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# TAF Newsletter #19 | March 2019

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

### What's new: Field Facts and Findings

#### New 35 M Eur ElectriFi Window for Bangladesh

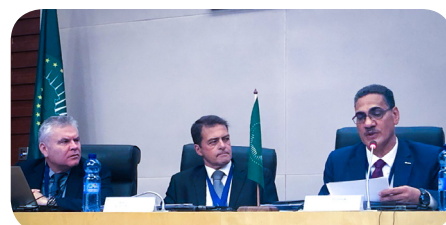
A RE/EE Market Assessment mission to Bangladesh found favourable conditions for private sector investment in sustainable energy, and laid the foundations for an ElectriFi Country Window worth 35 million Eur.

#### Myanmar's Renewable Energy Landscape

By identifying the most suitable technologies and locations, as well as the potentially successful business models for renewable energy projects, the TAF mission provides an insightful picture of Myanmar's renewable energy landscape. Private sector investments are investigated, including the continuous presence of China.

#### Africa-wide Guidelines Promoting Energy Efficiency

Over 50 Continental and regional actors of the African Union (AU) agreed on Harmonized Continental Transmission Tariffs, as well as Guidelines for Minimum Energy Performance Standards (MEPS) and Eco-Design Labelling for the African Continent this March, at a Technical Meeting hosted at the AUC headquarters.



### What's next: Upcoming Missions

- Mobilization of the EU Technical Assistance Facility in Tajikistan
- Ethiopia - tender documents for mini-grids, pre-feasibility studies, SAS tender documents, identification of bankable projects
- IOC - Minimum Energy Performance Standards for Buildings in the Indian Ocean Commission (IOC) Member States

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

- Focus on: Asia

### Who's who: Meet the Team

*'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*

# What's new: Field Facts and Findings

## Sustainable Energy Market Assessments

*Activity area: Market Assessment*

**Barriers and gaps to Renewable Energy investments are identified in the context of Stocktaking missions of the TAF.**

The TAF's Market Assessment activity aims to assist partner countries to identify energy access, supply and efficiency strategies and policies - including renewable energy readiness assessments where they are lacking.

It may include identifying the existing framework of policies, strategies and regulations guiding the sector, on-going reform programmes, gap analysis; comments on the effectiveness of existing energy sector reform programmes; support to energy policy formulation and legislation and the development of subsequent regulatory instruments; identification of legislative measures aimed at attracting public and private investments through several possible schemes; assessment of existing tariff regulation and make recommendations for future development. Recent Stocktaking missions include those in Myanmar and Bangladesh.

## New 35 M Eur ElectriFi Window for Bangladesh

**A RE/EE Market Assessment mission to Bangladesh found favourable conditions for private sector investment in sustainable energy, and laid the foundations for an ElectriFi Country Window worth 35 million Eur.**

Development of the electrical power sector has been a continued priority for the government of Bangladesh to resolve the lack of access to power and the limited availability of electrical power that was constraining the growth of the Bangladesh economy.



The TAF team estimates that achieving government targets will require a private sector investment of at least 500 million Euros per year until 2030. The local interest for the use of renewable energy is considerable, and the macro policies for promoting sustainable energy investments are promising. In conclusion, there is a significant potential for private sector investments in the sustainable energy sector.

During a dedicated mission, the team assessed the interest of private sector and government stakeholders in the ElectriFi concept. The reactions were positive among project developers, financial institutions and the government alike. Stakeholders believe that there is scope for a non-concessional support of private sector sustainable energy investments by reducing risks through ElectriFi's contributions.

The team investigated a large number of sustainable energy opportunities and assessed the barriers and gaps for each of these, as well as their suitability for ElectriFi, considering for example the additionality and development impact of ElectriFi support. Seven key opportunities were identified:

1. Solar rooftops in commercial and industrial buildings using a renewable energy service company (RESCO) model;
2. Grid-tied solar PV IPP;
3. Solar rooftops in residential and public buildings using a RESCO model;
4. Industrial energy efficiency investments using an ESCO model (for example, co-generation, efficient lighting);
5. Grid-tied solar PV, water-based IPP (e.g. floating solar power);
6. Grid-tied Wind Park IPP (provided access to land is confirmed);
7. Manure and MSW to Biogas to Power.



# What's new: Field Facts and Findings

## Sustainable Energy Market Assessments

*Activity area: Market Assessment*



The total potential ElectriFI investment demand of the identified opportunities is 92.5 million EUR.

Several reasons why a country window would have added value over the global ElectriFI window were also identified during this mission: the need to disseminate information about the ElectriFI funding opportunity; the need to integrate ElectriFI funding with risk mitigation instruments; and the need to integrate ElectriFI funding with complementing technical assistance and other sources of finance to maximize the crowding in of commercial investors and financiers.

