

# Mapping of Energy Initiatives and Programs in Africa

Report on Phase 2



The Africa-EU  
Energy Partnership

# Outline

- Introduction to AEEP
- Background
- Summary
- Methodology
- Validation Process
- Results
- Proposed Way Forward

# Africa EU Energy Partnership

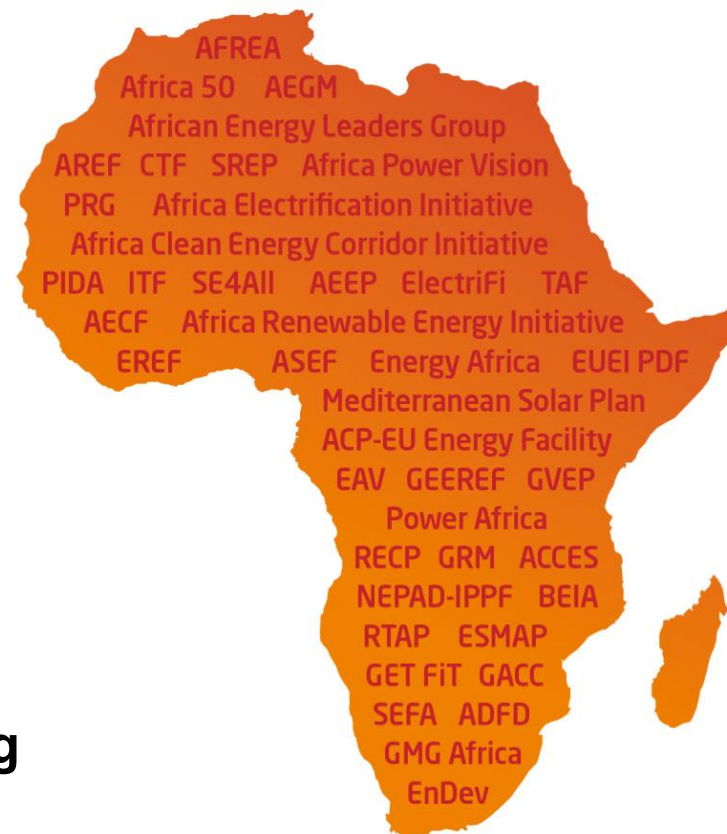
*The AEEP is a long-term framework for strategic dialogue on energy issues between Africa and the EU*

- Established in 2007, under JAES strategy
- Political framework for strategic energy dialogue
  - High Level Meetings
  - Stakeholder Dialogue and engagement
  - Thematic Workstreams
  - Monitoring Progress of the AEEP 2020 targets
- Steering Group includes EC, AUC, COMESA, Egypt, Germany and Italy



## Background

- Investments in energy sector are recently being prioritized, catalysing multiple new international initiatives and donor programs
- Has led to an increased need for coordination and understanding of “who is doing what?”
- AEEP was requested by partners to initiate mapping as a key input to the AUC’s pan-African coordination framework
- **Objective: present information about donor initiatives promoting energy in Africa in a systematic approach, allowing for better coordination and results**



## Summary

- **“Lifting the fog” from the sector to reveal overlaps, potential synergies and gaps**
- Key input to coordination efforts but also useful for practitioners and national governments
- Exercise undertaken through a phased consultative approach:
  - **Phase 1 (*concluded*)** : initial overview of key initiatives and programs, compiled based on publicly available information; **draft report presented at SAIREC** in October 2015;
  - **Phase 2 (*concluded*)**: the information contained in the Phase 1 report was **verified and validated for presentation during COP 21** in Paris;
  - **Phase 3 (*underway*)**: the mapping exercise will be **finalized with an enhanced level of detail** by way of additional input from stakeholders.
- **The follow-up to mapping would be one of the central tasks of the planned Pan-African coordination platform**

# Methodology I: Boundaries and Categorization

- Includes **high-ambition international initiatives**:
  - expected beneficiaries measure in 100.000's
  - Confirmed funding is significant (at least 5m EUR for TA-only initiatives; at least 20m EUR for financing instruments)
- Sound categorization allows for analysis and can lead to informed coordination and future planning
  - Geographical scope
  - Type of intervention
  - African counterparts and partners
  - Level of donor involvement
  - Financing instruments
  - Technical assistance instruments
  - Energy sub-sector coverage
  - Energy source



# Results I: Selection of Initiatives

## High-level initiatives

|   |  |
|---|--|
| Africa Clean Energy Corridor Initiative | Energies Pour l'Afrique                          |
| Africa Energy Leaders Group (AELG)      | Mediterranean Solar Plan                         |
| Africa-EU Energy Partnership (AEEP)     | Program for Infrastructure Development in Africa |
| Africa Power Vision                     | SE4ALL (Africa Hub)                              |
| Africa Renewable Energy Initiative      |  |

