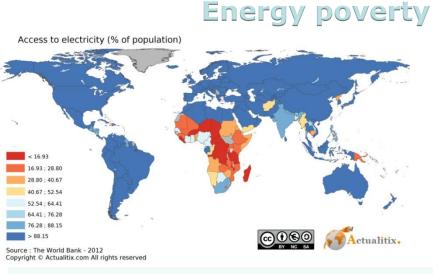


Need to increase access to energy and do it with renewables: facts & figures



1.2 billion people without access to electricity (IEA, 2016)

3 billion people cook and heat their homes using open fires and simple stoves burning biomass (wood, animal dung and crop waste) and coal.

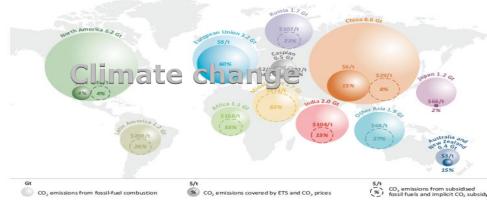
Over 4 million people die prematurely from illness attributable to the household air pollution from cooking with solid fuels (WHO, 2016).

Energy financing

Annual requirement for the period from 2010 to 2030 to achieve the universal access to modern energy services and doubling the share of renewable energy in the global mix :

- \$50 billion for energy access (current spending is \$9 billion)
- \$442-650 billion for renewable energy (current baseline of \$258 billion).
 Except for Europe all regions need to increase investment to meet targets.
 The largest annual funding gap by far is in developing Asia.
- **\$560 billion for energy efficiency** (current spending is \$130 billion). (SE4All Advisory Board's Finance Committee Report on Scaling Up Finance for Sustainable Energy Investments, 2015)

Figure 1.2 - Energy-related CO₂ emissions in selected regions, 2014



Notes: The implicit CO₂ subsidy is calculated as the ratio of the economic value of those subsidies to the CO₂ emissions released from subsidised energy consumption. ETS = emissions trading scheme.



International engagement

- The 2030 Agenda for Sustainable Development
- The Paris Agreement
- Addis Ababa Action Agenda (Financing for Development)
- The Africa-EU strategic partnership for energy: 'Energising Africa'
- Global Strategy on the European Union's Foreign and Security Policy
- The international dimension of the EU Energy Union
- New European Consensus on Development
- Council conclusions on energy and development
- European External Investment Plan















3 pillars of the EU strategy

1. Increase access to renewable energy

2. Increase renewable energy generation capacity and energy efficiency

3. Contribute to the fight against climate change





3 drivers of the EU strategy

Political ownership of reform agenda

- 23 Joint Declarations
- Africa Renewable Energy Initiative (AREI)
- Contribution to National/Regional and Global Indicative Programmes with (EUR 2.7 billion to sustainable energy in Sub-Saharan Africa)
- Covenant of Mayors in SSA to strengthen the role of local authorities

Capacity building

 Technical Assistance Facility (TAF) – supporting Reforms and regulatory frameworks

Investments

- Regional Blending facilities
- ElectriFI
- European External Investment Plan (EIP)



Political ownership

Financial Aspects

EUR 3.7 billion allocated from EU development funds to sustainable energy actions in developing countries (2014-2020). Around EUR 2.7 billion for Sub-Saharan Africa

30 partner countries have significant allocations to the energy sector (NIP). 17 are located in Sub-Saharan Africa

Africa Renewable Energy Initiative (AREI)

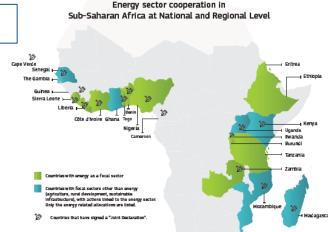
EU strongly supports AREI which is an Africa-led initiative established in COP21 with the objective to accelerate and scale up the harnessing of the continent's huge renewable energy potential.

Its objectives are to achieve at least 10 gigawatts of new and additional renewable energy generation capacity by 2020, and mobilise the African potential to generate 300 gigawatts by 2030.

EU commitment: EUR 1.5 billion to support 5GW of new renewable energy by 2020 (half AREI objective by 2020).

Women at the Centre of EU-Africa energy cooperation

Women and Sustainable Energy Initiative



- CfP 2017: 120 eligible concept notes
- 18 full project proposals
- 3 projects selected: EUR 18.1M over 5 years



Commission

Political ownership

The Africa-EU Energy Partnership



Africa-EU Energy Partnership

Established in 2007 as one of the partnerships created under the Joint Africa-EU Strategy (JAES), at the 2007 Lisbon Summit, the AEEP's overall objective is to improve access to secure, affordable and sustainable energy for both continents. It provides a platform for trans-continental policy dialogue.

