

TAF Newsletter #21 | May 2019

The EU's Technical Assistance Facility (TAF) for Sustainable Energy

What's new: Field Facts and Findings

Belize: EU support for the Sustainable Energy Roadmap

No more generations of poor citizens literally in the dark in Belize: EU-funded 'Support to the implementation of the Belize Sustainable Energy Roadmap' project will assist the country to implement its policy in the energy sector, aiming to achieve universal access by 2030. The new 14.8 M project will run for a period of 4 years.

Philippines: Renewable Energy Expansion under 'ElectriFI'

A TAF study of the sustainable energy market in the Philippines in the context of the European Union's ElectriFI instrument identifies opportunities for private sector investments in the sector.

Ethiopia: Mini-grid Pre-Feasibility Studies

A new TAF mini-grid pre-feasibility study focuses on a remote village in the Southern Omo region of Ethiopia, where there is no prospect for the 1,000 households to connect to the grid in the next 10 years.

SADC: Innovation and Energy Efficiency for Competitive Industries

The First Conference on 'Stimulating the competitiveness of the SADC region through Innovation and Energy Efficiency in Industries'.

What's next: Upcoming Missions

- TAF support to the EU-AU High Level Platform for Sustainable Energy Investments (SEI Platform)
- Electrification and Clean Cooking Technologies for Rural Schools in Rwanda

What we do: The EU's Technical Assistance Facility for Sustainable Energy

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'The EU's Technical Assistance Facility for Sustainable Energy' newsletter covers items of news from all the countries of operation of the EU TAF: East & Southern Africa, West & Central Africa, East & South Neighbourhood, Asia & Central Asia, Latin America, the Caribbean and the Pacific.

If there is a particular topic that you would like to see covered in future newsletters, please write to us. We welcome your feedback!

With our best wishes,

The TAF teams

Belize: EU support for the Sustainable Energy Roadmap

Activity Area: Capacity building in policy and regulatory framework.

No more generations of poor citizens literally in the dark in Belize - EU funded 'Support to the implementation of the Belize Sustainable Energy Roadmap' project will assist the country to implement its policy in the energy sector, aiming to achieve universal access by 2030.

The new 14.8 M project will run for a period of 4 years.

The energy sector has become one of the two focal sectors of cooperation of Belize with the European Union¹, and renewable energy is recognised as a crucial component for the country's development.

A new 4-year, 14.8 M EUR TA project for 'Support to the implementation of the Belize Sustainable Energy Roadmap' will support public institutions, in cooperation with private sector service providers, to advance towards universal access to electricity.

Energy access is a key social issue in Belize. About 3,500 households, or 20,000 people, do not have access to modern forms of energy. These households cannot afford modern and efficient stand-alone solar systems, and cannot be served on a cost-reflective basis through a private sector operator.

While universal access is an essential pillar of Belize's energy strategy, with a national target of universal access by 2030, the cost and efforts to close the gap through grid extension projects are enormous -and cannot be achieved in the short to medium term, if at all in the foreseeable future.

Belize has a large, but still widely untapped potential of renewable energies -in particular wind, but also solar, hydro, biomass, and wave energy- which may offer attractive opportunities for generation and energy saving measures, at the prevailing tariffs. In investing in renewable energy, the country could reduce its dependency on the main export products (sugar, bananas, fruit juice, and fish products), and reduce the enormous trade deficit – Belize had negative trade balance of 759 M USD in 2015, of which electricity imports contributed 21.6 M USD².



Both rural electrification as well as energy efficiency are highly gender relevant. Women are suffering most under the energy poverty in off-grid areas, as they are more often at home, responsible for household chores even after dark. Most energy efficiency measures aiming at behavioural change at household level will also have to address women in particular, in order to be adopted.

Under the new project, private sector service providers contracted on behalf of Government of Belize are planned to provide electricity to the remaining off-grid villages and households. Energy efficiency measures and the generation of renewable energy are also supported. Towards this goal, cooperation with individual households and private sector companies will be key.

Finally, the strategic energy planning process, including improvements in sector governance, regulatory framework, data analysis, and capacity building will be strengthened.