Various cooperation possibilities and possibilities to use additional instruments to reduce risks for ElectriFI or to increase revenues to compensate for risks that might be taken by ElectriFI have been identified by the team. This includes cooperation with development partners (in particular ADB, IFC, UNCDF, USAID), domestic partners (banks and non-bank financial institutions), sector associations, Green Climate Fund, and using instruments such as renewable energy certificates (RECs), mitigation bonds & loans and carbon bonds & loans.

As a key concrete impact of the mission, the team's recommendation to establish a Bangladesh country window under ElectriFI is followed, and a country window will be established with an initial budget of EUR 35 million. This country window will be open for all sustainable energy investment opportunities that meet ElectriFI criteria, but may in particular focus on some key opportunities identified by the team (see above). It is expected that through ElectriFI, the EU will be able to make a strong contribution to private sector investment in key emerging sustainable energy subsectors in Bangladesh, such as rooftops, and will help to kick-start opportunities in for Bangladesh new fields such as floating solar power and Windpark.

## Myanmar's Renewable Energy Landscape

By identifying the most suitable technologies and locations, as well as the potentially successful business models for renewable energy projects, the TAF mission provides an insightful picture of Myanmar's renewable energy landscape. Private sector investments are investigated, including the continuous presence of China.

Myanmar currently has no comprehensive renewable energy law, but a number of policies are related to renewable energy issues.

In this context, a TAF assignment was launched to properly assess the capacity and potential of the renewable energy market in Myanmar and identify the right instruments to support private sector investments for the country. The specific objectives were very ambitious, aiming to provide a clear understanding of Myanmar renewable energy market capacity and potential at several levels.



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The team made a comprehensive assessment of all donor support to the sector including grant-based energy programmes, governmental programs, and technical assistance programs already available in Myanmar, as of the financial institutions and development banks' lending to the sector, investment funds and facilities and guarantee schemes.

In Myanmar, the National Electrification Project (NEP) is the plan mostly responsible for rural electrification and energy access. The goal of 100% electricity by 2030 is to be met through grid extension, SHS, and mini-grids. These mini-grids are usually solar diesel hybrids, biomass gasification based, or mini-hydro.

### Private and IFI financing– the role of China

The private sector is quite active in the energy and renewable energy sectors in Myanmar, both in the NEP-based mini-grids and especially in hydropower. International development support has historically been dominated by large Chinese companies partnering with local conglomerates for hydro projects.

China has had a continuous, dominant presence in Myanmar in the sector. This is due to China's access to inexpensive State-sponsored and guaranteed finance, whereas local financing options are quite limited; the local banking sector is practically inactive, only providing loans with hefty collateral requirements.

Non-Chinese international financing to date has come predominantly through International Financing Institutions (IFIs) for projects like the Myingyan combined-cycle gas turbine (CCGT) power plant. While the Myingyan project consisted of a traditional project financing arrangement, there are more innovative schemes being piloted, such as Results-Based Financing and Two-step lending programmes. There is considerable donor support in the energy and renewable energy space, through a wide range of organisations.

### Challenges and recommendations

The scoping mission reveals that inter-institutional cooperation and communication is highly deficient, mainly centred on communication and limited capacity skills within the Ministries and banks. Coordination between Ministries around the grid extension plans and tariff are critical barriers to RE investment, especially for rural electrification projects.

After interviewing all stakeholders and researching the policy environment, recommendations for a two-step lending approach to support RE investment in Myanmar were proposed. One option would be to lend funds to local banks - and these local banks would then on-lend to the RE developers. As a result of the current barriers, an ElectriFI window does not to be feasible at present, differing from other countries in the region.

#### *ElectriFI*

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.

ElectriFI provides a flexible financing instrument that invests in high risk renewable energy projects that conventional sources tend to avoid. Support options include TA, junior debt, senior debt, and equity. The interim financing solutions help projects overcome obstacles, or otherwise reach a sufficiently mature stage that could attract private financiers.

#### *'Country Windows'*

Within the **Stocktaking activity** area, the TAF also works on Market assessments for dedicated ElectriFI 'Country Windows'.

The ElectriFI 'Country Window' is a modality used to bridge the domestic gaps in structuring and financing of investments in a country, by contributing a portion of the EU's 11th EDF National Indicative Programme

funding for the country in question to ElectriFI.

Whether or not a dedicated country window has an added value depends on the appetite of the private sector to make use of this financing instrument. Different sub-sectors are being assessed in the context of several ongoing assignments of the energy market (like solar home systems, captive power, etc.) if the private sector has investment plans that would be served by an ElectriFI country window, and under which conditions.

