

# GLOBAL GEOTHERMAL ALLIANCE

## UNLOCKING THE WORLD'S GEOTHERMAL POTENTIAL

The world contains vast geothermal energy potential, proven across nearly 90 countries. But almost 90% of this remains untapped with roughly 12 GW installed so far. \*

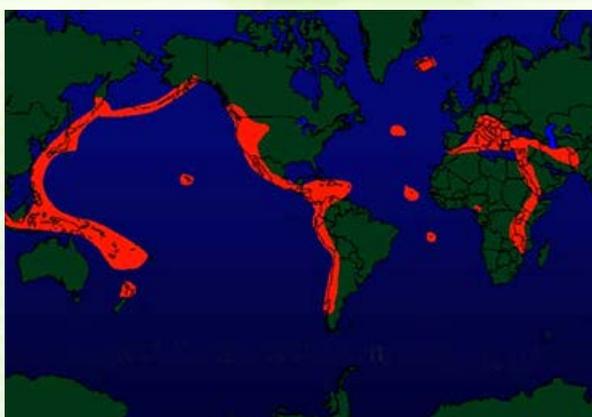
A geothermal plant provides decades of cost-effective power and direct heat. While the technology is mature and can significantly contribute to climate change mitigation, its uptake is constrained. Barriers include exploration risks, high upfront development costs, regulatory challenges, limited human resources and low awareness about geothermal energy.

### COORDINATED ACTION NEEDED

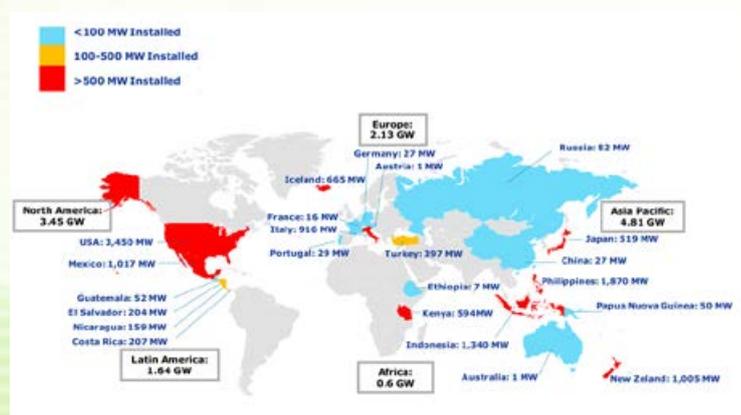
The Global Geothermal Alliance (GGA) seeks to address investment challenges and create enabling conditions for this key renewable energy resource. By fostering coordinated action among stakeholders from developed and emerging markets, the alliance seeks to achieve a 500% increase in global installed capacity for geothermal power generation and a 200% increase in geothermal heating by 2030.

### GLOBAL AND REGIONAL PARTNERSHIPS

In two years of preliminary consultations, the GGA has gathered substantial support from governments, development partners, regional and national institutions, non-governmental organisations and leading industry players. More than 40 countries and institutional partners have joined the alliance to date.



Hottest geothermal areas [GENI]



Installed geothermal capacity in 2015 worldwide (12.6GWe) [Bertani, 2015]

\* Based on 2015 data

## At COP21 in Paris, the alliance will call for joint global action to accelerate geothermal deployment.



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### GOING FORWARD

With the bulk of untapped potential existing in developing countries, geothermal projects could help to address the world's energy divide, improve energy access and ensure future energy security and independence for those markets.

The GGA offers a platform for:

- » Dialogue, cooperation and coordination
- » Customised technical assistance and advisory support
- » Holistic capacity-building engagement
- » Outreach and promotion for geothermal energy

#### PARTICIPATING COUNTRIES \*

- » **Africa:** Burundi, Djibouti, Egypt, Kenya, Uganda, Tanzania, Zimbabwe
- » **Asia:** Indonesia, Malaysia, Pakistan, Philippines
- » **Europe:** France, Iceland, Poland, Switzerland, Turkey
- » **The Americas:** Bolivia, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Peru
- » **Small Island Developing States:** Fiji, Papua New Guinea, Saint Vincent and the Grenadines, Solomon Islands, Tonga, Vanuatu

#### PARTNER INSTITUTIONS \*

- » **Development partners:** African Development Bank, African Union Commission, Eastern Africa Power Pool, Inter-American Development Bank, International Renewable Energy Agency, New Partnership for Africa's Development, Nordic Development Fund, Regional Center for Renewable Energy and Energy Efficiency for Arab Region, Southern Africa Power Pool, United Nations Environment Programme, World Bank – Energy Sector Management Assistance Program
- » **Industry:** European Geothermal Energy Council, International Geothermal Association, US Geothermal Energy Association
- » **Geothermal research institutions and academia:** AGH University of Science and Technology (Poland), Andean Geothermal Centre of Excellence (Chile), Serbian Geological Society (Serbia), Energy Institute Hrvoje Pozar (Croatia)

*\* As of November 2015*

For more information, e-mail: [info@irena.org](mailto:info@irena.org)

#### ABOUT IRENA

The International Renewable Energy Agency (IRENA) is an intergovernmental organisation that supports countries in their transition to a sustainable energy future, and serves as the principal platform for international co-operation, a centre of excellence, and a repository of policy, technology, resource and financial knowledge on renewable energy. IRENA promotes the widespread adoption and sustainable use of all forms of renewable energy, including bioenergy, geothermal, hydropower, ocean, solar and wind energy, in the pursuit of sustainable development, energy access, energy security and low-carbon economic growth and prosperity.

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