



Updating the project and programme portfolio

One of the most tangible aspects of AREI’s work is monitoring of renewable energy project and programme activity across Africa. This effort is crucial for monitoring the progress of AREI targets, and also enhances its ability to assess gaps in activity – be they geographical, sub-sectoral or in terms of capacity.

Following final contracting of a project-oriented consultant on 18 May 2018, the work towards compiling and mapping of planned, on-going and completed renewable energy sector projects on the ground (Category B projects) as well as renewable energy policy development projects, programmes, incentives, regulatory reform, capacity building and other key interventions (Category A projects/programmes) has been resumed.

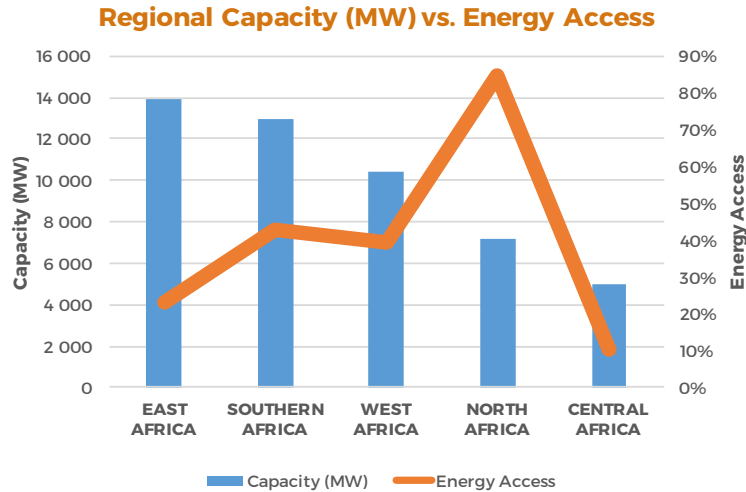
The initial mapping and compilation of the project pipeline (of all kinds of projects, not necessarily AREI attributable/compliant) from 2016 contained about 442 projects with an aggregate generation capacity of more than 60 GW as set out in Table 1 below. Of this 49.4 GW were attributed to Category B Projects. This list was derived from international partners, and contained only limited information about each project.

	TOTAL	Large Hydro	Renewables	Energy Access	Category A
Number of Projects					
PAN AFRICAN	8	-	-	1	7
EAST AFRICA	142	16	96	13	17
SOUTHERN AFRICA	86	12	44	9	21
WEST AFRICA	139	47	61	14	17
NORTH AFRICA	35	3	12	1	19
CENTRAL AFRICA	32	2	12	8	10
TOTAL	442	80	225	46	91
Capacity (MW)					
	59,845	27,074	18,920	3,387	10,464

Table 1.

The current effort in mapping project and programme activity is focused on refreshing this work from 2016, and engaging African nations, regional agencies as well as International Partner countries in gathering information on a consistent basis.

The preliminary analysis that is now being resumed and added to by enriching and updating the data showed clearly how there are significant regional imbalances across the continent, which will need to be addressed as a matter of priority.



The regions with largest needs for increased energy access have the least amount of generation capacity in the project pipeline.

Towards this objective;

- A database and web interface is currently being developed and is expected to be made available to both African governments and international partners for convenient and effective input of data.
- Owners of existing databases have been approached – e.g. Power Africa, REN21 and IRENA to draw on already existing data in other relevant databases.
- International partner countries and their agencies have been approached for a refresh of their Project Activity. This includes: Canada, EU, France, Germany, Italy, Japan, Netherlands, Sweden, UK, USA.

The effort will be facilitated by the AREI regional consultations, which will provide opportunity for direct interaction with focal points from each country. In addition to a mere listing of possible projects/policy interventions, this mapping will clarify country priorities, stages of project development, funding situation and other relevant project data.

As the pipeline is further refined over next few months, AREI will be in position to assess overall gaps, trends and areas/regions that may need attention for ensuring there is reasonable continental balance.

The survey forms for Category A and B projects as well as a baseline economic survey that have been formulated and used in the current outreach to African countries and international partners are provided as Annexes.