## Operative programs and delivery mechanisms

|  |   |   |
|--|---|---|
| Abu Dhabi Fund For Development Project Facility                      | Clean Technology Fund   | Global Energy Efficiency and Renewable Energy Fund        |
| ACP-EU Energy Facility   | EAP Africa – Energy and Environment Partnership                         | Green Mini-Grids Africa Regional Facility                 |
| AFREA Gender and Energy Program                                      | ElectriFi   | Lighting Africa   |
| Africa 50  | Energising Development  | NEPAD Bioenergy Programme for Africa                      |
| Africa Clean Cooking Energy Solutions Initiative                     | Energy Access Ventures  | NEPAD Infrastructure Project Preparation Facility         |
| Africa Energy Guarantee Fund   | Energy Africa   | Power Africa  |
| Africa Enterprise Challenge Fund                                     | EREF ECOWAS Renewable Energy Facility                                   | Regional Energy Project for Poverty Reduction             |
| Africa Renewable Energy Access Program (AFREA I & II) - ESMAP        | EU-Africa Infrastructure Trust Fund/Africa Investment Facility          | Regional Technical Assistance Program                     |
| Africa Renewable Energy Fund (AREF)                                  | EU Development Finance Institutions Private Sector Development Facility | Renewable Energy Performance Platform                     |
| Africa Sustainable Energy Facility (ASEF) (including TA to the ASEF) | EU Energy Partnership Dialogue Facility                                 | Renewable for Poverty Reduction Program                   |
| Africa-EU Renewable Energy Cooperation Program                       | European Union's Technical Assistance Facility                          | Scaling Solar   |
| African Development Bank Partial Risk Guarantee                      | Geothermal Risk Mitigation Facility                                     | Strategic Climate Fund – Scaling Renewable Energy Program |
| Biofuels Programme for Household and Transport Energy Use            | GET FIT Uganda  | Sustainable Energy Fund for Africa                        |
| Biomass Energy Initiative for Africa                                 | Global Alliance for Clean Cookstoves                                    | World Bank Guarantee Program                              |

## Results II: Overview of High-Level Initiatives (by Sub-Sectors)

| High-level initiatives – Sectors / Sub-Sectors addressed  |                    |   |                           |   |             |   |                      |   |                   |   |                |   |
|---|--------------------|---|---------------------------|---|-------------|---|----------------------|---|-------------------|---|----------------|---|
| Africa Clean Energy Corridor                              | Renewables         | x | Non-Renewables            |   | Electricity | x | Heating and Cooling  |   | Energy Efficiency |   | Cooking Energy |   |
|   | Electricity system | x | Grid-connected generation | x | Mini-grids  |   | Stand-alone off-grid |   |                   |   |                |   |
| Africa-EU Energy Partnership                              | Renewables         | x | Non-Renewables            | x | Electricity | x | Heating and Cooling  | x | Energy Efficiency | x | Cooking Energy | x |
|   | Electricity system | x | Grid-connected generation | x | Mini-grids  | x | Stand-alone off-grid | x |                   |   |                |   |
| Africa Power Vision                                       | Renewables         | x | Non-Renewables            | x | Electricity | x | Heating and Cooling  |   | Energy Efficiency |   | Cooking Energy |   |
|   | Electricity system | x | Grid-connected generation | x | Mini-grids  |   | Stand-alone off-grid |   |                   |   |                |   |
| Africa Renewable Energy Initiative                        | Renewables         | x | Non-Renewables            |   | Electricity | x | Heating and Cooling  |   | Energy Efficiency |   | Cooking Energy |   |
|   | Electricity system | x | Grid-connected generation | x | Mini-grids  |   | Stand-alone off-grid |   |                   |   |                |   |
| Mediterranean Solar Plan (MSP)                            | Renewables         | x | Non-Renewables            |   | Electricity | x | Heating and Cooling  |   | Energy Efficiency | x | Cooking Energy |   |
|   | Electricity system | x | Grid-connected generation | x | Mini-grids  |   | Stand-alone off-grid |   |                   |   |                |   |
| Programme for Infrastructure Development in Africa (PIDA) | Renewables         | x | Non-Renewables            | x | Electricity | x | Heating and Cooling  | x | Energy Efficiency |   | Cooking Energy |   |
|   | Electricity system | x | Grid-connected generation | x | Mini-grids  |   | Stand-alone off-grid |   |                   |   |                |   |
| SE4ALL (Africa Hub)                                       | Renewables         | x | Non-Renewables            | x | Electricity | x | Heating and Cooling  | x | Energy Efficiency | x | Cooking Energy | x |
|   | Electricity system |   | Grid-connected generation | x | Mini-grids  | x | Stand-alone off-grid | x |                   |   |                |   |