² http://atlas.media.mit.edu/en/profile/country/blz/
Photo source: http://www.bz.undp.org/content/belize/en/home/presscenter/pressreleases/2016/07/23/
empowering-santa-teresa-solar-energy-for-a-village-in-southern-belize.html



¹ Under the 11th EDF (European Development Fund) National Indicative Programme for Belize

Philippines: Renewable Energy Expansion under 'ElectriFI'

Activity Areas: Stocktaking, Mobilising Private Sector Investment.

A TAF study of the sustainable energy market in the Philippines in the context of the European Union's ElectriFI instrument identifies opportunities for private sector investments in the sector.

The Philippines' more than seven thousand islands hold great renewable energy potential that includes solar, wind, hydro, bioenergy, and geothermal resources. Increasing the use of this potential is an important target. To support this target, the EU's TAF for Sustainable Energy has fielded an on-site mission.

The TAF team assessed the macro policies for private sector investment in sustainable energy as very promising. For example, the team assessed that meeting the Paris Agreement targets of the Philippines will require a private sector investment of at least EUR 1.0 billion per year until 2030.

ElectriFI Country Window

According to the assessment study, the financial sector in the Philippines is quite mature, especially in comparison with other countries considered for ElectriFI. This means that many of the sustainable energy projects will have no difficulties attracting finance.

As a result of the financial sector's liquidity, donors and International Financing Institutions (IFIs) have been struggling to identify a 'niche' in the Philippines. Nevertheless, there are subsectors and technologies that the domestic financial sector currently does not serve well. These could be the target of ElectriFI: to not focus on large projects from the large conglomerates using technologies that are well-established in the Philippines, but instead focus on less established niches.

Considering a complete set of criteria including additionality, financial sustainability and development relevance, the team identified an array investment opportunities that an ElectriFI window could support, ranging from Hybridization of existing diesel mini-grids, Floating Solar Power, and Energy Efficiency in Industry to Project development and construction finance / capital for typically on-grid renewable energy projects.



The team also identified a potential ElectriFI financing demand of over 100 million EUR during the next 2 years. Based on these findings, the team recommended the establishment of an ElectriFI country window of between 20-25 million EUR, and additionally elaborated how the country window could leverage finance from among others the Green Climate Fund for increased impacts.

Potential areas of support through Technical Assistance

The team identified four opportunities that are significant from a development perspective, but that do not fit the ElectriFI modality: Green finance promotion capacity building; introduction of other countries' best practices to promote energy efficiency; best practices related to municipal lending and municipal creditworthiness enhancement; and technical assistance to improve the management of Energy Cooperatives (ECs).

Such opportunities could be addressed through TA projects, separate from the ElectriFI country window.

³ The European Commission's Electrification Financing Initiative (ElectriFI) acts as a financing mechanism to support market development and private sector initiatives for affordable, sustainable, and reliable energy solutions in developing countries. The TAF is working on Market assessments for dedicated ElectriFI Country Windows. Further info on ElectriFI: https://www.electrifi.eu/



Ethiopia: Mini-grid Pre-Feasibility Studies

Activity Areas: Project Preparation

A new TAF mini-grid pre-feasibility study focuses on a remote village in the Southern Omo region of Ethiopia, where there is no prospect for the 1,000 households to connect to the grid in the next 10 years.

Hana village is one of 3 sites selected by the Ministry and EU Delegation to develop mini-grid pre-feasibility studies, which the TAF team prepared under assignment 'Support to the Ethiopian Ministry of Water, Irrigation and Energy and other government entities – preparing tender documents for mini-grids, pre-feasibility studies, finalisation of SAS tender documents and identification of package of bankable projects'.

Hana village is situated in Southern Omo, named after the Omo River. It is in the most sparsely populated part of Ethiopia, inhabited by nomadic and semi-nomadic ethnic groups. The Debub Omo Zone is one of Ethiopian's socially most diverse zones, containing a minimum of 12 different ethnic groups – possibly as many as 21. Social diversity therefore compounds the existing problems of isolation, acute shortage of basic infrastructure as well as scarcity of professional and technical man-power.

