



IRENA Activities on Global Geothermal Alliance: A Global Partnership for Geothermal Energy

Nairobi - 10 October 2017

GRMF Workshop

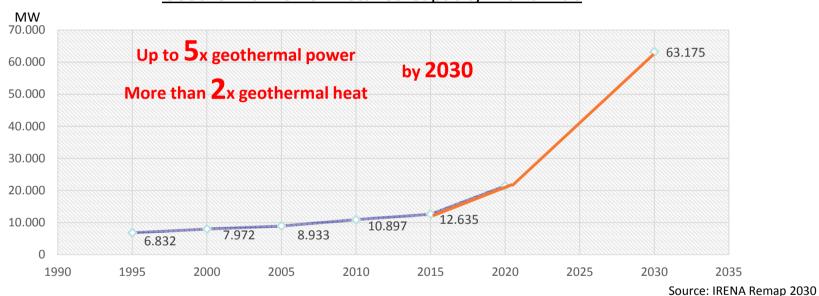
Global Geothermal Alliance

Launched at COP21 in Paris



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Global platform for improved dialogue, cooperation and coordinated action among key geothermal stakeholders to scale up geothermal deployment



Geothermal Power Installed Capacity Worldwide

A Joint Communiqué issued at the GGA Launch

- Neutrality and transparency
- Build on what is on the ground and scale up
- No bureaucracy

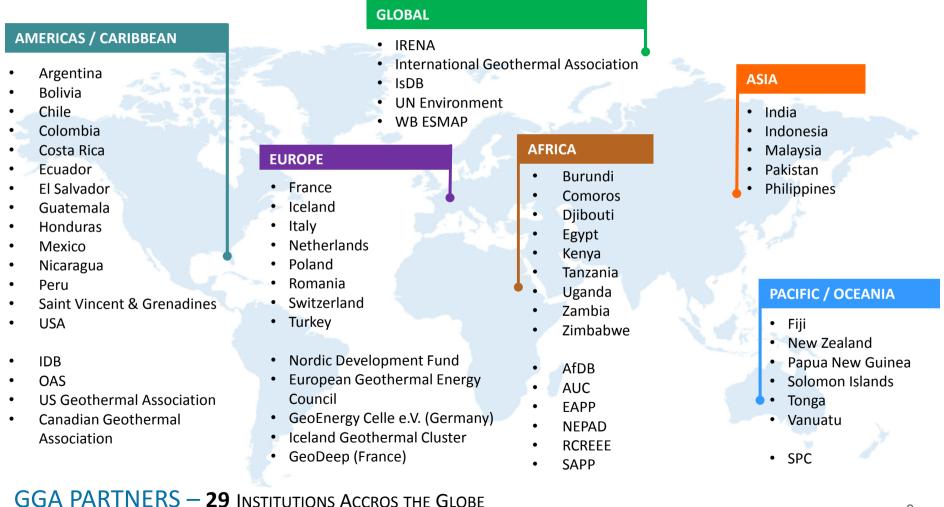
- Enabling most mature projects or countries with transformative potential
- Unlocking projects facing policy, legal, regulatory, fiscal, funding, capacity building challenges

Strong Commitment to GGA

Over 70 Members and Partners



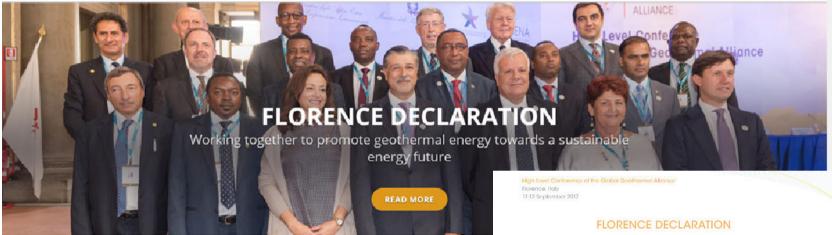
GGA MEMBERS - 42 COUNTRIES ACCROS THE GLOBE



