



Geothermal energy and development cooperation— New Zealand's experience



(Te Puia Geothermal Reserve, Rotorua)



New Zealand's geothermal sector

- Geothermal energy exploration began in the 1950s, first geothermal power plant operating from 1958
- Today—six geothermal fields, 18 geothermal power plants, total capacity of 985 megawatts, providing 17% of national grid electricity.
- New Zealand International Development Cooperation Programme – supporting geothermal energy development since the 1970s



(Nga Awa Puru geothermal plant)

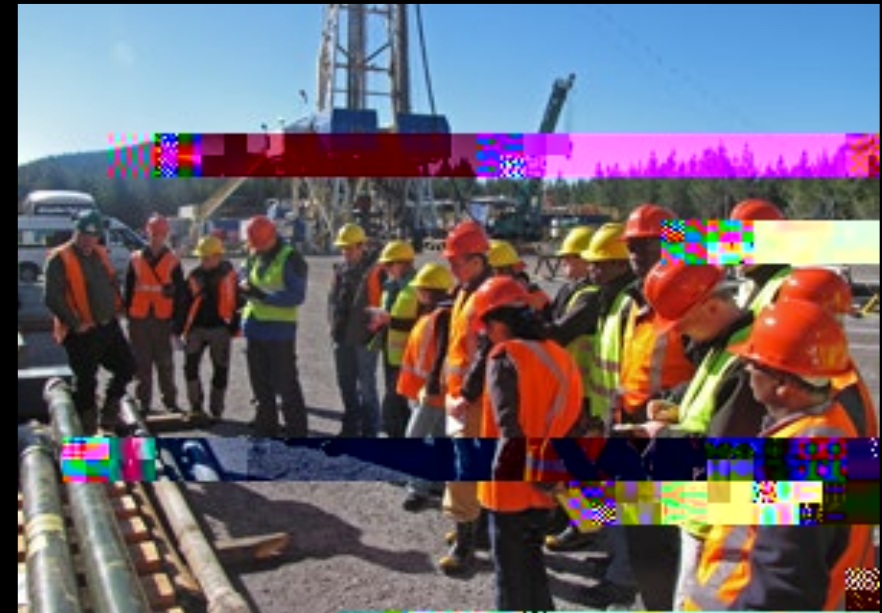
Geothermal energy development

- Geothermal development process
 - 1.

Indonesia



- Indonesia– Aotearoa New Zealand Geothermal Energy Programme
NZD 15.64m over 5 years
- Focus on
 - Geothermal energy policy, regulation and planning support
 - Technical support and capacity building
 - Increasing workforce skills and training

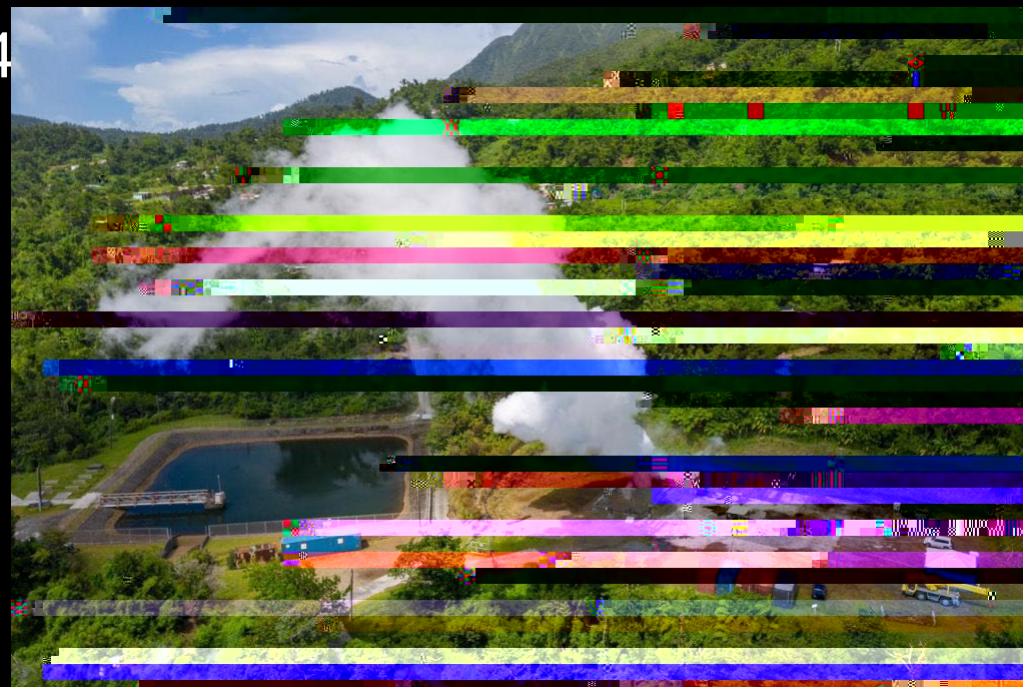


NZ Geothermal Institute training



Caribbean

- Caribbean Renewable Energy Facility 2014 – Present
- Focus on Commonwealth Small Island Developing States Dominica, St Lucia, St Vincent, Grenada, St Kitts and Nevis.
- Support for first geothermal power plant in Dominica for commercial development
- Design of GeoSmart Facility within the Caribbean Development Bank



Testing of a geothermal power plant in Dominica



Africa



- Africa Geothermal Facility 2017-2024, in partnership with African Union Commission
- Eleven eligible countries
- Technical support across the development lifecycle
- Online and in person training
- Support (and success) with applications for finance



Lessons learned

- Importance of community engagement
- Need for high level of technical expertise, long term commitment and significant lead in times
- Private sector has limited interest until potential projects are quantified and derisked (through exploration)
- Access to finance is crucial
- Training and scholarships

