Solutions Center. Already with the English version I could see the substance, and therefore the importance, of the report. I will now share the French version with my Minister.”

Bianpambe Patallet

Project Coordinator for the Global Climate Change Alliance in Chad



HELPING CHAD INCREASE ACCESS TO CLEAN ENERGY IN REMOTE REGIONS

To help the Government of Chad determine the best way to approach rural electrification, the Clean Energy Solutions Center provided a brief analysis of different electrification technologies for remote and non-interconnected regions of the country.

In addition to detailing solar PV, wind, biogas and biomass technology options and costs, the Solutions Center report offered specific examples from countries around the world to illustrate the different models of deployment that have been used to increase adoption of these technologies in remote areas. The Solutions Center analysis also presented an overview of four different business models for rural electrification: two financed primarily by the end user and two financed primarily by the government or by donors. In the process, it outlines the various advantages and disadvantages of each business model to assist the government of Chad in developing better policy and improve energy access in the country.

IMPACT OF ASSISTANCE. The extensive analysis and information provided by the Clean Energy Solutions Center will enable the Government of Chad to increase access to clean, low-carbon, and sustainable electricity sources across the country.

ESTABLISHING FEED-IN TARIFFS IN GHANA

The Clean Energy Solutions Center assisted the Ghana Energy Commission with the design and development of a feed-in tariff (FIT) policy. Ghana is in the early stages of creating such a policy and requested assistance from Solutions Center experts in identifying best practices for FIT policy design. Solutions Center experts provided resources on FIT design, including best practices. The Solutions Center also engaged in consultations with the Ghana Energy Commission to provide additional guidance and support for the FIT policy.

IMPACT OF ASSISTANCE. The Clean Energy Solutions Center collaborated with Ghana in the early stages of its FIT policy design. As such, this early support facilitated both effectiveness and speed of policy development and eventual implementation that will encourage scaled-up deployment of renewable energy into the Ghana energy mix.



Solutions Center assistance will help develop policies to support renewable energy deployment in Ghana. Shown here: Ghana town view. *Photo from iStock 1487490*



The Solutions Center assisted Namibia with several renewable energy and energy efficiency programs. Shown here: Namibian capital of Windhoek. *Photo from iStock 13425482*

ADVANCING RENEWABLE ENERGY AND ENERGY EFFICIENCY PROGRAMS IN NAMIBIA

The Clean Energy Solutions Center assisted the Renewable Energy and Energy Efficiency Institute (REEEI) with developing a concentrating solar power (CSP) program, a building certification and rating program, and an appliance standards and labeling program. Solutions Center policy experts from the Collaborative Labeling & Appliance Standards Program (CLASP), the World Green Building Council, the Mexico Green Building Council, the National Renewable Energy Laboratory (NREL), and the European Solar Thermal Electricity Association (ESTELA) consulted with REEEI on a range of effective policy designs covering the three program areas.

IMPACT OF ASSISTANCE. The potential impact of the assistance provided is based on Namibia having the right tools and information to proceed with constructing a concentrated solar power plant accompanied by strong policies to support developing a CSP program throughout Namibia. Additionally, Solutions Center assistance will support design and development of an effective appliance labeling program and implementing a “Green Building Council” building certification and rating program. These programs will facilitate integration of energy efficiency and renewable energy technologies across a range of applications, including new construction and major renovation building projects.

COMMENT FROM REQUESTOR



“The CEM Initiative has been very helpful to us in Namibia by being a great networking hub. They have connected us with experts such as CLASP in our endeavor to establish an appliance labeling and standards development program. They have also connected us to different green building council experts who in turn are assisting Namibia in establishing its own green building council. The CEM Initiative is assisting Namibia in its renewable energy resources assessment.”

Kudakwashe Ndhulukula
Coordinator at Renewable Energy & Energy Efficiency Institute

INFORMING KISUMU COUNTY, KENYA, ON ENERGY ACCESS AND HEALTH CORRELATIONS

The Kisumu County government requested assistance in identifying current status of household energy access in Kisumu County. In particular, the county wanted to explore the relation of energy access and the health sector. Solutions Center experts conducted a literature review and subsequent analysis of the information provided in a report.

IMPACT OF ASSISTANCE: Through the information provided in the Solutions Center's response, Kisumu County's community health workers gained a deeper understanding of the current sources of household energy for cooking and lighting, the reliability of these energy sources, and the impact of these sources on local health. With this information, they were able to understand the current energy access situation and develop a more appropriate county-wide energy strategy.