INDUSTRY, FINANCIAL INSTITUTIONS, REGIONAL AND DEVELOPMENT ORGANIZATIONS, ACADEMIA AND RESEARCH

Strong Commitment to GGA





WORKING TOGETHER TO PROMOTE GEOTHERMAL ENERGY TOWARDS A SUSTAINABLE ENERGY FUTURE

- New Florence Declaration outcome of High Level Conference in Italy (September 2017)
- Adopted by attending GGA members

The Global Geothermal Alliance has convened its present High-Level Conference in Florence, capital city of the Region of Tuscany, where the world's first geothermal power plant came into operation in 1913.

We, high-level representatives of the members' of the Alliance, attending this High-Level Conference at the invitation of the Italian Government and the International Renewable Energy Agency (IRENA);

Recalling that the Altiance was launched in 2015 at COP21 - the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) to serve as a global platform for enhanced dialogué, co-operation and co-ordinated action among policy makers, geothermal industry and other stakeholders to address the challenges hindering accelerated development of geothermal energy:

Recalling the Resolution adopted by the United Nations General Assembly on 25 September 2015, "Transforming our World: The 2030 Agenda for Sustainable

Florence Declaration available online: www.globalgeothermalalliance.org

GGA Action Plan Adopted by GGA Members in May 2016

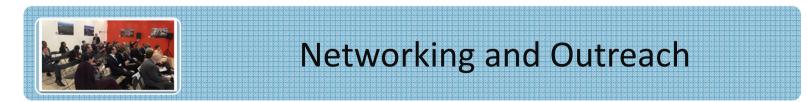




Resource and Market Assessment







GGA Action Plan An Overview of Implementation



Action Area 1

Resource & Market Assessment

- Enrichment of the geothermal datasets in the IRENA Global Atlas
- Geothermal market status (East Africa)

Action Area 2 Needs and Obstacles Assessment		Action Area 3 Enabling Frameworks	
	ſ		
Regional and Thematic Capacity Building	IRENA Tools and	d Analysis	Call for Proposals

Capacity Building

Regional and Thematic Initiatives





- Legal and Regulatory Frameworks
- Technical Environmental Licensing & Reservoir Modelling
- Finance and Risk Mitigation
- Geothermal Skills Needs Assessment Methodology



Regional and Thematic Capacity Building



Upcoming

Geothermal financing and risk mitigation in **East Africa**

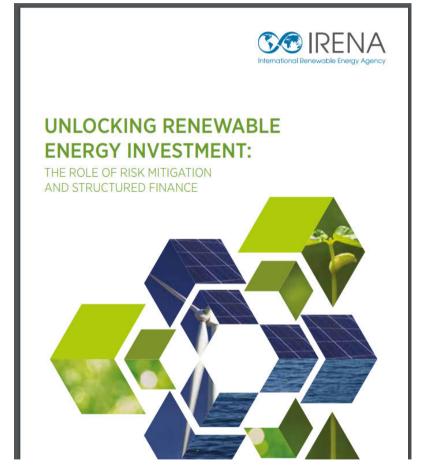
Workshop in Kenya, 6-8 December 2017





IRENA Analysis: The role of risk mitigation and structured finance





Insights for Policy Makers and Investors

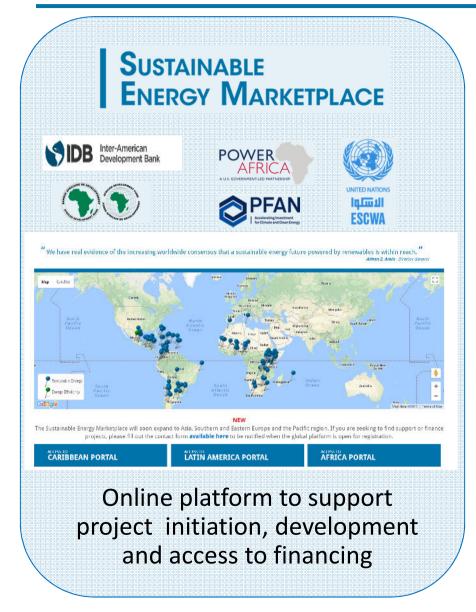
- » Enabling policies and tools
- » Financial Risk Mitigation instruments
- » Structured finance mechanisms

