



Joint Communiqué on the Global Geothermal Alliance

On the occasion of the 21st Meeting of the Conference of the Parties of the United Nations Framework Convention on Climate Change, we, Members and Partners of the Global Geothermal Alliance:

- Note that geothermal energy is a proven clean energy technology that provides stable and affordable electricity and offers flexibility and direct use of geothermal heat in domestic, commercial and industrial sectors, yet the modest pace of its deployment hinders reaping the potentially game changing benefits of geothermal technologies.
- Note that despite the vast global geothermal energy potential, with identified resources in nearly 90 countries, only 24 of those countries are producing geothermal electricity, corresponding to around six per cent of the estimated global geothermal power potential.
- Acknowledge that policy uncertainty, a shortage of skilled professionals, environmental concerns, licensing delays, and timely development of dedicated long-distance transmission infrastructure, as well as a lack of awareness and limited information about geothermal technologies, are preventing wider adoption of geothermal energy.
- Further acknowledge that the main obstacle remains the high upfront costs of drilling and risks associated with the uncertainties from the exploration phase.
- Recognize that a global platform that facilitates enhanced dialogue, cooperation and coordination among the key stakeholders can spearhead collaborative action that is essential to overcome hurdles for accelerated geothermal development.

Therefore, we join forces in the Global Geothermal Alliance as a platform for enhanced dialogue and knowledgesharing within the constituency as well as for coordinated action to increase the share of installed geothermal electricity and heat generation worldwide.

We will focus our efforts towards realising geothermal energy potential to achieve a five-fold growth in the global installed capacity for geothermal power generation and two-fold growth for geothermal heating by 2030¹.

We call on all stakeholders to support our efforts to realise this global geothermal potential.

<u>Members in the Global Geothermal Alliance</u>: Burundi, Comoros, El Salvador, France, Guatemala, Iceland, Indonesia, Italy, Kenya, Malaysia, Mexico, Netherlands, New Zealand, Nicaragua, Pakistan, Papua New Guinea, Philippines, Poland, Saint Vincent & Grenadines, Solomon Islands, Switzerland, Tanzania, Tonga, Turkey, Uganda, United States of America, Vanuatu, Zimbabwe.

<u>Partners in the Global Geothermal Alliance</u>: African Development Bank, African Union Commission, AGH University of Science and Technology (Poland), Eastern Africa Power Pool, Energy Institute Hrvoje Pozar (Croatia), Energy Institute of Hungary, European Geothermal Energy Council, Iceland GeoSurvey ISOR, International Geothermal Association, International Renewable Energy Agency, NEA of Iceland, New Partnership for Africa's Development, Nordic Development Fund, Serbian Geological Society, Secretariat of the Pacific Community, Southern Africa Power Pool, United Nations Environment Programme, United Nations University – Geothermal Training Programme, US Geothermal Energy Association, World Bank – Energy Sector Management Assistance Program.

¹ as indicated in IRENA REmap 2030 – A Renewable Energy Roadmap





Annex. Concept of the Global Geothermal Alliance

The Global Geothermal Alliance (GGA) serves as a partnership for action to increase the share of geothermal energy in the global energy mix through both geothermal power generation and direct use of geothermal heat.

Objective

The Alliance will contribute to the efforts to achieve the Sustainable Energy for All (SE4ALL) target to double the share of renewable energy in the global energy mix by 2030, through the promotion of collaborative actions supporting accelerated deployment of geothermal energy. In this regard, the Alliance calls on governments, the industry and other stakeholders to support efforts towards achieving the deployment of realisable geothermal energy potential through a fivefold growth in the global installed capacity of geothermal power generation and more than two-fold growth in geothermal heating compared to the 2014 levels by 2030 as shown by the IRENA REmap 2030 analysis.

Members and Partners

The GGA seeks to create an inclusive and neutral multi-stakeholder platform that brings together public, private, intergovernmental and non-governmental actors that share a common vision of accelerating deployment of geothermal energy for power generation and other applications. Membership in the Alliance includes geothermal energy resource-rich countries with established or emerging geothermal markets as well as other countries that wish to support the activities of the Alliance. Development partners (such as, international and bilateral development organisations, international financial institutions, institutional investors, international organizations, and other development partners involved in geothermal energy), geothermal industry represented through global, regional and national geothermal business associations as well as institutions engaged in research, education, etc. in the geothermal energy field at regional, national or subnational level can become Partner in the Alliance, with the consent of Members. No entry fee is envisaged for joining the Alliance as a Member or Partner.

Scope of Activities

The Alliance Members, in consultation with the Partners, intend to formulate a work programme to be implemented in the following four areas of activity:

- (i) *Platform for Dialogue, Cooperation and Coordination* with a view to creating synergies, maximizing complementarity of different strengths offered by different partners, and avoiding duplication of efforts in geothermal energy related interventions.
- (ii) *Partnership for Action* to improve the mitigation of exploration, drilling, investment and operation risks through customized support to regions and countries, such as:
 - a. Advisory services for the creation of enabling regulatory and institutional frameworks, for timely and efficient private investments and efficient operation of geothermal resources and associated grid infrastructure;
 - b. Promotion of geothermal energy investments through innovative financing and de-risking mechanisms and benchmarking of policies, programs and initiatives on geothermal energy.





- (iii) *Capacity Building Support* to all key stakeholders in developing required institutional, expert and enterprise capacities in policy, regulation, technology and finance to support the development of the geothermal sector.
- (iv) *Outreach and Raising Awareness* to achieve greater visibility of geothermal energy in the global energy and climate change debates, as well as raising awareness of its benefits.

Operational Principles

Neutrality and transparency will be the guiding values, ensuring no particular region, country, technology or scheme gets preferential treatment. The Alliance will act independently from national agendas. It will coordinate its work with the existing structures, programmes and facilities on the ground to avoid duplication.

Governance

The Alliance will be governed by a committee formed of representatives of the Alliance constituency. The committee will meet at least once a year and communicate as often as required. At its meetings, the committee will review the achievements, status of collaboration, potential activity opportunities and progress in implementing the work programme alongside any other relevant issues. Chairmanship of the committee will be on a rotational basis between Members, to be supported by IRENA. The chair will host the committee and be responsible for the administrative and logistical arrangements of the meeting.

The GGA will also seek to establish working group(s) that would provide valuable input and technical assistance in areas of strategic importance to the GGA. In order to advance individual and institutional learning from past experiences with a view to further improving procedures and identifying promising avenues for future activities, the Alliance will develop an elaborate monitoring and evaluation system.

Coordination

IRENA will act as the Alliance's coordinator². In this context, IRENA will be responsible for the overall coordination of GGA activities as outlined in GGA's work programme. IRENA will also provide to the Alliance, as appropriate, data, information and relevant tools developed by the Agency. IRENA may, subject to the availability of resources, provide support in GGA activities, within the context of the Agency's work programme.

Communication

The Alliance will communicate through various channels such as email groups, audio and video conferencing, as needed.

Funding

Expenses incurred in the course of the work programme, along with secretariat administration and support, will be funded by voluntary contributions from Member and other donor countries as well as through support of Partners.

² Upon endorsement by the IRENA Assembly