Covenant of Mayors in Sub-Saharan Africa (CoM SSA)

- CoM SSA is a regional CoM initiative that supports SSA cities
- CoM SSA is part of the Global Covenant of Mayors for Climate and Energy (GCoM)
- Launched in 2015 105 signatory cities as of May 2018
- In addition, 13 pilot cities
- Phase I & II (launch & kick-off) (AAP 2015 & 2016): EUR 16M
- Phase III (2019-2022) EU contribution of EUR 25M
 New approach in line with EIP/innovative financing: enabling environment → bring in the private sector → boost private investments

Covenant of Mayors Office for Sub-Saharan Africa

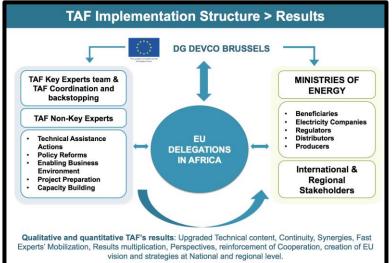


Making sustainable energy investments a reality

Technical Assistance Facility (TAF)

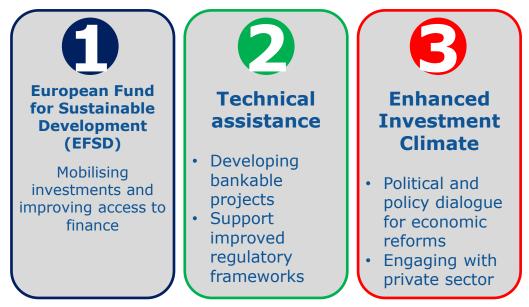
- Three TAF contracts > 40 million > EUR
- Since December 2013
- Duration: 6 years
- Geographic coverage:
 - ✓ Central and West Africa
 - East and Southern Africa
 - ✓ Rest of the World
- Covers all partner countries, high quality and expertise and support in:
 - ✓ Policy advice
 - ✓ Capacity building
 - ✓ Identification
 - ✓ Mobilisation of funding
 - ✓ Technology transfer

- Supports regulatory & policy reforms in partner countries' energy sectors
- Assists in the fine-tuning of policies to create a conducive environment for private sector investments





External Investment Plan (EIP)



• Sustainable energy in the EIP:

- Pillar 1: One specific investment window on Sustainable Energy and Connectivity
 □ 12 first EFSD guarantee tools recently launched
 ✓ 6 of them energy related
- Pillar 2: EU TAF and upcoming Get.Invest initiative
- Pillar 3: High Level Platform on sustainable energy investments to be launched at Africa Investment Forum in Johannesburg



ElectriFI – global (with FMO, EDFI. Implemented by EDFI MC)

- 2015, launched Paris COP, operationalised 2016. Instrument to reduce investment risks for the private sector
- 120M+ from budget (+10M Power Africa, +5M Sweden)
- Strong focus on access and with rural focus, decentralised and off grid solutions
- Projects financially sustainable; potential to scale. Early stage, high risk with flexible financing

ElectriFI – country windows (with FMO, EDFI. Implemented by EDFI MC)

- First movers: Zambia, Nigeria, Cote d'Ivoire, Benin (more to come, incl. Asia and Pacific)
- Anything with the sustainable energy sector, with private sector interest, from access, to RE generation to energy efficiency. <u>Source of funds: NIPs, 85 M EUR (so far)</u>
- Structure will respond to specific country situation. Flexibility on defined and agreed focus through selection criteria (technology, business model, geographic focus, ticket sizes, focus on sectors such as agri-production ...). <u>Implementation as of 2nd sem 2018</u>



The Energy-Digital Nexus:

Building electricity networks fit for the future to enable productive uses of energy, job creation and financial inclusion

Vision for this action: *We can't solve tomorrow's challenges with tools of the past*

- Catalyse and accelerate the adoption of digital solutions to increase partner countries' access to affordable, reliable, sustainable and modern energy
- Use the energy-digital nexus to boost the quality of project pipeline, while targeting productive uses of energy, job creation and financial inclusion
- Ambitious focus on challenging environments (Sahel, fragile states, SIDS)

How?

