

# **International Geothermal Association (IGA)**

## **Activities' Report - Year 2022**

**Adele Manzella**

### **1. Introduction**

The International Geothermal Association (IGA) is the leading global platform for geothermal energy. With its four pillars, Visibility, Sustainability, Partnerships and Authority, it is committed to pushing geothermal as a gamechanger for achieving Sustainable Development Goal #7, providing affordable, clean, baseload energy for all. The IGA connects the Global Geothermal Community, serving as a hub for networking opportunities to promote and support global geothermal development. With industry partners, the IGA sets standards, matures the technology agenda, and nurtures entrepreneurs engaged in clean technology.

The association's primary mission is to encourage, facilitate, and promote the development of geothermal resources and innovative research in geothermal technologies through visible and integrated position and representation of geothermal power, heat, geo-exchange, cooling, and other uses of geothermal resources.

IGA provides geothermal education in terms of the best practices and unbiased benefits of developing the utilization of Earth's energy for direct use, heat and power generation. It offers financial support to geothermal educational events, especially in countries with emerging geothermal markets. Furthermore, IGA encourages and promotes the coordination of activities related to worldwide research and application of geothermal resources, including conferences, workshops, congresses etc.

IGA collaborates with its renewable partners through the REN Alliance, 100% renewables platform and REN21. Together with these partners, it conducts political dialogues in such areas as sustainability assessment, carbon funds, green policies and other related fields. IGA has consultative status at the United Nations, special observer status to the Green Climate Fund, works closely with IRENA (International Renewable Energy Agency) – Global Geothermal Alliance (GGA), the International Energy Agency Geothermal Implementation Agreement (IEA – GIA), and is a partner in the World Bank ESMAP programme.

IGA has about 5000 members worldwide, with 30 affiliated organizations.

### **2. Main activities carried on by IGA during 2022 relevant for Italy and for CNR**

The Board's main activity was the reorganisation of the IGA, moving its headquarters from New Zealand to the Netherlands, incorporating the Secretariat's activities differently, and amending the Rules and Regulations. The most significant activities for Italy were the promotion of geothermal technologies:

- co-organising the World Geothermal Congress 2023, scheduled to take place in Beijing, China, in September 2023
- co-organising together with Enel Green Power an international event held in Larderello in October 2022, which was attended by delegates from many parts of the world (e.g. Kenya, Iceland, USA) and important representatives of Italian industry, research and academia.
- Contributing to bringing the geothermal sector closer to the oil & gas sector and aiming to expand the sector by combining exploration, drilling and management techniques for different types of geo-resources. This topic is very important given CNR's research and expertise in this area and reinforces the role of geo-resource research in the energy transition.

### **3. Activities carried on by Adele Manzella within IGA during 2022 and impact on the Italian scientific community**

In my role as Education & Information Committee Chair, I continued the activities to define standards for the collection of geothermal production data and update the World Geothermal Congress (WGC) reporting. After the definition activity, completed in 2021 and already described in my 2021 report, I updated the template for requesting production data collected at the country updates for the congress. This orderly collection of data is the prelude to the creation of a data archive and information portal, which will be a reference for the whole world. I have also been appointed as the reference person to represent the world situation of thermal production

from geothermal energy in the World Geothermal Congress 2023. The main spin-off of these activities is in terms of promoting and supporting the geothermal sector globally.

#### **4. Evaluation of the participation in terms of benefits and membership cost**

The IGA is evolving. The current discussion is on strengthening the activities and participation of corporate, affiliate and institutional members. It is not yet clear what the IGA's role will be globally in research and innovation. However, active participation in the Board is a way to inform and be informed about opportunities, ideas, and barriers to be overcome in Italy and abroad for the development of the sector. Contacts with industry and discussions on the promotion of the sector are strategic for defining research and innovation goals. This activity ties in very well with what I am doing at the European level in the field of research strategy in the role of co-chair of the European Research and Innovation Platform (ETIP) Geothermal and co-chair of the European Energy Research Alliance (EERA) Joint Programme Geothermal. The privileged position allows a broader view of the research topics to be pursued in the future, to draw up recommendations for research funding, and to obtain information on research and innovation funding opportunities.

#### **5. Evaluation of Italians' attendance and how to improve interest and involvement**

Italian participation in the IGA is strengthening, and the CNR's involvement is active. It is worth waiting to see how the IGA activity will evolve in the near future before proposing actions to improve involvement.

#### **6. Italian experts with important roles within the Union or within related Commissions and Programs (if known)**

Paolo Conti of the University of Pisa is involved in the UNFC-IGA working group (see <https://www.lovegeothermal.org/about/people/iga-unfc-ad-hoc-committee/>). No activity was known from the latter in 2022).

Enel Green Power is a corporate member of IGA, and Unione Geotermica Italiana is an affiliate member.

#### **7. If Union with CNR Commission, short summary about the 2022 CNR Commission activities**

NA

#### **8. Notes (if any)**

#### **9. Conclusions**

Although 2022 has yet to see any particular IGA activities that provide a direct benefit to the CNR, the visibility that the CNR is gaining globally, to be manifested especially in 2023 through high-level participation in the World Geothermal Congress, may bring benefits in terms of contacts with industrial and research stakeholders.

Signature



Place and date

Pisa, June 16, 2023