Hana village is not connected to the grid and there is no intention to connect in the medium or long term – i.e. within the next 10 years. It is a deep rural village, a 3 hours' drive from the nearest town in the area: Jinka. Although there is a considerable agricultural production of sugar cane exploited by Chinese companies nearby Hana alongside the Omo river, the village has no electrical infrastructure.

There are about 6,000 inhabitants and just over 1,000 households. The village hosts several productive users: flour mills, small restaurants and some social institutions -a school and clinics.

To provide electricity to Hana village the TAF team have modelled different scenarios, the base scenario being the current 'fuel based' electricity supply.





Retrieving data and details about the energy requirements proved to be difficult. During the site visit the TAF team met the major stakeholders. A technical inspection was performed to get a better insight of the location itself, the installed electrical loads, energy demand and potential resources. With help of a drone the TAF team could get an upto-date view of the site to compare with previous google data. Here, the birdseye view of Hana Village, and a new double lane paved road being built by a Chinese contractor to facilitate the transport of sugar cane products from a nearby plantation.

The pre-feasibility studies present the required CAPEX, OPEX, and the levelised costs of electricity. In addition, they provide recommendations of the business model and ownership of the mini-grid that would be appropriate for the village context and the current regulatory framework in Ethiopia.

SADC: Innovation and Energy Efficiency for Competitive Industries

Activity Areas: Policies, Technology cooperation, Mobilising Private Sector Investment.

The First Conference on 'Stimulating the competitiveness of the Southern African Development Community (SADC) region through Innovation and Energy Efficiency in Industries' was organised by the SADC Centre for Renewable Energy and Energy Efficiency (SACREEEE) in cooperation with the European Union, the United Nations Industrial Development Organisation (UNIDO), the Austrian Development Cooperation (ADC), and hosted by the Government of Namibia.

The First Conference on 'Stimulating the competitiveness of the SADC region through Innovation and Energy Efficiency in Industries', held this May 16-17 in in Windhoek, Namibia convened a global audience of established companies, start-ups and SMEs in the energy sector and government leaders mainly in the SADC region and Europe. The 2-day Conference highlighted the status of industrial energy efficiency within the SADC region, showcased results and best practices and outlined investment opportunities. The Conference provided decision makers with the information and a platform needed to meet their business and policy objectives.

The comprehensive program featured presentations from top leaders from national, regional, international organisations, independent energy efficiency companies, alternative energy companies, regulatory agencies, industry associations, academia, as well as financial experts who will share their strategies for success.

An exhibition showcased innovative technologies and services on industrial energy efficiency.

The Conference and Exhibition offered a mix of formal presentations and informal events as well as great networking. For example, the Business-to-Business (B2B) session providing space for private sector companies, investors, etc. to meet one-on-one to make deals and explore opportunities for collaboration.

The SADC Industrial Energy Efficiency Programme (SIEEP) - a driver of Industrial Competitiveness

The Conference was organised in the context of implementing the SADC Industrial Energy Efficiency Programme (SIEEP) and engaging with the wider stakeholder group.

The SADC Industrial Energy Efficiency Programme (SIEEP) was developed by the SADC Centre for Renewable Energy and Energy Efficiency (SACREEE) in 2018 with the support of the European Union Technical Assistance Facility (TAF) for Sustainable Energy. The Industrial Programme will support the region to attain industrial competitiveness.

The SADC Industrialisation Strategy and Roadmap (2015-2063) identifies energy as a major barrier as well as a key enabler for industrial competitiveness of the region. Energy efficiency is the most cost-effective way to support industry in overcoming these barriers, improving their competitiveness and addressing climate change.



At the Conference, a Namibian, Ms. Marita Walther, MD of Suncycles in Namibia, received the prestigious environmental Energy Globe Award for her project on solar bikes.