Annex 1

BASELINE SURVEY OF AREI CATEGORY A PROJECTS (Renewable energy policies, programmes, incentives, regulatory reform, capacity building etc)

Context:

AREI constitutes a framework intended to provide guidance and coordination across institutions and all African countries to facilitate action towards AREI's goals, and ensure additionality to existing activities and support.

AREI pursues goals for *transformational* change towards universal energy access and renewable energy across Africa. The [AREI Framework](#) and [Action Plan](#) therefore highlights the primary importance of support for country-wide policies and programmes, incentives and regulatory reforms that can enable a flourishing of new projects on the ground (Category A). In addition and complementary to this, AREI also recognises there is a role for direct project support for individual renewable energy installations on the ground and enhanced capacity by developers and investors (Category B).

AREI is currently *not* a project funding mechanism in itself¹. The Initiative seeks to primarily drive action by mapping and coordinating activities, by supporting policy development, and by directing project design in alignment with AREI's Framework and values. Both Category A and B projects and programmes can be assessed for 'AREI Attribution' proving they are in conformity with [AREI Criteria](#) (Click here for link to a specific form for assessment of attribution). Attributed projects/programmes may have higher chance of obtaining funding by external funders.

This form is intended to gather information for the AREI general baseline mapping of the most relevant and currently prioritised Category A interventions (Renewable Energy policies, programmes, incentives, regulatory reform, capacity building projects and programmes) on the continent. If the project you would like to record is a specific renewable energy installation (Category B) project – click [HERE](#) for the appropriate form. The intention is not to capture every single policy/programme that exists, but to gain understanding of the landscape of what African countries currently see as most important interventions.

Objectives:

This form seeks to access basic information on currently prioritised renewable energy policy development projects, programmes, incentives, regulatory reform, capacity building and other key interventions across all African countries

* = required fields

PROJECT DESCRIPTION

Name of project

Your answer

Narrative summary (incl. statement of overall goal and specific objectives/outcomes)

Your answer

¹ The AREI Trust Fund is yet to be capitalised. Once capitalised it will primarily serve to support Category A (policy development, incentives, guarantees, capacity building and other enabling activities) programmes.

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Beneficiary country(ies) and region(s). Please select all that apply.

Angola	Gabon	Botswana	São Tomé
Botswana	São Tomé	Lesotho	Príncipe
Lesotho	Príncipe	Malawi	Benin
Malawi	Benin	Mozambique	Burkina Faso
Mozambique	Burkina Faso	Namibia	Cameroon
Namibia	Cameroon	South Africa	Cape Verde
South Africa	Cape Verde	Swaziland	Chad
Swaziland	Chad	Zambia	Row 37
Zambia	Row 37	Zimbabwe	Côte d'Ivoire
Zimbabwe	Côte d'Ivoire	Erithrea	Gambia
Erithrea	Gambia	Ethiopia	Ghana
Ethiopia	Ghana	Somalia	Guinea
Somalia	Guinea	Djibouti	Guinea-Bissau
Djibouti	Guinea-Bissau	Suddan	Liberia
Suddan	Liberia	Kenya	Mali
Kenya	Mali	Tanzania	Mauritania
Tanzania	Mauritania	Rwanda	Niger
Rwanda	Niger	Burundi	Nigeria
Burundi	Nigeria	The Comoros	Senegal
The Comoros	Senegal	Mauritania	Sierra Leone
Mauritania	Sierra Leone	Seychelles	Togo
Seychelles	Togo	Madagascar	Egypt
Madagascar	Egypt	Central African	Libya
Central African	Libya	Republic	Tunisia
Republic	Tunisia	Congo	Algeria
Congo	Algeria	Democratic	Morocco
Democratic	Morocco	Republic of Congo	Western Sahara
Republic of Congo	Western Sahara	Equatorial Guinea	Angola
Equatorial Guinea	Angola	Gabon	

Does/will the project have a wider target area beyond the African country(ies) listed above?

Southern Africa

East

Central

West

North

Pan-African

Host government sponsor(s)

Ministry/Commission

National Utility

No Data

Host government prioritisation of the project(s)

At what priority level does the government(s) consider this project?

