

SCALING UP RENEWABLE ENERGY INVESTMENTS

Regional Workshop on Overcoming Critical Bottlenecks to Accelerate Renewable
Energy Deployment in ASEAN+6 Countries

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To scale up renewable energy and energy efficiency investments a virtual market place is created with the objective to support:

- ✓ initiation,
 - ✓ development and
 - ✓ financing
- of sustainable energy projects

By:

- *Improving the transparency of the market*
- *Offering relevant tools and databases for market players*
- *Supporting and facilitating projects in the development stage*

Positioning of the Marketplace:

Main stakeholders and their roles

PROJECT HOST COUNTRIES

- Promote project portfolios
- Promote enabling investment environments

PROJECT OWNERS

- Ensure visibility for projects
- Identify investors and advisors
- Share data

IRENA SUSTAINABLE ENERGY MARKETPLACE



FINANCIERS

- Originate deals
- Project development support
- Co-financiers
- Find relevant country data

SERVICES & TECHNOLOGIES

- Originate new customers
- Find partners in project development / financing consortia
- Find relevant country data

Matchmaking / search engine

HOME

- ABOUT
- BENEFITS FOR USERS
- MEDIA
- MARKETPLACE
- USER PROFILE
- OTHER MARKETPLACES

LATEST PROJECTS

Tunisia	Solar - PV - utilit...
Municipality of N...	0.25 MW electricity
Kenya	Wind - on-shore
300MW Bubisa W...	300 MW electricity
Kenya	Solar - PV - utilit...
SunCulture	0.41 MW electricity
Botswana	Hybrid - Diesel/R...
Biofuels Botswana	0.18 MW electricity

Sustainable Energy Marketplace

57

Number of projects in the market place

850 MW

Combined capacity of projects in the market place (power generation projects only)

2.1 bn US\$

Total investment cost



THE SUSTAINABLE ENERGY MARKETPLACE: a new horizon

As part of IRENA's objective to sustain and facilitate the spread of renewable energy technologies, IRENA has implemented a virtual market place for renewable energy projects. The Sustainable Energy Marketplace is a free platform, for project owners, governments, financiers, and service and technology providers to help develop and drive investments to new renewable energy projects.

Objective

The objective of the virtual market place is to accelerate the scale-up of investments – both public and private – to promote initiation, development and financing of low-carbon renewable energy projects by bringing together project owners, governments, financiers, and service and technology providers. It makes investment opportunities visible and easily identifiable for investors and helps project developers to identify relevant funding sources and expertise.

The virtual market place will bring together project owners, governments, financiers, and service/technology providers to:

- search for information of interest like projects with certain investment criteria, financing sources, or advisors according to specific needs of a project;
- find information about and contact relevant entities, projects or financing instruments;
- create a virtual data room to organize and share confidential information with selected financiers, advisors, etc.;

NEWS

- 04/12/2016 - Mary Ellen Harte: Climate Change This Week: Seas...
- 04/11/2016 - John Roome: A Plan to Tackle a Changing...
- 04/11/2016 - Kenya receives \$30 million funding towards two projects in...
- 04/11/2016 - Eritrea receives \$9 million in EU funding for geothermal...
- 04/11/2016 - GreenChar launches crowdfunding campaign to expand access to clean...

see more...

EVENT CALENDAR

MENAREC

Kuwait

Second Meeting of the UN Environ...

Nairobi, UNEP Headquarters

America's leading Renewable Ener...

New York, NY, Grand Hyatt

see more...