## Results III: Example for Overview of Programs (by Sub-Sectors and Type of Support)

| Programs with financing and technical assistance components – Sectors / Sub-Sectors / Type of TA & financing (continued) |                                      |   |                           |   |                              |   |                      |   |                                       |   |                |   |
|--|--------------------------------------|---|---------------------------|---|------------------------------|---|----------------------|---|---------------------------------------|---|----------------|---|
| ElectriFI  | Renewables                           | x | Non-Renewables            |   | Electricity                  | x | Heating and Cooling  |   | Energy Efficiency                     |   | Cooking Energy |   |
|  | Electricity system                   |   | Grid-connected generation | x | Mini-grids                   | x | Stand-alone off-grid | x |                                       |   |                |   |
|  | Dialogue and networking              |   |                           |   | Information and analysis     |   |                      |   | Policy support / institution building |   |                |   |
|  | Project preparation / implementation |   |                           | x | Skill development / training |   |                      |   |                                       |   |                |   |
|  | Grant                                | x | Equity                    |   | Debt                         | x | Guarantee            |   | Early stage                           | x |                |   |
| Energisng Development (EnDev)  | Renewables                           | x | Non-Renewables            | x | Electricity                  | x | Heating and Cooling  | x | Energy Efficiency                     | x | Cooking Energy | x |
|  | Electricity system                   | x | Grid-connected generation |   | Mini-grids                   | x | Stand-alone off-grid | x |                                       |   |                |   |
|  | Dialogue and networking              |   |                           |   | Information and analysis     |   |                      | x | Policy support / institution building |   |                |   |
|  | Project preparation / implementation |   |                           | x | Skill development / training |   |                      | x |                                       |   |                |   |
|  | Grant                                | x | Equity                    |   | Debt                         |   | Guarantee            |   | Early stage                           | x |                |   |
| EREF ECOWAS Renewable Energy Facility  | Renewables                           | x | Non-Renewables            |   | Electricity                  | x | Heating and Cooling  | x | Energy Efficiency                     | x | Cooking Energy | x |
|  | Electricity system                   | x | Grid-connected generation | x | Mini-grids                   | x | Stand-alone off-grid | x |                                       |   |                |   |
|  | Dialogue and networking              |   |                           | x | Information and analysis     |   |                      | x | Policy support / institution building |   |                |   |
|  | Project preparation / implementation |   |                           | x | Skill development / training |   |                      | x |                                       |   |                |   |
|  | Grant                                | x | Equity                    |   | Debt                         |   | Guarantee            |   | Early stage                           | x |                |   |
| EU-Africa Infrastructure Trust Fund (ITF)  | Renewables                           | x | Non-Renewables            |   | Electricity                  | x | Heating and Cooling  |   | Energy Efficiency                     | x | Cooking Energy |   |
|  | Electricity system                   | x | Grid-connected generation | x | Mini-grids                   |   | Stand-alone off-grid |   |                                       |   |                |   |
|  | Dialogue and networking              |   |                           |   | Information and analysis     |   |                      |   | Policy support / institution building |   |                |   |
|  | Project preparation / implementation |   |                           | x | Skill development / training |   |                      | x |                                       |   |                |   |
|  | Grant                                | x | Equity                    | x | Debt                         | x | Guarantee            | x | Early stage                           |   |                |   |