Energy costs are quite significant as they represent about 20-35% of the production costs of industries in a number of countries in the SADC region. This is the trend in all member countries where the manufacturing industry is the largest consumer of energy and very few improvements in energy conservation are taking place largely due to a general lack of awareness and guiding policy frameworks for energy efficiency. Investments to improve industrial energy efficiency can deliver large energy savings, improve productivity, and reduce environment pollution.



What's next: Upcoming missions

TAF support to the EU-AU High Level Platform for Sustainable Energy Investments (SEI Platform)

In the framework of the new Africa Europe and Alliance, the EU-AU High Level Platform for Sustainable Energy Investments (the SEI Platform) aims at providing recommendations of actions and activities to accelerate impact on access to sustainable energy, boost public and private investments as well as decent job creation.

The SEI Platform will address long-term challenges and strategic interests of the EU and the AU and shall contribute to the implementation of the Agenda 2030 and the Sustainable Development Goals together with the Paris Agreement on Climate Change. It will also support the realization of the objectives set-up by the Africa Renewable Energy Initiative (AREI).

The SEI platform will aim to share knowledge and know-how, while considering the specific context and existing initiatives such as the Abidjan EU-AU Declaration, Africa Union –European Union Energy Partnership (AEEP) and the Africa Renewable Energy Initiative (AREI) including synergies with the Sustainable Business for Africa Platform (SB4A).

The TAF team is also supporting this initiative. A team will be deployed to support the European Commission's Directorate-General for International Cooperation and Development (DG DEVCO) to steer and coordinate the work under the SEI Platform and its work-plan, and assist in the preparation of the relevant documents, deliverables and communication activities. The mission will coordinate with the AEEP Secretariat, as it will also support and contribute to the well-functioning of the activities under the SEI Platform. DG DEVCO will coordinate with and inform the Directorate-General for Energy (DG ENER) - as the SEI Platform is jointly co-led by the two DGs.

Electrification and Clean Cooking Technologies for Rural Schools in Rwanda

Improved standards of education pass by providing basic energy services, reliable electricity and environmentally sustainable cooking solutions. A new TAF assignment will develop an Advanced Pre-Feasibility Study, presenting scenarios for improving conditions in Rwandan public schools – to provide stable, affordable and reliable electricity supply to primary and secondary schools as well as clean and efficient cooking facilities public boarding schools.

The assignment looks into PV electrification of off-grid schools, and providing internet connections and clean cooking equipment. The team will also help define the optimum project structure and business model for financing, as well as implementation modalities, including income-generating activities for off-grid rural electrification that could apply.

What we do: The EU's Technical Assistance Facility for Sustainable Energy

The 'EU's Technical Assistance Facility (TAF) for Sustainable Energy'

The 'EU's Technical Assistance Facility (TAF) for Sustainable Energy' assists partner countries in fine-tuning their energy policies and regulatory framework that allow for increased investments in the energy sector. The TAF supports countries which are committed to reaching Sustainable Energy objectives, and in particular those who selected energy not only as one of the priority areas of their national policy agenda but also as focal sector in their bilateral cooperation with the EU for the period of 2014–2020.

Through targeted expert missions to the partner countries, five types of technical assistance packages ('Activity Areas') are delivered:

Policy and reforms; Capacity building; Investment projects planning; Mobilising funds and partnerships; Industrial and technology cooperation.

Overview of TAF support:

Since its launch in 2013, the TAF has provided technical assistance for some 270 missions in Sub-Saharan Africa.

A year after the Sub-Saharan Africa TAF launch, TAF operations were extended to also accommodate regions beyond Sub-Saharan Africa, and to date over 60 technical teams have been deployed by the TAF 'Rest of the World' Facility – ranging from the East and South Neighbourhood and Asia to Latin America, the Caribbean, and the Pacific.

Focus on: the Caribbean



Who's who: Meet the team

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This newsletter update has been drafted by the EU's Technical Assistance Facility (TAF) for Sustainable Energy. The aim is to update EU Delegations regarding news and findings from the TAF missions and areas of assistance. The data has been collected from various sources by the TAF Experts in the context of the ongoing TAF missions, and is not exclusive. Please feel free to contact us with any feedback on the information provided, or other areas of support you would like to be informed of.