PROJECT NAVIGATOR

Do you need help in project development? IRENA's Project Navigator offers tools, templates and information to help project developers in developing bankable projects. Try it here:



Matchmaking / search engine

HOME

ABOUT

BENEFITS FOR USERS

MEDIA

MARKETPLACE

» General Search

» Projects

» Financing Instruments

» Service Providers

» Technology Suppliers

» Organizations

» Countries

USER PROFILE

IRENA REPORTS

OTHER MARKETPLACES

LATEST PROJECTS

Projects Search

Search... Clear

Project technologies

☒ Solar - PV - rooftop/building integrated/distributed (4)

☒ Solar - PV - utility scale (2)

Apply | Clear

Country

☐ Ghana (2)

☐ Morocco (1)

☐ Nigeria (2)

☐ Uganda (1)

Apply | Clear

Project status

☒ Feasibility (3)

☒ Financing (3)

Apply | Clear

Project ownership

☐ Private (5)

☐ Private Public Partnership (1)

Apply | Clear

Grid connection

☐ Grid connected (4)

☐ Mini-grid (2)

Apply | Clear

Organization name

☐ Access Infra Africa Limited (1)

☐ EME West Africa (1)

☐ GVE Projects Ltd. (1)

☐ Ghana Capital Partners (1)

☐ ICIMI (1)

☐ Solar Breeder Morocco S.a.r.l. (1)

Apply | Clear

Expected start of construction

2,011 2,021

All

Expected start of operation

2,011 2,021

All

Matchmaking / search engine

SGI Biomass-to-E... 15 MW electricity

[see more...](#)

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PROJECT NAME	ORGANIZATION NAME	PROJECT TECHNOLOGIES	COUNTRY	CAPACITY	TOTAL INVESTMENT (MILLIONS USD)	STATUS OF PROJECT	EXPECTED START OF CONSTRUCTION	EXPECTED START OF OPERATION
Tororo 20MWp Solar PV Plant	Access Infra Africa Limited	Solar - PV - utility scale	Uganda	20	30	Feasibility	10/10/2016	6/1/2017
Green Village Electricity Project	GVE Projects Ltd.	Solar - PV - rooftop/building	Nigeria	17.8	3,492	Financing	5/7/2015	12/1/2015
Shared-ownership Off-grid Solar Electrification	ICIMI	Solar - PV - rooftop/building	Nigeria	15	38	Financing	9/1/2016	1/1/2017
Solar Breeder Morocco	Solar Breeder Morocco S.a.r.l.	Solar - PV - rooftop/building	Morocco	8	10	Financing	4/1/2016	9/1/2016
Decentralised Solar PV project for Self	EME West Africa	Solar - PV - rooftop/building	Ghana	20	36.4	Feasibility	6/1/2016	6/1/2017
28MW solar PV in Senya Beraku, Ghana	Ghana Capital Partners	Solar - PV - utility scale	Ghana	28	56	Feasibility	6/1/2016	10/1/2017

6 results

Matchmaking / search engine

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- LATEST PROJECTS**

Nigeria	Solid Biomass - ...
Hexagon Renewa...	50 Litres per day
Senegal	Biogas - Power
Thecogas	0.25 MW electricity
Ghana	Solar - PV - utilit...
28MW solar PV in...	28 MW electricity
Senegal	Solid Biomass - ...
SGI Biomass-to-E...	15 MW electricity

Ghana Capital Partners 28MW solar PV in Senya Beraku, Ghana

Contact administrator

Ghana - Solar - PV - utility scale

CAPACITY 28 MW electricity	INVESTMENT (MILLIONS USD) \$56.00	ANNUAL GENERATION 42,000 MWh electricity
GRID CONNECTION GRID CONNECTED	PROJECT OWNERSHIP PRIVATE	

LAND ACQUISITION FINALIZED

PERMITS IN PROCESS, FINAL STAGE

FEASIBILITY STUDIES IN PROCESS, FINAL STAGE

AGREEMENTS IN PROCESS, FINAL STAGE

FINANCING PROCESS PLANNED

Status of project

Project idea
Pre-feasibility
Feasibility
Financing
Construction
Operation

6/1/2016

10/1/2017

Expected start of construction

Expected start of operation

PROJECT LEVEL IRR 17 %	EQUITY IRR 22 %	DIRECT PAYBACK PERIOD 6 Years
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Project summary

Project objective and structure

The project will provide electricity via the national grid to 200,000 homes or 1 million people. The project is 100% owned by GCP. SolarCentury will be our EPCM partner. SolarCentury will be responsible for the technical work, construction and assisting GCP with maintenance. GCP is responsible for equity and senior debt financing and project management.



