



GLOBAL
GEOTHERMAL
ALLIANCE



Global Geothermal Alliance

2nd High Level Conference

San Salvador, El Salvador | 29 September - 1 October 2022

Global Geothermal Alliance

Objective



Global Multi-stakeholder Platform to foster geothermal deployment worldwide through enhanced dialogue, cooperation and coordinated action among key geothermal stakeholders

2030 Goals

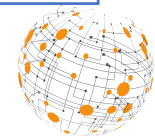


- ❑ 5-fold growth in geothermal power generation
- ❑ 3-fold growth in geothermal heat

Action Plan



- ❑ Resource and Market Assessment
- ❑ Needs and Obstacles Assessment
- ❑ Enabling Frameworks
- ❑ Networking and Outreach



GGA: 49 Member Countries and 54 Partner Institutions

49 countries and 54 partners

AMERICAS / CARIBBEAN

- Argentina
- Bolivia
- Chile
- Colombia
- Costa Rica
- Ecuador
- El Salvador
- Guatemala
- Honduras
- Mexico
- Montserrat
- Nicaragua
- Peru
- Saint Vincent and the Grenadines
- Uruguay
- USA
- Atlantic Council
- Canadian Geothermal Association
- CARILEC
- CEGA (Chile)
- CeMIEGeo (Mexico)
- Chilean Geothermal Council
- Colombian Geothermal Association
- Ecuadorian Geothermal Association
- Geothermal Canada
- Geothermal Rising (USA)
- IDB
- Mexican Geothermal Association
- OAS
- OECS
- Peruvian Renewable Energy Association
- REDMEREE
- US Energy Association

EUROPE

- France
- Germany
- Iceland
- Italy
- Netherlands
- Poland
- Portugal
- Romania
- Switzerland
- Turkey
- United Kingdom of Great Britain and Northern Ireland
- AGH University of Science and Technology
- Bulgarian Association Geothermal Energy
- EIHP
- European Geothermal Energy Council
- GeoDeep (France)
- GeoEnergy Celle e.V. (Germany)
- Geoscience Ireland
- Geothermal Energy Advancement Association (UK)
- Geothermal Power Plants Investors Association (Turkey)
- GRO GTP
- Iceland Geothermal Cluster
- Iceland School of Energy
- ISOR (Iceland GeoSurvey)
- Macedonia Geothermal Association
- National Energy Authority (Iceland)
- Nordic Development Fund
- Serbian Geological Society
- Serbian Geothermal Association
- University of Geneva

GLOBAL

- AIIB
- International Geothermal Association
- IRENA
- Islamic Development Bank
- UNEP
- UNIDO
- Women in Geothermal - WING
- World Bank - ESMAP

AFRICA

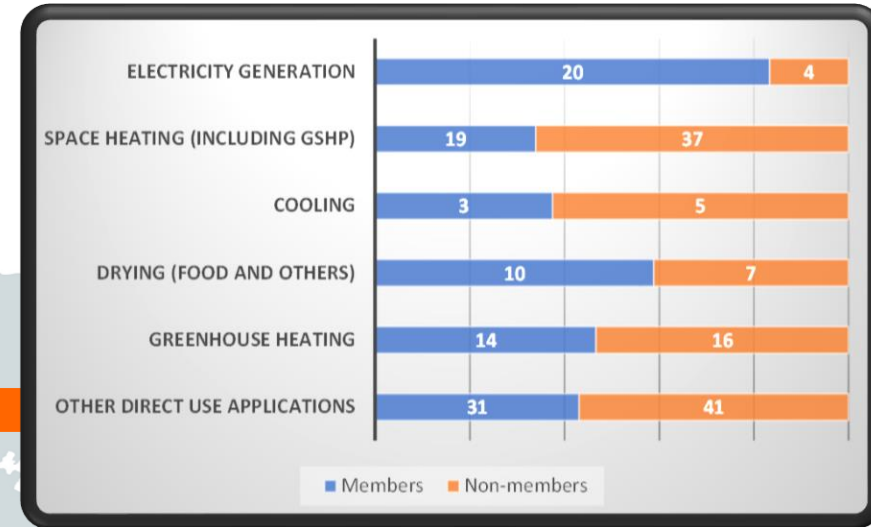
- Burundi
- Comoros
- Djibouti
- Egypt
- Ethiopia
- Kenya
- Tanzania
- Uganda
- Zambia
- Zimbabwe
- AfDB
- AUC
- EAPP
- NEPAD
- RCREEE
- SAPP

ASIA

- India
- Indonesia
- Japan
- Malaysia
- Pakistan
- Philippines
- CREEL (China)
- CREIA (China)

PACIFIC / OCEANIA

- Fiji
- New Zealand
- Papua New Guinea
- Solomon Islands
- Tonga
- Vanuatu
- Australian Geothermal Association
- Pacific Community



