



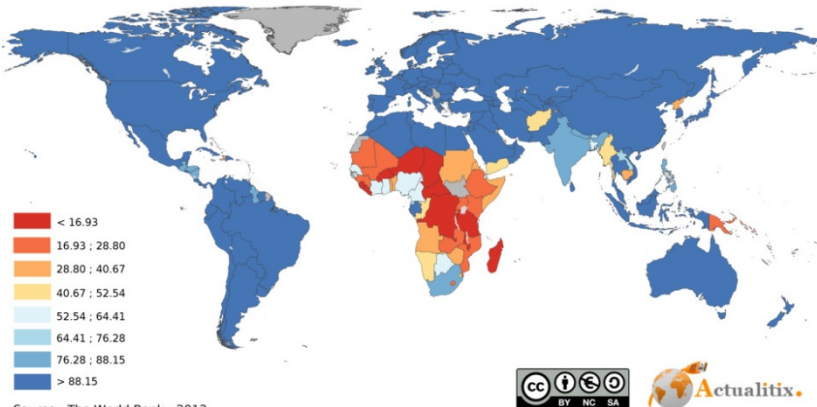
Sustainable Energy Geographic & Thematic Programmes

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Facts & figures

Energy poverty

Access to electricity (% of population)



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).

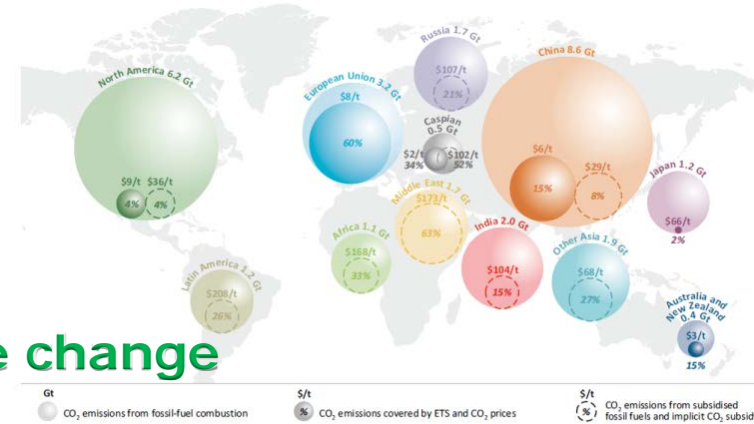
Energy financing

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). **\$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



Climate change

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.



EU Vision

3 OBJECTIVES for ENERGY COOPERATION

- Increase access to sustainable energy
- Increase renewable energy generation capacity and energy efficiency
- Contribute to the fight against climate change

Council Decision on Climate and Energy 2014 ; Council Conclusions on Energy and Development 2016 ; New European Consensus for Development; Council Conclusions on Energy and Climate Diplomacies 2017



3 pillars of cooperation

Pillar 2 & 3 EIP

➤ Political ownership of reform agenda

- Policy dialogue, **24 Joint Declarations**
- Contribution to **National Indicative Programmes** (30 countries) and **Regional Indicative Programmes**: overall EUR 3.7 billion for sustainable energy (2014-2020)
- **Continental**: AEEP, part of **Joint Africa-EU Strategy**
- With Local Authorities: **Covenant of Mayors in Sub-Saharan Africa**

➤ Technical Assistance and Capacity building

- Technical Assistance Facility (TAF), EUR 40 million for Sub-Saharan Africa + EUR 10 million 'rest of the world' – to help creating an **enabling environment**