Contact information

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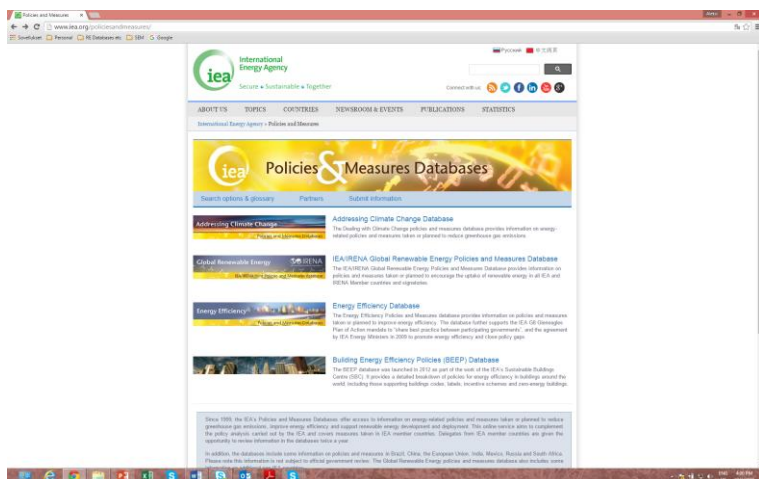
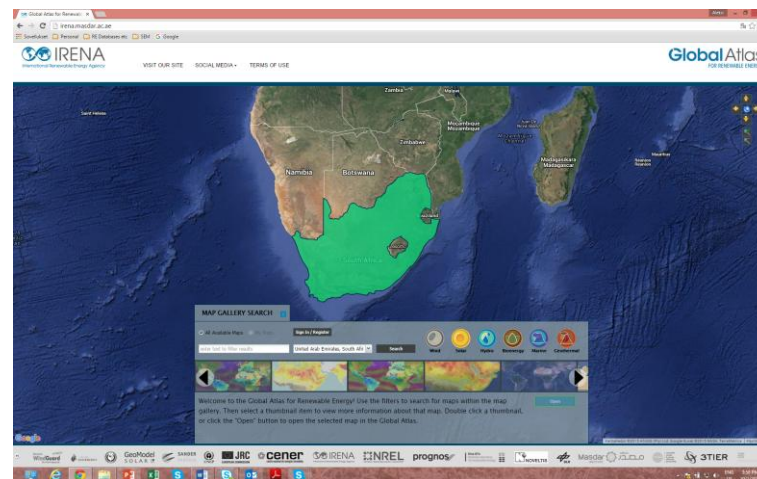
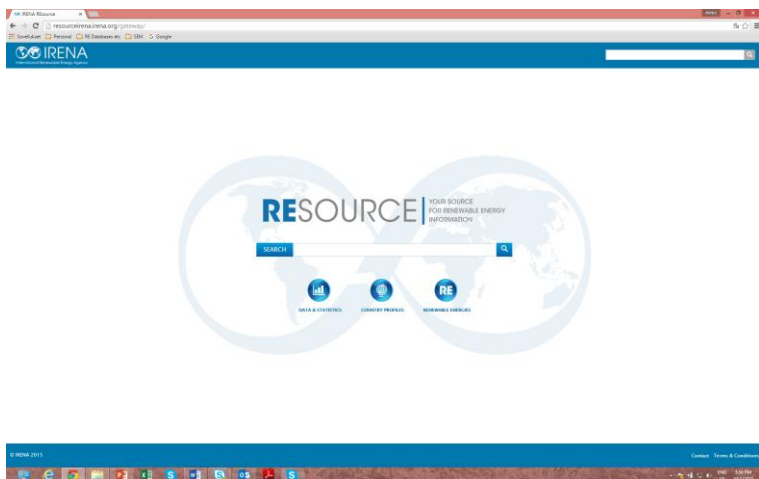
1 Independence Avenue
Accra

Financing plan

Financial instrument	Amount (millions USD)
Equity, controlling stake/ M & A	20
Senior Debt	36

Available financing

Tools and databases



What is the IRENA Project Navigator?