*In orange: Members/partners joining in 2021-22



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Offering a Global Platform for Dialogue and Cooperation



Launch at COP21
2015



1st High Level Conference
2017



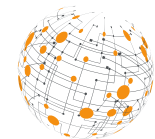
GGA at IRENA Assembly
2018



GGA annual meetings



GGA at WGC
2021



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Pioneering A New Approach to Geothermal Resource Assessment

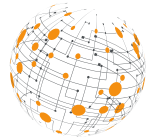
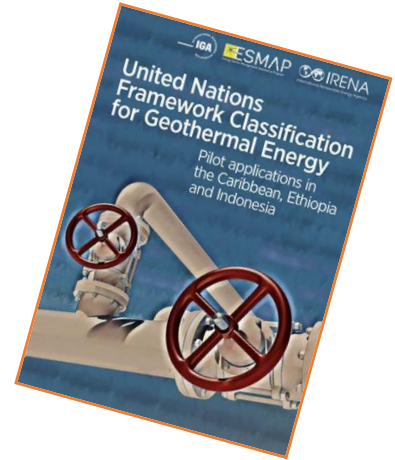


UN Framework Classification for Geothermal Energy

- Promote standardization in classification and reporting geothermal resources

Pilot training on application of UN Framework Classification

- Technical sessions conducted in Indonesia, Ethiopia and the Caribbean Islands
- Co-facilitated by IRENA, IGA and ESMAP
- Produce classification reports and subsurface temperature maps
- Report on lessons learnt

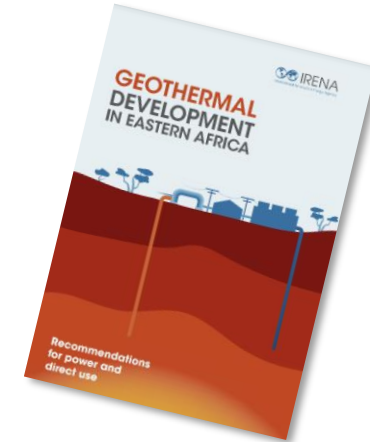


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Geothermal Market and Technology Assessments

Geothermal Market Assessment in East Africa

- Provide an updated status of the geothermal market
- Identify bottlenecks and provide recommendations

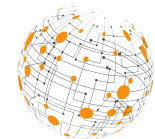


Enabling Policies and Regulatory Frameworks for Geothermal Energy - East Africa Rift

- Co-hosted with UNEP and African Union Commission
- Insights, experiences and best practices shared btw East African and Mexican counterparts

Global Geothermal Market and Technology Assessment **[upcoming]**

- Collaboration between IRENA and IGA
- What are the key drivers for geothermal in the coming years?
- Supported by practitioners' group of geothermal expert



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Promoting Geothermal Heat Solutions in District Heating and Cooling

GUIDEBOOK FOR POLICY MAKERS: Integrating Low-Temp Renewables in District Heating and Cooling

- Options and available tools for successful deployment

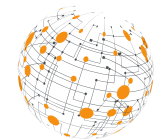
Thorough consultative process

- Supported by a practitioners' group of geothermal experts mainly from the GGA constituency

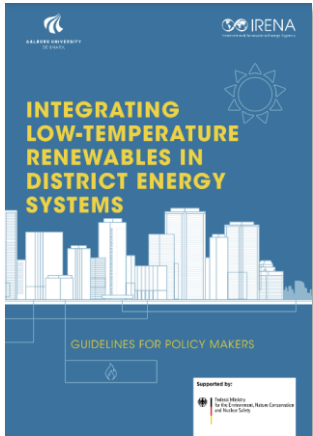


Informing Policy Making

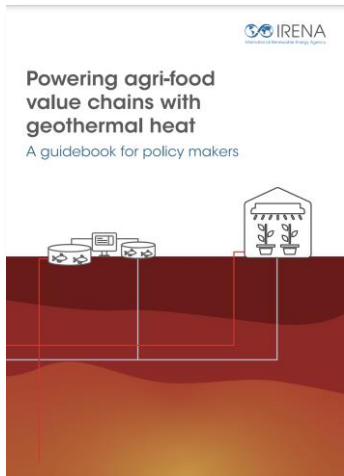
- Western Balkans (Capacity building)
- Belarus (Capacity building)
- China (Capacity building)
- Dialogue with industry
- Mongolia (capacity building and strategic heating plan)



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Fostering Geothermal Heat Applications in the Agri-Food Systems



GUIDEBOOK FOR POLICY MAKERS: Powering Agri-food Value Chains with Geothermal Heat

- Key success factors based on best practices
- Priority areas to scale up geothermal deployment

