

# **International Geothermal Association**

## **Activities' Report - Year 2021**

### **Delegate/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 2021 relevant for Italy and for CNR**

IGA has been mainly working on the promotion of geothermal energy technologies by:

- co-organizing the World Geothermal Congress 2020-2021, partly online events and partly in physical form (in Iceland)
- participating in the leading global activities related to energy planning using renewable energy sources: Global Renewable Energy Forum (September 2020); a podcast series on the Energy Transition in The Netherlands on February 2020), IRENA 10<sup>th</sup> Annual Assembly on January 2020;
- a partnership with Pivot (a decade-long conference series focused on engaging oil and gas professionals in geothermal exploration and development) to host a variety of sessions at Pivot2021, including "exploring offshore geothermal energy", "geothermal in developing nations", and "geothermal's social license". The virtual events took place from 19 to 23 July 2021.
- a series of actions to bridge the gap between the geothermal and the oil&gas sector. The activity includes: the organization of a report to initiate and frame ways to pivot the oil and gas sector into geothermal energy (Green Pipeline, <https://www.lovegeothermal.org/wp-content/uploads/The-Green-Pipeline-2021.pdf>); a webinar jointly organized by IGA and the Geothermal Association of Kenya (GAK) on "Opportunities for Oil & Gas in Geothermal: Spotlight on East Africa, held on 7th October 2021

The pandemic situation has slowed down the activity. The new Board of Directors started its term on May 2020; only online meetings have been held, reducing the action to a minimum. The main activity was the re-organization of the World Geothermal Conference and the re-organization of IGA, moving its headquarters from New Zealand to The Netherlands.

### **3. Activities carried on by Adele Manzella within IGA during 2021 and impact on the Italian scientific community**

In the role of the Education&Information Committee Chair, the CNR delegate followed the activities for building a framework for geothermal data standards and methods to improve data collection and update the World Geothermal Congress (WGC) reporting. This work was launched in January 2021 and was led by the IGA Education and Information Committee with the goal of supporting the process of collecting, storing, and sharing coherent geothermal datasets. In March 2021, two groups of experts were formed: one for geothermal power generation and one for geothermal heating and cooling. Each expert group had two sets of activities, categorized broadly as reviewing data standards and data management/analysis. In November 2021, the work of the IGA experts was completed. These results will be used as standards for the IGA data collection and customized questionnaires for the World Geothermal Congresses Country Updates and proposed for reference to other organizations. The produced documents are available at the link <https://www.lovegeothermal.org/geothermal-data-standards/>

This activity paves the road to defining standards in the geothermal sector, an essential target in Italy and abroad.

The other main activity has been in participating the two annual Board Meetings.

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

This activity is significant for CNR, which manages the Italian geothermal database and information platform; harmonizing with the global database is strategic. Furthermore, CNR already collaborated with IGA in the past, organizing the venue for the publication of the IGA data. Re-establishing the collaboration would be beneficial both for CNR, in terms of visibility, and for IGA for utilizing the most sophisticated tools developed by the scientific community.

CNR does not currently support the cost of membership.

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

IGA is in evolution. The actual discussion is on enhancing corporate, affiliated, and institutional members' activities and participation. It is not clear yet, what will be the role of IGA at the global level concerning research and innovation. Still, the active participation in the Board is a way to inform and be informed of opportunities, ideas, and barriers to be overcome in Italy and abroad and of strategic collaboration. For future involvement, CNR should consider the payment of the annual fee.

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

Paolo Conti of the University of Pisa has been involved in the expert group responsible for revising heating and cooling data collection. He is also involved in the UNFC-IGA working group (see <https://www.lovegeothermal.org/about/people/iga-unfc-ad-hoc-committee/>. No activity is known from this latter in 2021). Enel Green Power is a corporate member of IGA, and Unione Geotermica Italiana is an affiliated member.

### **7. If Union with CNR Commission, short summary about the 2021 CNR Commission activities**

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

### **9. Conclusions**

The CNR delegate is working on establishing a worldwide collaboration in the geothermal sector. The involvement of other colleagues of CNR may be launched on topics that will depend on the expanding interests of IGA.

Signature

Place and date

Pisa, May 1, 2022