High

Medium

Low

No position

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Main implementing organisation(ies)

- African Government Institution and Agency, national
- African Government Institution and Agency, sub-national (e.g. municipality)
- International organizations, development agencies and banks
- Civil Society and Non-Governmental Organizations
- Public-private partnerships
- Public interest and research institutions
- Consultancy firms
- Other: _____

Main partner implementing organization(s)

Your answer

Public sector party(ies) (if applicable)

Your answer

Private sector party(ies) (if applicable)

Your answer

Type of intervention

- Long-term renewable energy planning*
(participatory long-term integrated studies/assessments, forecasting models and other interventions)

Specify: _____

- Economic instruments*

(Payment guarantees and feed-in tariffs, Auctioning of PPAs, Redirection of subsidies, Currency de-risking, Procurement rules, direct subsidies and other interventions)

Specify: _____

- Regulatory and Legal Instruments/reforms*

(Codes and standards, energy efficiency requirements, standardised contracts, utility reform, approval process reform, connection guarantees for off-grid projects, minigrid-specific regulation, tariff reforms and other interventions)

Specify: _____

- Capacity Building*

(Professional training/exchanges, strategic planning, project development facilities, extension programmes, new/strengthened learning institutions and other interventions)

Specify: _____

- Information and education*

(Information material, public awareness campaigns and other interventions)

Specify: _____

- Public funding of technology research, development & deployment*

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(research programmes, innovation systems and transition studies, cenario studies, meaningful technology transfer studies and other intervention.

Specify: _____

Environmental impact, technology and risk assessments, gender policies, social and environmental safeguards and public participation

(Strengthening/implementation of social and environmental safeguards, Interventions to empower women, multi-stakeholder engagement/participation programmes or other interventions)

Specify: _____

Coordination of on-going/planned RE projects

Specify: _____

Other: _____

PROJECT OUTPUT/IMPACT

Expected output(s)/impact

Please provide your expected/achieved main benefits and positive impacts of the project

Your answer

Does the project have a clearly defined, and demonstrable public benefit for the energy poor?

Yes

No

If yes, please specify those benefits: _____

Total additional installed capacity expected/ahieved (MW) (if applicable)

Your answer

Total additional generation expected/achieved (MWh/year) (if applicable)

Your answer

Expected energy efficiency gains expected/achieved (if applicable)

Your answer

Expected reduction of CO2-equivalent emissions expected/achieved (if applicable)

Your answer

Expected increase in energy access

How many additional people have/are expected to gain access to energy due to the project? (if applicable)

Your answer

Other energy access output data (e.g. expected number of additional: small- and medium sized

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industrial workshop/factory connections, small and medium sized food/agro-processing facility connections, tertiary/commercial facility connections, residential building connections).

Your answer

Expected/achieved development co-benefits (jobs, energy democracy, health, local economic development etc.)

Your answer

PROJECT DEVELOPMENT STAGE AND PROCESSES

What is the status of the project at the current stage of development?

Predevelopment (Situational assessments; policy issue(s); policy motivation; modelling/scenario building; preliminary impact analyses; design and implementation of monitoring, evaluation, feedback/learning mechanisms).

Development (Policy formulation processes, including legal drafting); in-depth analyses of costs and benefits of policy implementation/administration).

- Actual/expected start date: _____

Implementation (Direct financing of incentives, off-take and tariff guarantees (feed-in tariffs), subsidies, institutional and programmatic/policy-based capacity mobilization and strengthening etc.)

- Actual/expected start date: _____

Actual/expected date of project initiation

MM/DD/YYYY

Actual/expected starting date for implementation

MM/DD/YYYY

What kind of multi-stakeholder engagement and involvement of local communities has/will the project entail?

Your answer

What kinds of social and environmental impact assessments/safeguards have been undertaken and with what results?

Your answer

COST & FUNDING

Overall Total costs for the intervention (Million Euros or USD, please specify)

Your answer

Amount provided by government itself (if applicable)

Your answer [number, currency, comment]

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Grant amount secured (if applicable)

Your answer [number, currency, comment]

Loan amount secured and conditions (if applicable)

Your answer [number, currency, comment]

Outstanding funding needs to enable the project

Your answer [number, currency, comment]

Outstanding other (non-financing) needs to enable the project

Your answer

BASELINE SURVEY OF AREI CATEGORY B PROJECTS (Specific installations on the ground)

Context

AREI constitutes a framework intended to provide guidance and coordination across institutions and all African countries to facilitate action towards AREI's goals, and ensure additionality to existing activities and support.