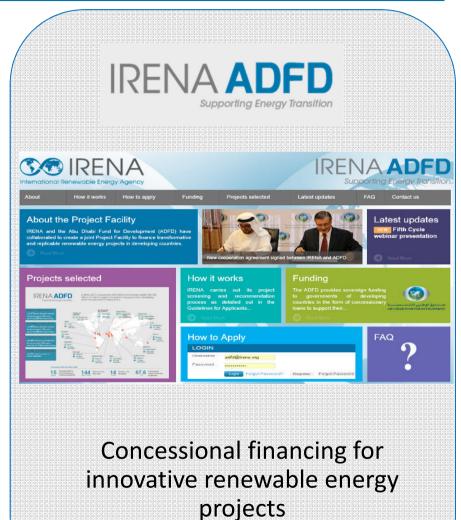
IRENA Tools: Project Facilitation

Marketplace & RE Project Financing Facility with ADFD



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IRENA Tools: Project Facilitation

Project Navigator: Geothermal Module





Launched in Launched 201 Septem Tail Tailored project development guidelines available at no cost to enhance the bankability of geothermal power projects

()	Assessment	Resources
() Home	On this page	~ Toolkit
 Introduction 	Technical assessment	Quick Acce Depet Biel Terre to Tools
Overview	Environmental and social assessment	Bankability Checklist
Identification	Risk management	Risk Assessment Tool
Screening Assessment Selection	F Outline In the assessment phase, the project developer should perform a resource assessment consisting exploration, temperature gradient hole drilling and conceptual reservoir model development. At the phase, the project developer should be able to specify technical requirements for the drilling of full-size	of surface and of the
Py development Development		Carebon Summary of activities

Sign up for a free Navigator webinar on Geothermal



State-of-the-art guidance, tools, and templates developed by IRENA with industry experts

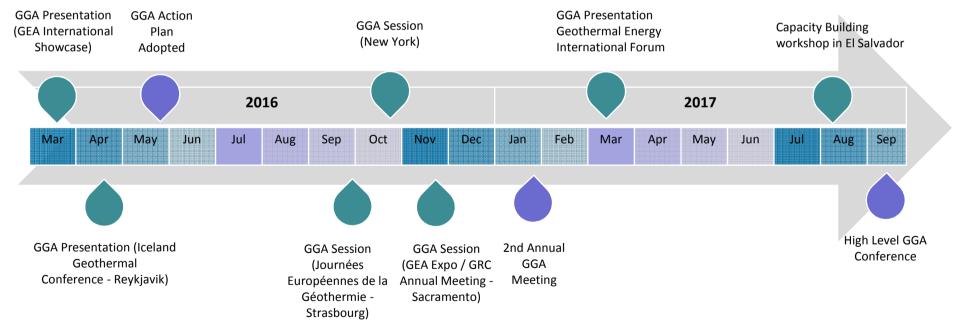
Flash the QR code or register here: https://goo.gl/CKBTVb

Find out more at www.irena.org/navigator

GGA Action Plan: Network and Outreach



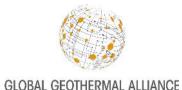




✓ Nov 2017, Bonn: GGA event at COP 23

Upcoming events

- ✓ Dec 2017, Nairobi: Workshop on geothermal financing and risk mitigation
- ✓ Jan 2018, Abu Dhabi: 3rd Annual GGA Meeting





THANK YOU

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