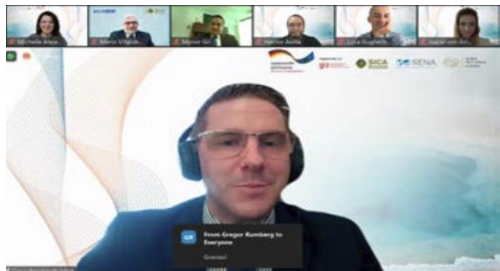
Thorough consultative process

- Supported by a practitioners' group of geothermal experts mainly from the GGA constituency



Informing Policy Making

- Global webinar
- East Africa workshop
- LATAM workshop



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Facilitating RE Projects through IRENA Platforms

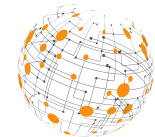


Climate Investment Platform (CIP)

- Joint initiative of IRENA, UNDP, and SEforALL in coord with Green Climate Fund (GCF)
- Develop a strong pipeline of bankable RE projects
- Facilitate the financial matchmaking

Energy Transition Acceleration Financing Platform (ETAF)

- Multi-stakeholder climate finance platform which aims to mobilize USD 1 B
- UAE announced USD 400 million anchor funding via ADFD
- Masdar joined as equity investor and TA provider
- Discussion underway with several IFIs to join



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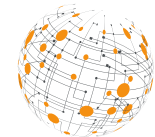
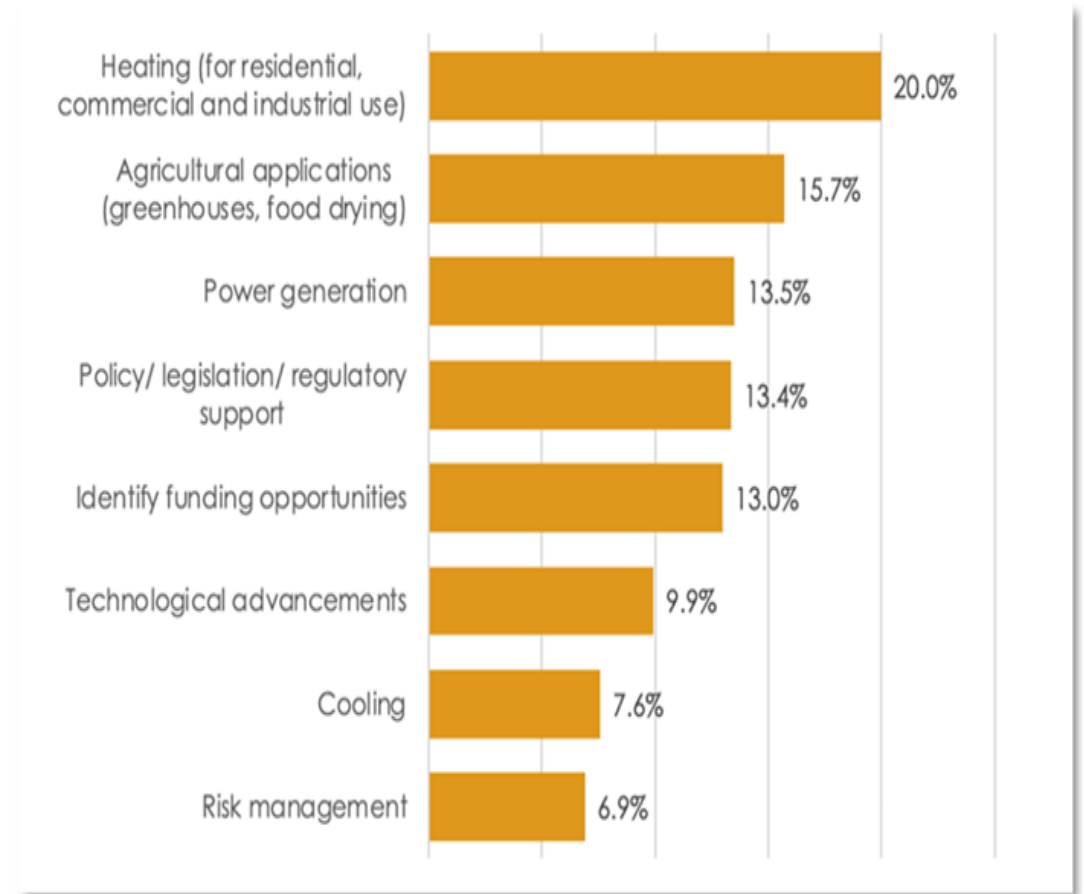
GGA Members and Partners Guiding on Strategic Direction and Priorities

Emerging Thematic Focus

- Direct use for end-use decarbonization for climate action and sustainable development
- Unlocking and facilitating investments and finance

Implementation Principles

- Guide and inform country decision making
- Explore and establish regional emphasis
- Enable stronger “practitioners” engagement to guide GGA work
- Advocate and raise awareness
- Activate strengthened country-industry dialogue





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Thank you!



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IRENA
International Renewable Energy Agency