The challenge of Renewable Energy Projects

- » Perceived risks of RE technologies are hindering the implementation of many RE projects around the world.
- » Insufficient knowledge on project development leading to:
 - » High rate of RE project failure
 - » Perceived lack of bankability by investors and lenders
 - » Higher than normal project development costs,

Project Navigator objectives

- » Support the increase in RE project bankability by:
 - » Providing transparent project development guidelines,
 - » Enhancing the quality of activities during development,
 - » Ensuring more project reaches financing closing,
 - » Facilitating effective implementation by reducing time & cost.

Project Navigator scope

- » Technical Concept Guidelines for Solar (Large & Small) , Onshore Wind, Small Hydro, Geothermal, Minigrids, Biomass
- » Support for various financial instruments for equity & debt
- » Project sizes: homeowners to utility scale projects
- » Global reach: Southeast asia, Sub-Saharan Africa, Latin America & , SIDS



Learning Section

Project Development Guidelines

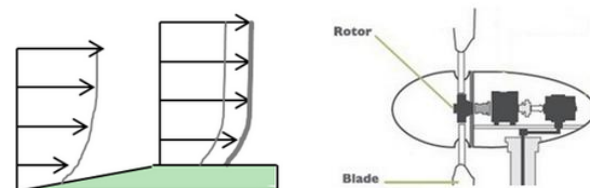
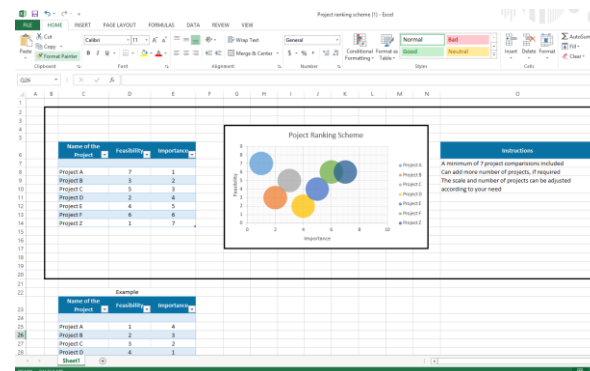
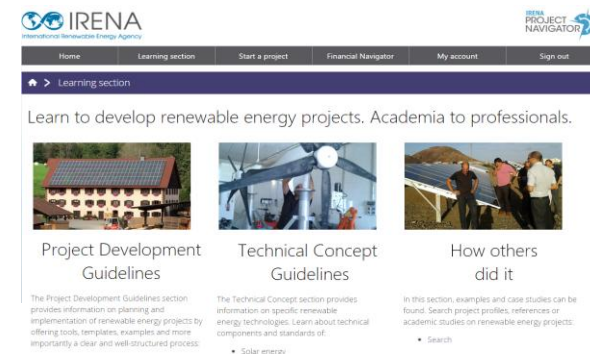
- » Transparent project development process
- » Detailed definitions
- » Tools for Project Developers
- » Summary of Key Actions
- » Control questions
- » Key deliverables
- » Contractual agreements guidelines

Technical Guidelines

- » Guidelines for bankable project development
- » 9-steps project development process
- » Technology-specific knowledge & information
- » Toolkit including financial models & contract templates

How others did it

- » Database of RE project development examples
- » Detailed country-specific case studies
- » Templates for contracts and agreements