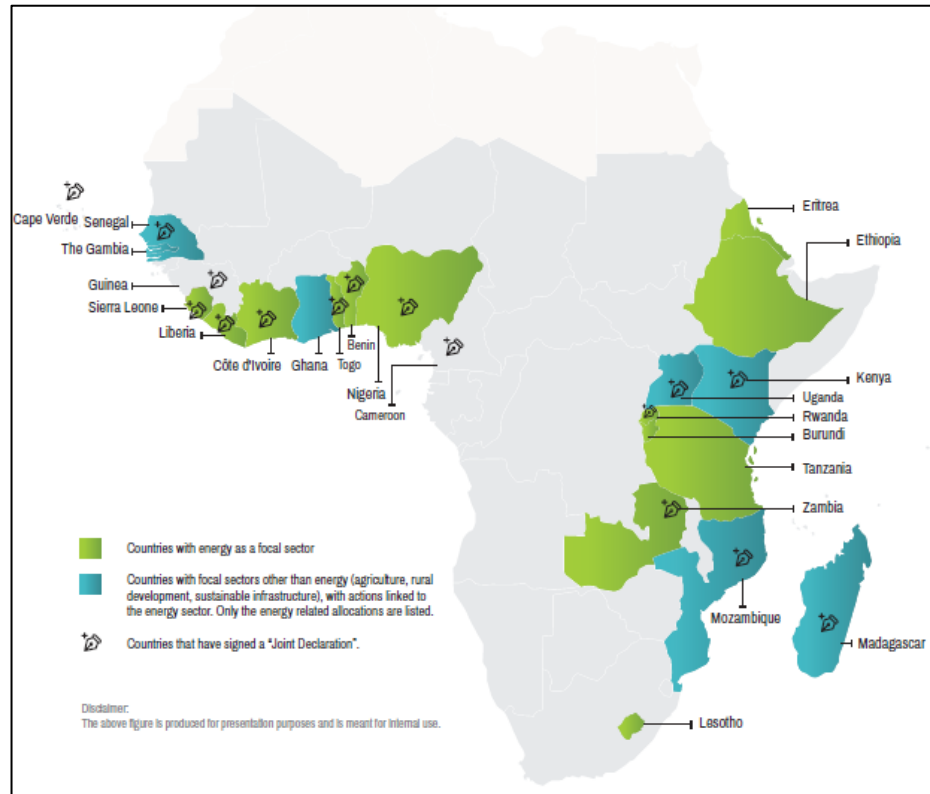
Pillar 1 EIP

➤ Investments

- Regional Blending facilities
- ElectriFI, Gender Window, GEEREF, ARESUF, Climate Investor One
- And soon: **European External Investment Plan (EIP)**

Energy Focal Sector for approx. 30 countries world wide

example: Sub-Saharan Africa at national Level
(more in Asia, Caribbean, Pacific...)



Africa Renewable Energy Initiative (AREI)



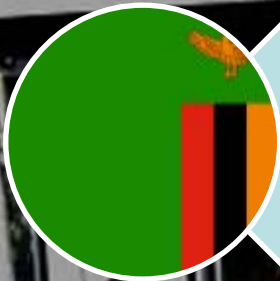
- *EU strongly supports AREI objectives, guiding principles and criteria*
- *EU commitment: EUR 1.5 billion to support 5GW of new renewable energy by 2020 (half AREI objective by 2020)*
- *19 projects supported with EU funds for EUR 300 million already endorsed by AREI Board, expected to generate 1.8GW of new renewable energy*
- *Enhanced cooperation through existing instruments:*
 - *Ensuring country ownership and local socio-economic development*



Technical Assistance Facility

- Covers all partner countries, high quality expertise and support in:
 - policy advice
 - capacity building
 - identification of projects
 - mobilisation of funding
 - technology transfer
- Supports crucial regulatory and policy reforms in partner countries' energy sectors
- Assists in the fine-tuning of policies to create a **conducive environment for private sector investments**

Examples of TAF assignments



Quick Wins for Energy Savings in Zambia

Total potential electricity saving from 14 investigated sites may cut electricity consumption by up to 50% and significantly reduce the energy deficit in Zambia.



AUC: Bringing Harmony to Electricity Markets in Africa

African Energy Ministers adopt the Strategy and Action Plan for the 'Development of a Legal Harmonized Continental Regulatory Framework for the Energy Sector in Africa'