AREI pursues goals for *transformational* change towards universal energy access and renewable energy across Africa. The [AREI Framework](#) and [Action Plan](#) therefore highlights the primary importance of support for country-wide policies and programmes, incentives and regulatory reforms that can enable a flourishing of new projects on the ground (Category A). In addition and complementary to this, AREI also recognises there is a role for direct project support for individual renewable energy installations on the ground and enhanced capacity by developers and investors (Category B).

AREI is currently *not* a project funding mechanism in itself. The Initiative seeks to primarily drive action by mapping and coordinating activities, by supporting policy development, and by directing project design in alignment with AREI's Framework and values. Both Category A and B projects and programmes can be assessed for 'AREI Attribution' proving they are in conformity with [AREI Criteria](#) (Click here for link to a specific form for assessment of attribution). Attributed projects/programmes may have higher chance of obtaining funding by external funders.

This form is intended to gather information for the AREI general baseline mapping of the most relevant and currently prioritised renewable project pipeline for all kinds of Category B projects on the continent. If the project you would like to record is a policy/regulatory/capacity/programmatic Category A project – click [HERE](#) for the appropriate form.

Objectives: This form seeks to access basic information on planned, on-going and completed renewable energy sector projects on the ground (Category B project) across all African countries

* = required fields

NEXT

PROJECT DESCRIPTION

Name of project (incl. location, e.g. town, city, river)

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Your answer

Narrative summary (incl. statement of overall goal and specific objectives/outcomes)

Your answer

Beneficiary country(ies) and region(s)

Angola	Gabon	Botswana	São Tomé
Botswana	São Tomé	Lesotho	Príncipe
Lesotho	Príncipe	Malawi	Benin
Malawi	Benin	Mozambique	Burkina Faso
Mozambique	Burkina Faso	Namibia	Cameroon
Namibia	Cameroon	South Africa	Cape Verde
South Africa	Cape Verde	Swaziland	Chad
Swaziland	Chad	Zambia	Row 37
Zambia	Row 37	Zimbabwe	Côte d'Ivoire
Zimbabwe	Côte d'Ivoire	Erithrea	Gambia
Erithrea	Gambia	Ethiopia	Ghana
Ethiopia	Ghana	Somalia	Guinea
Somalia	Guinea	Djibouti	Guinea-Bissau
Djibouti	Guinea-Bissau	Suddan	Liberia
Suddan	Liberia	Kenya	Mali
Kenya	Mali	Tanzania	Mauritania
Tanzania	Mauritania	Rwanda	Niger
Rwanda	Niger	Burundi	Nigeria
Burundi	Nigeria	The Comoros	Senegal
The Comoros	Senegal	Mauritania	Sierra Leone
Mauritania	Sierra Leone	Seychelles	Togo
Seychelles	Togo	Madagascar	Egypt
Madagascar	Egypt	Central African	Libya
Central African	Libya	Republic	Tunisia
Republic	Tunisia	Congo	Algeria
Congo	Algeria	Democratic Republic	Morocco
Democratic Republic	Morocco	of Congo	Western Sahara
of Congo	Western Sahara	Equatorial Guinea	Angola
Equatorial Guinea	Angola	Gabon	

Does/will the project have a wider target area beyond the African country(ies) listed above?

Southern Africa

East

Central

West

North

Pan-African

Host government sponsor(s)

Ministry/Commission

National Utility

No Data

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Host government prioritisation of the project(s)

At what priority level does the government(s) consider this project?

High

Medium

Low

No position

Main partner implementing organization(s)

Your answer

Private sector party(ies)

Your answer

Ownership structure

Public

Private (communities/cooperatives)

Private company (African SMEs)

Private company (African)

Private company (non-African)

Public-Private

Other (specify) _____

Technology(ies)

Solar PV

Solar Thermal

Solar CSP

Wind on-shore

Wind off-shore

Biomass

Pico-scale Hydropower

Micro-scale Hydropower

Small-scale Hydropower

Medium-scale Hydropower

Large-scale Hydropower

Geothermal

Marine

Renewable energy storage

Mini/micro grids

Energy transmission and distribution systems to accommodate RE, e.g. smart grids

Manufacturing technology

Energy efficiency technology

No Data

PROJECT OUTPUT

Expected output(s)

Electricity

Heat

Fuel

Energy efficiency improvement

Renewable energy relevant energy storage

Renewable energy relevant T&D system efficiency improvement

Renewable energy relevant T&D system extension

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Other: _____

Total expected/installed capacity (MW) (if applicable)

Your answer

Total expected generation (MWh/year) (if applicable)

Your answer

Expected energy efficiency gains (if applicable)

Your answer

Expected reduction of CO2-equivalent emissions (if applicable)

Your answer

Expected increase in energy access

How many additional people are expected to gain access to energy due to the project?