Start a Project

Create your own workspace

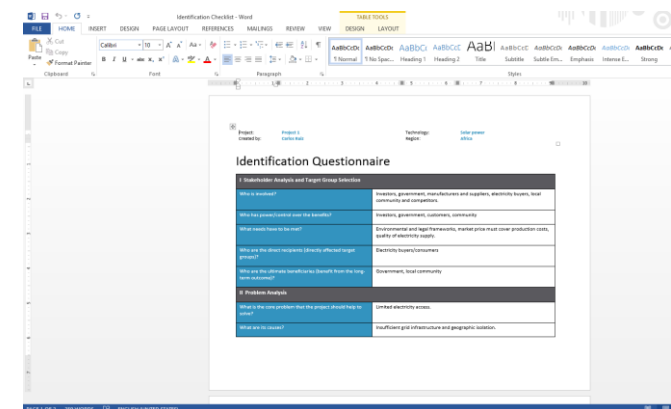
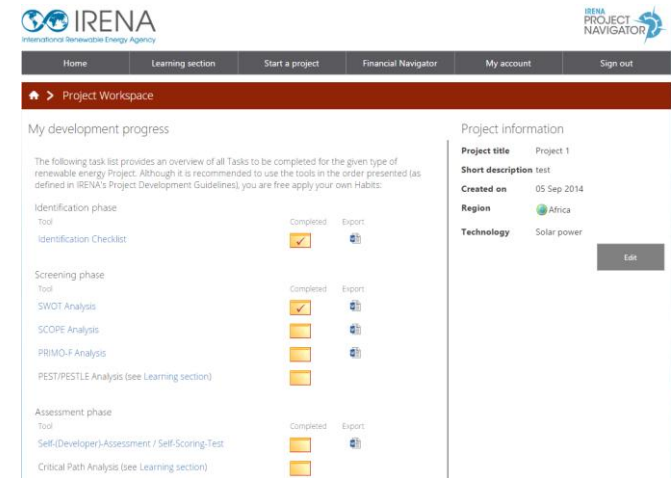
- » Private online workspace
- » Interactive tools
- » Store up to three projects

Follow a clear project development process

- » Clear objectives for each phases
- » Interactive walkthrough tools
- » Summary of actions & deliverables and control questions

Track your progress

- » Store your data
- » Keep track of your project
- » Export and download reports
- » Engage with experts



Engaging partners in project facilitation

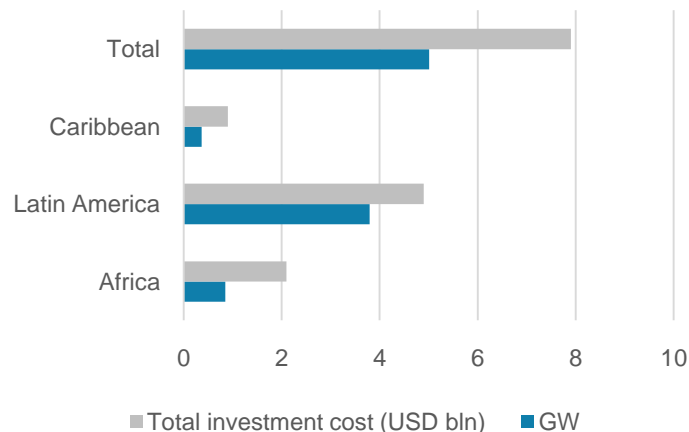


Objective: Project origination, development and match-making

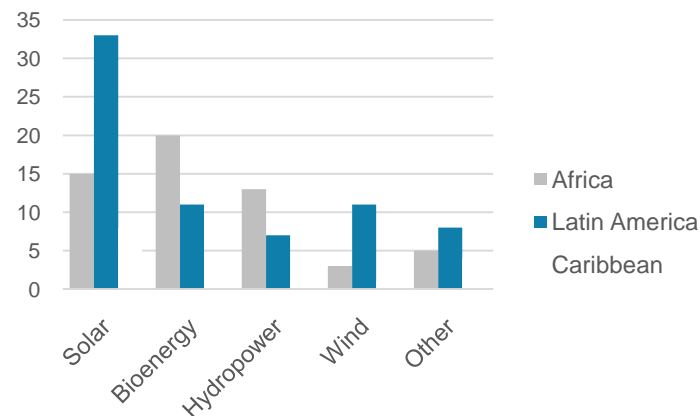
Current User Volume

- 200 registered users
 - 144 projects
 - 63 financing instruments
 - USD 8 bln investment need
-
- 58 solar projects
 - 33 bioenergy projects
 - 21 hydropower projects
 - 15 wind projects
 - 17 other renewable energy projects

Total investment cost (USD bln) and Capacity (GW)



Project types by region (number of projects)



Thank you!



ACCESS TO
CARIBBEAN PORTAL

ACCESS TO
LATIN AMERICA PORTAL

ACCESS TO
AFRICA PORTAL