Preparatory phase: Exploratory mission under the EU Technical Assistance Facility (TAF) for Sustainable Energy for All





How the EU cooperates with the Regional Energy Centres

Carrying out technical assistance activities

• Enhancing policy dialogue



Case Study: AU-EU continental cooperation on sustainable energy



EU Technical Assistance Facility (TAF) for the Sustainable Energy for All (SE4ALL) Initiative East and Southern Africa



A project financed by the European Union SIX (6) strategic objectives:

Developing effective Regional and Continental Electricity markets;

□ Improving the operational efficiency and performance of the Electricity Supply Industry;

□ Creating stable, transparent and predictable environment to attract investment;

□ Enhancing electricity markets frameworks to increase access;

□ Enhance Renewable Energy Frameworks;

□ Establish norms, standards and frameworks for energy efficiency;

Strategy for the Development of a Harmonised **Regulatory Framework** for the Electricity Market in Africa



Harmonisation Action Plan Follow-up EU TAF assignments

1-*Guidelines and Monitoring Plan for Continental Transmission Tariff Methodology*.

- Final technical workshop in Addis Ababa, 27-28 February 2018: Stakeholders recommended that there should be a Pilot Phase Implementation of the Continental Transmission Tariff Methodology
- **2-***Institutional and policy model for micro-grids / mini-grids.*

3-*Pilot Phase Implementation of Continental Transmission Tariff Methodology for International Bilateral Transactions.*

4-*Guidelines for Minimum Energy Performances Standards, (MEPS) Energy Labelling and Eco-Design at the Continental Level:* **TAF implementing partners are: ECREEE, RCREEE, EACREEE, SACREEE, AFREC, AFSEC, UNECA and U4E**



Case Study: SADC- EU regional cooperation on sustainable energy







RENEWABLE ENERGY AND ENERGY EFFICIENCY STRATEGY & ACTION PLAN

REEESAP 2016-2030





REEESAP Guiding Implementation Principles

Responsibility: Member States have the responsibility to choose and implement those actions of REEESAP that are of priority to their countries.

Subsidiarity :REEESAP will be implemented at the most appropriate levels by relevant agencies in the Region and in Member States.

Additionality :Institutions others than the SADC Secretariat and its Agencies can implement REEESAP interventions. This includes public, private, civil society, academia, development partners.

Rationalization: REEESAP will promote coherency and alignment of national, regional and global initiatives, objectives and goals. **Coordination**: REEESAP will promote cross-sectoral and cross-cutting planning.

Best practices : REEESAP Strategic Actions will be executed, based on best practices and sharing of lessons learnt among MS.



Follow-up EU TAF assignment: SADC Industrial Energy Efficiency Programme (SIEEP)



SADC CENTRE FOR RENEWABLE ENERGY & ENERGY EFFICIENCY



A project funded by The European Union



- Recently validated by the SADC region's stakeholders at the workshop held on 12 September in Victoria Falls.
- Developed by the SADC Centre for Renewable Energy and Energy Efficiency (SACREEE) in cooperation with the 15 SADC Member States with support from the European Union Technical Assistance Facility (TAF) Eastern and Southern Africa.
- The SIEEP will assist in the operationalization of SADC Renewable Energy and Energy Efficiency Strategy and Action Plan (REEESAP) and the SADC Industrialization Strategy and Roadmap (2015-2063).
- Objective: Building SADC industries' capacity to adopt, invest and use energy efficient technologies and practices- and eventually reduce energy consumption, which amounts to up to 35% of production costs.



Case Study: Technical Assistance to CCREEE in the implementation of the CARICOM Energy Policy







A project funded by The European Union

- The EU Delegation to Barbados, the Eastern Caribbean States, the OECS and CARICOM/CARIFORUM is supporting CCREEE.
- Through the Technical Assistance Programme for Sustainable Energy in the Caribbean (TAPSEC), 5 technical experts will assist CCREEE in the implementation of:
 - the CARICOM Energy Policy (CEP)
 - the Caribbean Sustainable Energy Road map and Strategy (C-SERMS)
 - as well as the "National Energy Policy" of the Dominican Republic





Case Study: Support to ECREEE via the West Africa Regional programme - (AGoSEREE-AO) 7.25 million – EU funding 5.45 million 2018 to 2021

- This programme carried together with ECREEE is managed and by GIZ and co-funded by BMZ and is a main component of the regional EU-ECOWAS Programme on Energy (AGOSE) funded by regional funds. It aims to the :
 - Improve of regional political, strategic and planning frameworks
 - Define renewable energy corridors (hydro, solar, wind)
 - Establish regional standards and certification in the field of renewable energy



A project funded by The European Union

Definition standards and certifications in the field of energy for buildings



- Develop together with ERERA and WAPP the regional electricity market to promote both energy efficiency and renewable energy in the energy mix.
- Support to the development of renewable energy in the context of rural electrification (Mini grids, solar kits)