Your answer

Other energy access output data (e.g. expected number of additional: small- and medium sized industrial workshop/factory connections, small and medium sized food/agro-processing facility connections, tertiary/commercial facility connections, residential building connections).

Your answer

Expected development co-benefits (jobs, energy democracy, health, local economic development etc.)

Your answer

PROJECT DEVELOPMENT STAGE AND PROCESSES

What is the status of the project at the current stage of development?

Stage	Expected/Actual Start Date	Expected/Actual Completion Date
Pre-development (pre-feasibility & feasibility studies..)		
Preparation (Design, permitting, contract negotiations...)		
Financial close (Financing, procurement...)		
Construction		

COST & FUNDING

INVESTMENT COSTS

Overall Total costs (Million Euros or USD, please specify)

Your answer

Grant amount secured

Your answer

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Loan amount secured

Your answer

Equity secured

Your answer

TARIFF STRUCTURE (if applicable)

Currency

Your answer

Levelized cost USD cents/kWh equivalent

Your answer

Term (yrs)

Your answer

STAKEHOLDER INVOLVEMENT

Stakeholder involvement in the project development process (If the information is readily available)

Stage	Stakeholder(s) engaged (Organizations, individuals)
Pre-development (pre-feasibility & feasibility studies..)	
Preparation (Design, permitting, contract negotiations...)	
Implementation (Financing, procurement...)	

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENTS AND SAFEGUARDS (if applicable)

If available, provide documentary evidence of social and environmental impact assessments/safeguards underway or completed

Your answer (titles and attachments)

BASELINE ECONOMIC SURVEY

Context:

AREI constitutes a framework intended to provide guidance and coordination across institutions and all African countries to facilitate action towards AREI's goals, and ensure additionality to existing activities and support.

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This form is intended to gather information for the AREI general baseline mapping of Africa's renewable energy and energy landscape.

Objectives: This form seeks to access basic information on current basic economic data across all African countries

NATIONAL DATA

1. **Population:** _____ (millions) year: _____
2. **GDP:** _____ (USD billion) year: _____
3. **Average House-hold Income:** _____ (USD/household) year: _____
4. **Electric Peak Demand:** _____ (MW) year: _____
5. **Electric Power Generation:** _____ (billion kWh) year: _____
6. **Electric Power Consumption:** _____ (billion kWh) Year: _____
7. **Annual CO2 emissions recorded:** _____ (million Tonnes) year: _____
8. **Annual Petroleum Consumption:** _____ (million litres) year: _____
9. **Annual Petroleum Imports:** _____ (million litres) year: _____
10. **Key organisations and institutions responsible for electric energy in the country:**
(e.g. ministries, utilities): _____

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11. Electric Power Capacity:

Coal: _____ (MW) year: _____
Gas: _____ (MW) year: _____
Fossil Fuel Co-generation: _____ (MW) year: _____
Large Hydro (>100 MW): _____ (MW) year: _____
Small Hydro (1-100 MW): _____ (MW) year: _____
Micro Hydro (< 1 MW): _____ (MW) year: _____
Wind Energy: _____ (MW) year: _____
Solar Energy: _____ (MW) year: _____
Bio Mass Energy: _____ (MW) year: _____

12. Energy Access:

Urban households with Energy Access: _____ (%) year: _____
Rural households with Energy Access: _____ (%) year: _____

13. Electric Energy Tariffs:

Industrial: _____ (USD / kWh equivalent) year: _____
Commercial: _____ (USD / kWh equivalent) year: _____
Residential: _____ (USD / kWh equivalent) year: _____



AREI

L'initiative de l'Afrique sur les énergies renouvelables