The process includes a stocktaking mission, where the TAF Teams gather relevant information on the successful initiatives and propose innovative solutions. Market surveys lead to insight in the absorption capacity and potential of the different energy sub-sectors and, if needed, the team provides recommendations to shape a financial instrument using the ElectriFI window model.

The ElectriFI country window is then designed based on the findings, thus allowing for the maximum effect from the ElectriFI funds to be achieved.

More info: [www.electrifi.eu](http://www.electrifi.eu)



# What's new: Field Facts and Findings

## Africa-wide Guidelines Promoting Energy Efficiency

*Activity Area: Policy and reform*

Over 50 Continental and regional actors of the African Union (AU) agreed on Harmonized Continental Transmission Tariffs, as well as Guidelines for Minimum Energy Performance Standards (MEPS) and Eco-Design Labelling for the African Continent this March, at a Technical Meeting hosted at the AUC headquarters.

The Final Technical Meeting on 'Guidelines for Minimum Energy Performance Standards (MEPS) and Energy Labelling' and 'Harmonized Transmission Tariffs at the Continental Level' was organized by the African Union Commission (AUC) in collaboration with the European Union. More than 50 representatives from the African Union Commission (AUC), the European Union (EU), Regional Economic Communities (RECs), Regional Bodies, Regional Centers for Renewable Energy and Energy Efficiency, gathered in Addis Ababa, Ethiopia, over a three-day meeting on 6-8 March 2019.

The aim of the Final Technical Meeting was to facilitate stakeholder consultations, dialogue and validation of Continental Guidelines for MEPS and Energy Labelling, and Continental Transmission System Tariff Methodology and Model. Topics included regional activities on MEPS and Eco-Labels, for each regional economic community; a presentation of results of implementation in 4 pilot countries, i.e. the national energy labeling roadmaps produced; focus on off-grid appliances MEPS and labels, and recommendations for MEPS and labelling; Transmission Tariff Methodology and Model; demonstration of operation of Tariff Computational Model in 6 pilot countries.

This is the Final Workshop in a long-term Technical Assistance initiative of the EU's Technical Assistance Facility for Sustainable Energy (TAF) towards a 'Harmonised Regulatory Framework of Electricity Markets in Africa'. The initiative, led by the AUC, aims to accelerate the process of integration and harmonization of continental and regional electricity markets.

Regional energy markets transcend multiple jurisdictions. This calls for the harmonisation of policies, legislation, regulatory and institutional frameworks at the regional and continental levels to enhance greater coordination and cooperation, as well as remove barriers to facilitate cross-border trade and investments.



*From left to right: Dr. Dimitris Papastefanakis, TAF, Supervising Key Expert; Mr. Francisco Carreras Sequeros, Head of Operations, EUD to the African Union; Mr. Marzouk Atef, Acting Head of Energy Division, African Union Commission opened the sessions on 6 March.*

The Harmonization **Strategy** and **Action Plan** were adopted by the Heads of State and Government of the African Union during the 29th African Union Summit in July 2017 in Addis Ababa, Ethiopia.

Within the context of the Harmonization Action Plan, a **Harmonised and Continental Transmission Tariff Methodology for the Electricity Sector** has been developed, to be used for international bilateral transactions. Regulation of cross border electricity trading requires a methodology for transmission costs and tariffs within each power pool.

On the other hand, the **Guidelines of Minimum Performance Standards and Energy Labelling** for appliances are to be used by the African Regions through their centres of Renewable Energy and Energy Efficiency to prepare the framework for the implementation of MEPS and Energy Labelling at the regional and national levels.

The results are expected to improve energy consumption and contribute to the energy market transformation in Africa.



# What's next: Upcoming missions

## **Mobilisation of the EU Technical Assistance Facility in Tajikistan**

An EU-TAF Mission will be organised in Tajikistan, aiming to provide an in-depth assessment and analysis of the Sustainable Energy sector, policies and regulatory framework in this country.

A particular attention will be paid to the on sub-sector policies related to this specific sector. The team of experts will provide also, inter alia, key recommendations in view of optimizing the impact of EU (and possible new interventions) and Member States - MS development aid in the renewable energy area. To reach this objective, the experts will take stock of the current situation in the sector and interrelated policies and regulation, and establish contacts with all relevant stakeholders in view of collecting all relevant information. They will also create a stakeholders map, including EU, EU MS and other donors' cooperation programmes, projects and initiatives on sustainable energy. In view of recommending concrete measures, the mission will also evaluate the financial situation of the developer and the reliability of the financing sources

## **Ethiopia - tender documents for mini-grids, pre-feasibility studies, SAS tender documents, identification of bankable projects**

Access to adequate, reliable, affordable and environmentally sustainable energy is fundamental to the economic development strategy of Ethiopia. This can help lift people out of poverty by supporting industrialisation, job creation and export earnings from electricity sales to other countries, but also by creating electricity access for the 70 percent the population (around 70 million people) currently without access.