## Results IV: Example for Full Details (Annex IV)

|   |   |   |                                  |   |   |                                     |                             |   |  |   |                            |   |
|---|---|---|----------------------------------|---|---|-------------------------------------|-----------------------------|---|--|---|----------------------------|---|
| <b>Name of initiative</b>                   | <b>SE4ALL (Africa Hub)</b>  |   |                                  |   |   |                                     |                             |   |  |   |                            |   |
| <b>Implementing agencies</b>                | Hosted by the AfDB together with the African Union, the New Partnership for Africa's Development (NEPAD) and UNDP   |   |                                  |   |   |                                     |                             |   |  |   |                            |   |
| <b>African partners</b>                     | <b>Pan-African organization</b>   | x | <b>Regional organization</b>     | x | <b>Government</b>                               | x                                   | <b>Other public body</b>    | x | <b>Private sector</b>                        | x | <b>Civil society</b>       | x |
| <b>Names of African partners involved</b>   | African Union Commission, NEPAD Planning and Coordination Agency, ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE)   |   |                                  |   |   |                                     |                             |   |  |   |                            |   |
| <b>Donor involvement (incl. IOs)</b>        | <b>Single Donor</b>   |   | <b>Multi-donor</b>               | x | <b>Multilaterals involved</b>                   | x                                   | <b>Bilaterals involved</b>  | x |  |   |                            |   |
| <b>Names of donors involved (incl. IOs)</b> | African Development Bank, UNDP  |   |                                  |   |   |                                     |                             |   |  |   |                            |   |
| <b>Geographical scope</b>                   | <b>Continental</b>  | x | <b>Regional</b>                  |   | <b>Country</b>                                  |                                     |                             |   |  |   |                            |   |
| <b>Countries where active</b>               | Country-level processes: Burkina Faso, Burundi, Ethiopia, Gambia, Ghana, Guinea, Kenya, Liberia, Mozambique, Rwanda, Senegal, Sierra Leone, Tanzania, Uganda (first phase focus countries)  |   |                                  |   |   |                                     |                             |   |  |   |                            |   |
| <b>Sector</b>                               | <b>Renewables</b>   | x | <b>Non-Renewables</b>            | x | <b>Electricity</b>                              | x                                   | <b>Heating and Cooling</b>  | x | <b>Energy Efficiency</b>                     | x | <b>Cooking Energy</b>      | x |
| <b>Sub-Sector (Electricity)</b>             | <b>Electricity system</b>   |   | <b>Grid-connected generation</b> | x | <b>Mini-grids</b>                               | x                                   | <b>Stand-alone off-grid</b> | x |  |   |                            |   |
| <b>Type of intervention</b>                 | <b>High-level initiative (upstream)</b>   |   |                                  | x | <b>Program / funding mechanism (downstream)</b> |                                     |                             |   | <b>TA component</b>                          | x | <b>Financing component</b> |   |
| <b>Type of technical assistance</b>         | <b>Dialogue and networking</b>  |   |                                  | x | <b>Information and analysis</b>                 |                                     |                             | x | <b>Policy support / institution building</b> |   |                            |   |
|   | <b>Project preparation / implementation</b>   |   |                                  |   |   | <b>Skill development / training</b> |                             |   |  |   |                            |   |
| <b>Type of financing</b>                    | <b>Grant</b>  |   | <b>Equity</b>                    |   | <b>Debt</b>                                     |                                     | <b>Guarantee</b>            |   | <b>Early stage</b>                           |   |                            |   |
| <b>Main objectives</b>                      | - The mission of the SE4ALL Africa Hub is to coordinate and facilitate the implementation of the SE4ALL initiative on the African continent in keeping with the resolution of the Conference of Energy Ministers of Africa in November 2012. The Hub will promote African ownership, inclusiveness and a comprehensive approach to the Initiative's implementation. |   |                                  |   |   |                                     |                             |   |  |   |                            |   |
| <b>Main activities</b>                      | <ul style="list-style-type: none"> <li>- Coordination and facilitation of the implementation of the SE4All initiative in Africa;</li> <li>- Rapid assessments / gap analysis,</li> <li>- Development of country-level Action Agendas and Investment Prospectuses</li> </ul>   |   |                                  |   |   |                                     |                             |   |  |   |                            |   |
| <b>Comments</b>                             |   |   |                                  |   |   |                                     |                             |   |  |   |                            |   |
| <b>Sources</b>                              | <ul style="list-style-type: none"> <li>- SE4All Annual Report 2014</li> <li>- SE4All Africa Hub Leaflet 2014</li> </ul>   |   |                                  |   |   |                                     |                             |   |  |   |                            |   |

## Validation Process

- Phase 2 included a thorough validation process with key stakeholders
  - Both data presented and overall methodology were validated and commented upon by key actors
- Presentations at major sector events including SAIREC, PIDA Week, COP21 (and now SE4ALL forum)
- **Verification and validation was received by key organizations**
  - EC, AUC, NEPAD, AfDB, SE4ALL, UNDP, IFC, WB, UNECA, AREI
- Responses were positive and reaffirmed the need for clarity in the complex web of actors

## Results/Messages (so far)

- Recent years have witnessed the emergence of energy access and private sector oriented programs
- Key gap remains lacking support for early-stage project development
- Geographical focus remains on central and sub-saharan Africa
  - Both in terms of programs and ODA flows
- ODA figures show substantial overall increase in the past 10 years in to sustainable energy in Africa
- Significant number of large initiatives in the pipeline

## Proposed Way Forward

- Finalize the report through a thorough Phase 3 to ensure all initiatives and further details are incorporated
- Conduct selected stakeholder discussions to interpret aggregated data/derive conclusions for coordination effort
- Integrate with ongoing processes to put information to use:
  - AUC coordination effort
  - SE4ALL
  - Africa Renewable Energy Initiative
  - Bilateral funding
- Official launch of Report planned for AEEP Stakeholder Forum (Italy, May 2016)
- **(Sustainability) Hand over to Pan-African Coordination framework for management and dissemination**

Thank you for your attention!

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