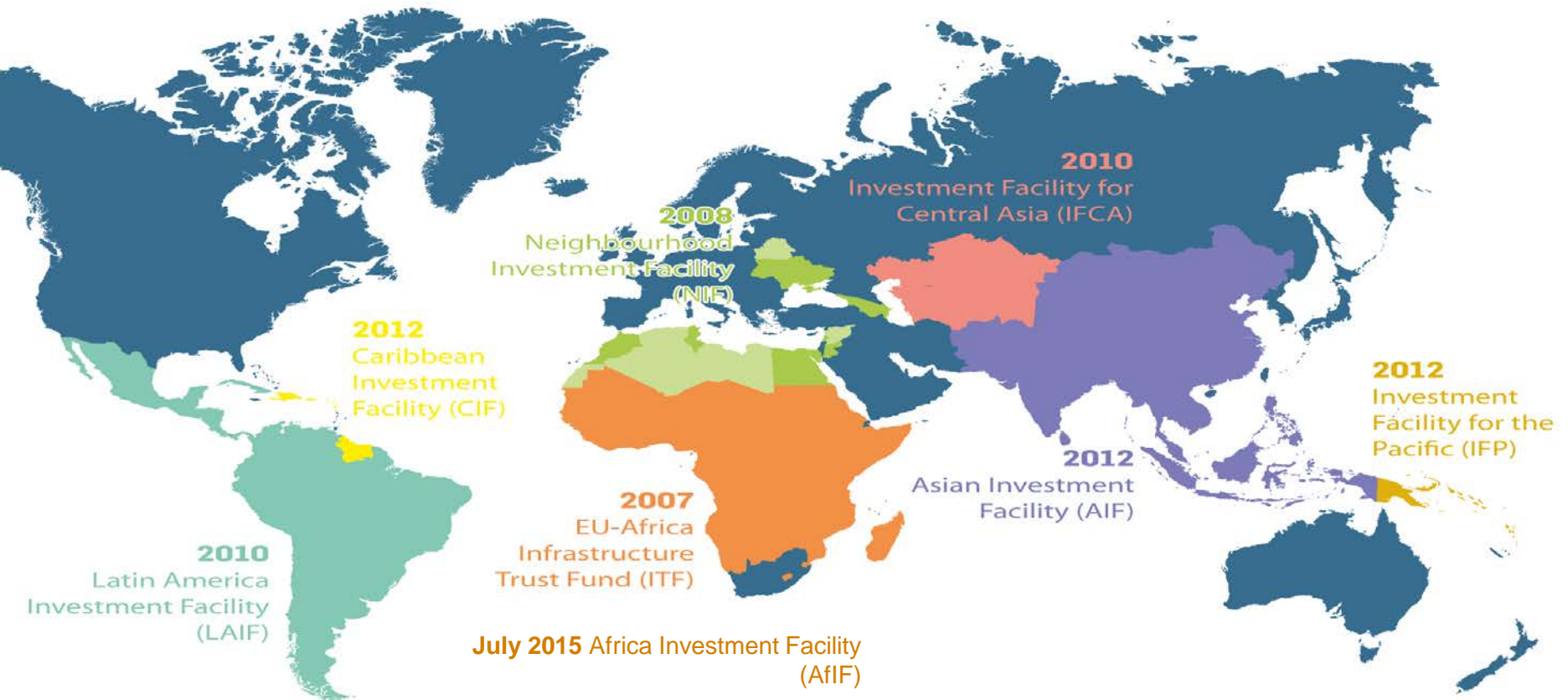


New Momentum for Lesotho's Rural Energy

A new, dedicated institution for "Rural Energy Action", REA, will pull together efforts focusing on Lesotho's off-grid, mountainous areas

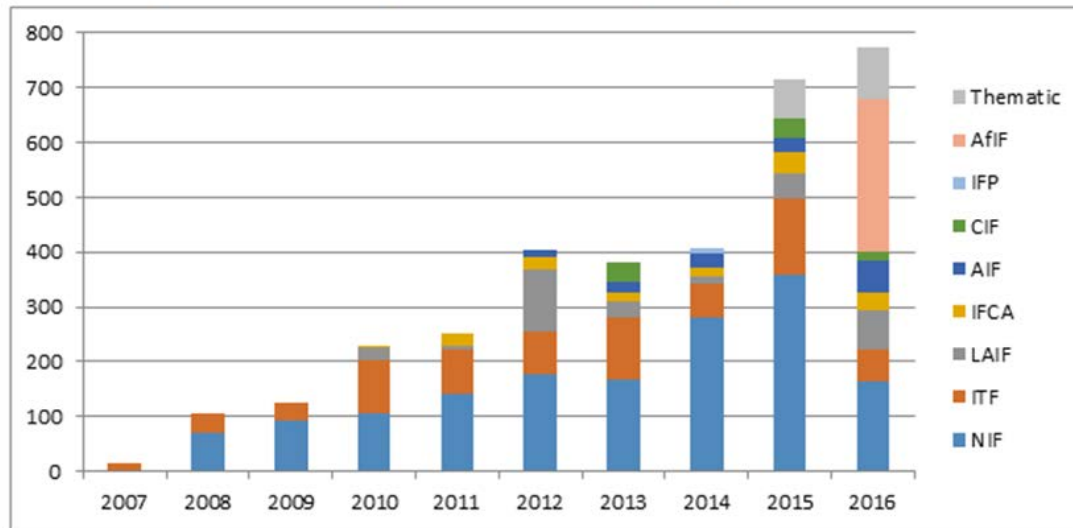
Blending facilities

- 7 Investment facilities set up for regions worldwide



Blending Facilities

Figure 3 - EU Blending Facilities: Annual grant approvals (in € million)