SUPPORTING SOLAR HOT WATER SCHEMES IN MAURITIUS

The Solutions Center conducted an assessment of the residential solar water heating program in Mauritius and provided high-level recommendations for options for moving the program into other market sectors, such as commercial and industrial participants, and increasing the sustainability of the program and solar water heating market in Mauritius.

IMPACT OF ASSISTANCE: The assistance provided will allow Mauritius to capture greater benefits from existing solar hot water systems and implement program changes to improve effectiveness of future systems that facilitate energy and cost savings.



Solutions Center assistance will help increase the solar water heating market in Mauritius. Shown here: City of Port Louis, Mauritius. *Photo from iStock 10538090*

CREATING COMMERCIAL BUILDING EFFICIENCY REGULATION IN SOUTH AFRICA

The Clean Energy Solutions Center assisted the South African National Energy Development Institute (SANEDI) with design of a regulation created to promote energy efficiency in the commercial building sector. Solutions Center experts consulted with SANEDI on modeling options for assessing energy savings, provided best practices for setting incentive levels and program targets, reviewed draft regulation language, and provided comments on policy design.

IMPACT OF ASSISTANCE. The assistance was used by SANEDI to complete the content of the final draft of the regulation. The Solutions Center provided SANEDI with information to put forth the framework of an effective energy efficiency regulation, incentives, and energy reduction targets applied to South Africa's commercial buildings sector. Additionally, review of the regulation content resulted in structuring language to avoid unintended consequences. As such, South Africa will implement a program that results in reduced energy demand within a high-energy-use sector. The regulation was adopted November 2013 under Section 12L of the South Africa Income Tax Act, and was developed in response to the National Energy Efficiency Strategy to improve energy efficiency by 15% in the commercial building sector.

DEVELOPING RENEWABLE ENERGY AND ENERGY EFFICIENCY ACTION PLANS FOR WEST AFRICAN COUNTRIES

The Clean Energy Solutions Center provided on-site support during a workshop held in Abidjan, Cote D'Ivoire. The workshop was focused on helping representatives from the 15 member states of the Economic Community of West African States (ECOWAS) develop their national renewable energy action plans (NREAP) and their national energy efficiency action plans (NEEAP). The participants, who included senior regulatory and government officials from each of the ECOWAS countries, were provided with detailed insight into how to establish national renewable energy targets and how to design NREAPs and NEEAPs. A portion of the workshop focused on gathering baseline data and on the various methodologies available to gather, organize and integrate data into a successful clean energy strategy. Solutions Center experts informed the attendees on good practices for renewable energy and energy efficiency policies.

IMPACT OF ASSISTANCE: The assistance provided will facilitate the development of effective and successful renewable energy and energy efficiency action plans that will allow ECOWAS countries to meet the energy targets defined in the ECOWAS regional energy policy, foster the deployment of clean energy technologies and provide clean energy access to remote populations.

COMMENT FROM REQUESTOR

"The assistance which you have provided us has proved invaluable to our work over here. MANY thanks for all your help and assistance in making this a reality!"

Barry Bredenkamp, Senior Manager at SANEDI

COMMENT FROM REQUESTOR

“The feedback from trainees was excellent, indicating the high quality of lectures. In particular, the Solutions Center contribution was very well received and added significant value to the discussions, which was reiterated by the trainees.”

Gauri Singh, Director Country Support and Partnerships, IRENA



BUILDING CAPACITY FOR AFRICA AND PACIFIC ISLANDS

On-site expert assistance was provided in collaboration with the International Renewable Energy Agency (IRENA) for Small Island States and African Nations at the Japan-IRENA training program on *Setting Renewable Energy Targets*. The training focused on the policy aspect of designing and implementing optimal renewable energy targets. Assistance focused on the design of tariff-based support policies, such as feed-in tariffs and auctions, and financing options for these policies. The audience consisted of policymakers in the renewable energy sector from Africa and the Pacific Islands.

IMPACT OF ASSISTANCE: This training afforded policymakers the opportunity to learn good practices on how to design policies and programs that are compatible with renewable energy target-setting objectives, including affordable prices, grid stability requirements, and design elements from an investor perspective. As a result of the support provided at the workshop, policymakers have the tools to design successful policy responses to market fluctuations, and regulators have enhanced capacity to evaluate laws, adapt tariffs as needed, and benchmark best practices for renewable integration.

Page 1 photo: The Clean Energy Solutions Center is helping several African countries with clean energy policy and programs. Shown here: Cape Town business district in South Africa. *Photo from iStock 19945301*

To learn more about the Solutions Center and how it can assist you in achieving your policy goals, please visit www.cleanenergysolutions.org.