The overall objective of this assignment is to support the Government of Ethiopia in its efforts to ensure universal access to electricity for all by 2025 by improving the enabling environment for private and public investment in the off-grid sector and by developing a package of bankable projects for electricity access in the off-grid sector.

The specific objectives of this assignment are to support the development of the mini-grid sector through the identification of a pipeline of mini-grid projects, and subsequent development of tender documents for mini-grids; support the development of the SAS market - finalization of the tender documents for Stand Alone Systems and accompany the preparation of pilots; enable private sector participation in the off-grid sector.

## **IOC - Minimum Energy Performance Standards for Buildings**

The general objective of this assignment is to develop minimum energy performance standards (MEPS) for new and refurbished buildings - taking into account the specific climatic conditions encountered in the Indian Ocean. The project will be deployed in 3 Phases:

Phase 1: Assessment and recommendations on Minimum Energy Performance Standards (MEPS) – building codes and energy labels for building systems;

Phase 2: Development of four roadmaps - one for each Member State (Comoros, Madagascar, Mauritius, Seychelles) to adopt MEPS into their legal and regulatory framework;

Phase 3: Synthesis – regional recommendations and final report.



# 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.

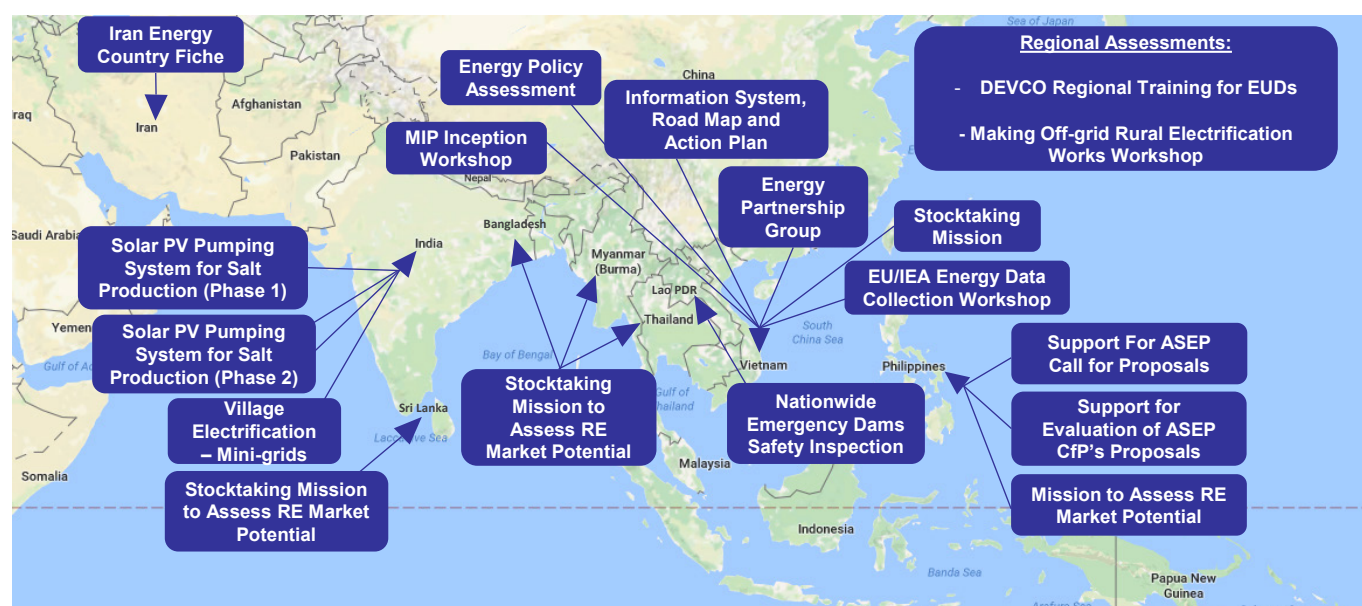
- Supporting the **#EU's vision** and strategies at national and regional level
- Provision of **#high quality** technical assistance at Partner Country and Region
- #Low lead times** from ToR preparation to assignment launch
- Efficient and **#effective management** of each mission
- #Control mechanism** and QA for coherent deliverables

## Overview of TAF support:

Since its launch in 2013, the TAF has provided technical assistance for some 240 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 30 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: Asia



# Who's who: Meet the team

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## DISCLAIMER

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.



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