All facilities grant approvals to 380 operations

EUR 3.4 billion

Average: EUR 9 million per operation

EFIs financing to approved projects ¹ *

EUR 26.2 billion

Leverage: 7.7/1

Total investment amount

EUR 57.3 billion

Leverage: 16.8/1

¹ Regional Banks (e.g. AfDB, IADB, CDB, ADB.) and WB/IFC are NOT included.



Electrification Financing Initiative (ElectriFI)

- **FMO/EDFI**
- Investment facility to increase access to renewable energy (mainly decentralised) with the private sector sharing high-risk in projects business plan with loans.
- **EUR 132 M allocated** so far (thematic funds) + USD 10 M contribution from Power Africa
- Ticket size: min. EUR 500k - max. EUR 10mln (Small-to medium-scale)
- Product range: Equity, Quasi-equity, Debt and Development Finance, flexible financing
- Close to 30M EUR investment portfolio (by and of 2017), due diligence is ongoing for up to 100 million EUR more investments. ElectriFI projects are already implemented in Haiti, India, Tanzania, Rwanda ...
- Expansion from global to bilateral level with Country Windows (starting with 85M EUR in 2017)



Africa Renewable Energy Scale-Up Facility (ARESUF)

- **AFG Group (AFD and Proparco)**
- **24 M€ contribution from European Union**
- 12 M EUR > AFD to reinforce public sector actions: public policy, sector planning and regulation, transparent tender preparation for IPP on-grid projects, develop national rural electrification sector strategies recognizing privately led off-grid activities
- 12 M EUR > Proparco to support private sector projects in the off-grid and mini-grid sub-sectors focussing on solar – GUARANTEE FACILITY with 50% covered by EU
- Expected results: 1 million households with 240 MW on-grid and 50 MW off-grid renewable energy

Climate Investor One

- **FMO**
- *EUR 30 M EU contribution to 877 M EUR fund*
- *EU contribution earmarked to Sub-Saharan Africa*
- *Equity Investment facility set-up to serve a large scale on-grid renewable energy project*
- *To facilitate Climate Change Mitigation in Developing Countries*
- *composed of three funds (development, construction equity, refinancing) of 1.3 bill in total*
- *providing a "whole-of-life" financing solutions, saving up to 3 years in getting projects off the ground*
- *Expected results: 20 renewable energy projects, 3.2 GW generated reaching 7m people, 10.000+ jobs created, 1.8m tCo2 avoided annually*



Women and Sustainable Energy

Support women's economic empowerment through:

- **Jobs & entrepreneurship opportunities** in the energy sector
- **Productive uses** of energy
- Vocational training, political advocacy and awareness campaigns
- Within the larger EU Gender Action Plan and new Consensus for Development
- EUR 20 million allocation – expected signature of 3 contracts by end 2017



Covenant of Mayors for Sub-Saharan Africa

- Part of the **Global Covenant of Mayors for Climate and Energy**, global initiative with 3 focuses: **mitigation – adaptation – energy access**
- Increasing energy access, energy efficiency, and planning capacity for resilient urban design and mobility
- Main activities up to now: Technical Assistance Platform, projects at city level (11 financed so far)
- Next phase: scaling up and bridge the gap to investments



Africa-EU Summit: Energising Africa

Joint Communication for a renewed impetus of the Africa-EU Partnership

Proposed Flagships for period 2018-2020:

1. ***Deliver the EU contribution to the AREI: 5 GW of renewable energy generation capacity by 2020, access for 30 million people in Africa and saving of 11 million tons of CO₂ per year***
2. ***High Level Platform for dialogue with private sector, partnering for increased investments, improvement of investment climate, facilitation of knowledge sharing, innovative business and financing models***
Business Forum will showcase powerful examples, bringing together private developers and Financing Institutions
1. ***Launch a new EU-Africa Research and Innovation Partnership on climate change and sustainable energy focusing on deployment as well as capacity building in energy efficiency and renewables.***



**THANK YOU
FOR YOUR ATTENTION**