



Global Geothermal Alliance: A Global Partnership for Geothermal Energy

Florence - 11 September 2017

High-Level Conference of the Global Geothermal Alliance

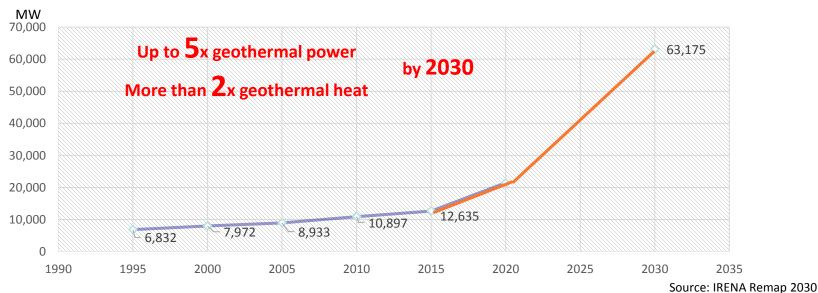
Global Geothermal Alliance

Launched at COP21 in Paris



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

AMERICAS / CARIBBEAN

- Argentina
- Bolivia
- Chile
- Colombia
- Costa Rica
- Ecuador
- El Salvador
- Guatemala
- Honduras
- Mexico
- Nicaragua
- Peru
- Saint Vincent & Grenadines
- USA
- IDB
- OAS
- US Geothermal Association
- Canadian Geothermal Association

GLOBAL

- IRENA
- International Geothermal Association
- IsDB
- UN Environment
- WB ESMAP

EUROPE

- France
- Iceland
- Italy
- Netherlands
- Poland
- Romania
- Switzerland
- Turkey
- Nordic Development Fund
- European Geothermal Energy Council
- GeoEnergy Celle e.V. (Germany)
- Iceland Geothermal Cluster
- GeoDeep (France)

AFRICA

- Burundi
- Comoros
 - Djibouti
- Egypt
- Kenya
- Tanzania
- Uganda
- Zambia
- Zimbabwe
- AfDB
- AUC
- EAPP
- NEPAD
- RCREEE
- SAPP

ASIA

- India
- Indonesia
- Malaysia
- Pakistan
- Philippines

PACIFIC / OCEANIA

- Fiji
- New Zealand
- Papua New Guinea
- Solomon Islands
- Tonga
- Vanuatu
- SPC

GGA PARTNERS – 29 Institutions Accros the Globe

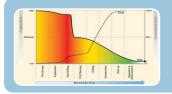




Resource and Market Assessment



Needs and Obstacles Assessment



Enabling Frameworks



Networking and Outreach

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

Regional and Thematic Capacity Building

IRENA Tools and Analysis

Call for Proposals

Capacity Building

Regional and Thematic Initiatives



Geothermal Energy Initiative in the **Andes**



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

Geothermal capacity building in **Central America**



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







Geothermal capacity building in the **Pacific**





Capacity building on RE options for **district heating** (with geothermal focus)

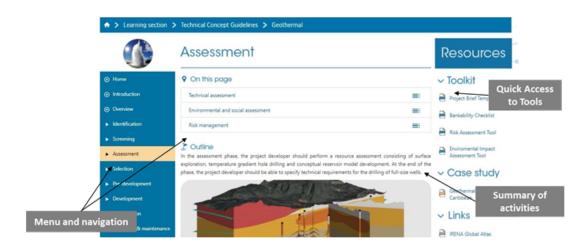
IRENA Tools: Project Facilitation

Project Navigator: Geothermal Module



PROJECT NAVIGATOR

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



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

Sign up for a free Navigator webinar on Geothermal



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

IRENA Tools: Project Facilitation







Online platform to support project initiation, development and access to financing



Concessional financing for innovative renewable energy projects

IRENA Analysis:

Geothermal Power Technology Brief





GEOTHERMAL POWER

TECHNOLOGY BRIEF



Insights for Policy Makers

- Process and technology status
- » Costs
- » Potential and barriers

Launched in 2017 September 2017

GGA Action Plan: Network and Outreach

New GGA Website: www.GlobalGeothermalAlliance.org

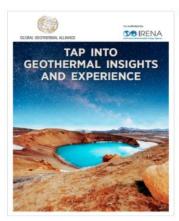




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ABOUT US



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Launched at COP21*, the Global Geothermal Alliance (GGA) serves as a pla form for dialogue, cooperation and coordinated action between the geothermal industry, policy makers and stakeholded worldwide.

As stated in the Joint Communique on the Global Geothermal Allice and GGA is consultion for action to increase the use of geothermal energy, both in power generation and directive of heat. It can be governments, business and other stakeholders to support the deployment of realizable othermal potential fine Alliance has an aspirational goal to achieve a five-fold growth in the installed copt in a power generation and more than two-fold growth in geothermal heating by 2030.

What the GGA is designed to do?

- foster an enabling environment to attract investing in geothermal energy;
- provide customised support to regions and item with geothermal market potential;
- facilitate the exchange of insights and experience among key stakeholders in the geothermal energy value chain;
- identify and promote models for sharing and mitigating risks, in order to attract private investment and integrate geothermal facilities into energy markets.
- help to streamline outreach efforts to give geothermal energy greater visibility in the global energy and climate debates.

GGA Action Plan: Network and Outreach





GGA Presentation **GGA** Presentation **GGA Action** Capacity Building **GGA Session** (GEA International Plan **Geothermal Energy** (New York) workshop in El Salvador Showcase) International Forum Adopted 2016 2017 Aug May May Jul Mar Apr Jun Sep Oct Nov Dec Jan Feb Mar Apr Jun Jul Aug Sep High Level GGA **GGA Presentation (Iceland GGA Session GGA Session** 2nd Annual Conference Geothermal **GGA** (Journées (GEA Expo / GRC Conference - Reykjavik) Européennes de la Annual Meeting -Meeting Géothermie -

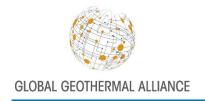
Nov 2017, Bonn: GGA event at COP 23

Strasbourg)

Sacramento)

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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