

Pacific Geothermal Initiative



Context

- Geothermal potential identified in: Fiji, Vanuatu, Samoa, Solomon Islands,
 Papua New Guinea, American Samoa, Marianna Islands and Tonga
- Various stages of national and regional geothermal activities since the Mid
 90s
 - Regional geothermal survey
 - Feasibility studies and to some extent some exploratory drilling for some of the identified PICTs



Rationale

- Regional vision of "an energy secure Pacific" and working towards the goal of a "secured supply, efficient production and use of energy for sustainable development
- FAESP 2010 2020 has identified geothermal energy as one of the potential renewable energy sources under Theme 3 – Energy Production and Supply
- Geothermal exploration is most of the PICTs is covered under the Minerals and/or Geological related legislations
- Many PICTs are of volcanic origin and therefore present a significant potential of economically viable geothermal resources.



Rationale

- Detailed scoping of geothermal potential and supporting each PICT strengthen their respective institutional capacities:
 - policy and regulatory enabling environment
 - geo-scientific disciplines in general and
 - geothermal energy projects



Challenges for geothermal deployment in Pacific Island Communities and Territories

Absence or the lack of adapted legislation/policy

Risk management

Land issues

Limited human resources

Lack of awareness on geothermal

Dependence on development assistance.



Proposal for the geothermal preparation of the PICTs: the Pacific Geothermal Initiative

- Capacity building and technical assistance initiative for the preparation of geothermal exploration and operationalization: "the Pacific Geothermal Initiative"
- Activities implemented through national steering groups in collaboration with the Secretariat of the Pacific Community (SPC
- **IRENA, the Global Geothermal Alliance, and other partners** to support activities implementation



A recommended two phased approach

Phase I: Setting-up of steering processes and scoping of needs

Institutionalizing national energy technical committees and a regional with the mandate and the institutional capacity to lead the assessment of needs at the policy, technological and capacity levels.



Phase II: Direct technical assistance and training activities

Building capacity at the Institutional, technical expertise and enterprises levels for an enabling environment

Definition of pilot projects and building of skills to manage enabling policies and regulations

Geothermal mining operations, hydro-geological as well as geothermal research and project implementation



Simultaneous actions at the regional and national levels

The regional perspective

Promotion of bilateral and multilateral partnerships regionally and internationally

Policy consensus and capacity building

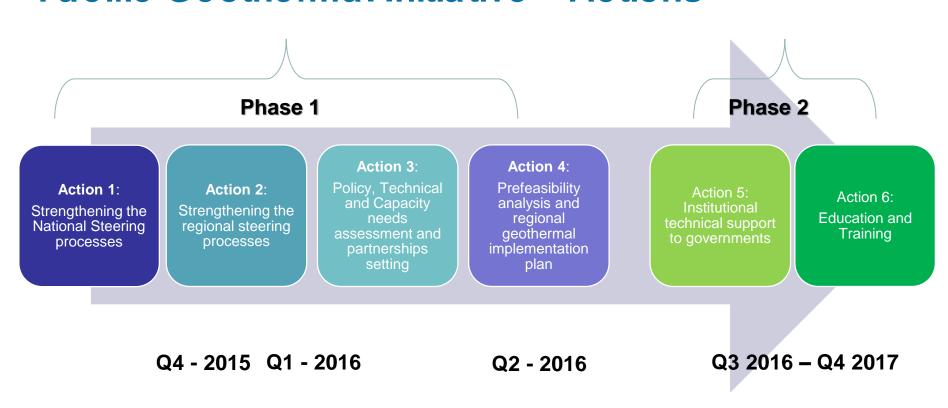
The national perspective

Technical assistance and capacity building to national institutions and industry partners

Advanced level of geothermal awareness, site identification, exploration and drilling abilities



Pacific Geothermal Initiative – Actions





Implementation partners



The Global Geothermal Alliance (GGA)

- The Global Geothermal Alliance (GGA) brings together leading geothermal countries as well as several private and public partners
- GGA to help with the coordination of global efforts for the improvement of:
 - Geothermal exploitation
 - Mitigating risks
 - Addressing the awareness
 - Targeted capacity building
 - Project identification and support needed by countries
- IRENA hosts the GGA secretariat



The Global Geothermal Alliance (GGA) – Membership as of 12 November 2015

Member Countries

Africa: Burundi, Djibouti, Egypt, Kenya, Uganda, Tanzania, Zimbabwe

Asia: Indonesia, Malaysia, Pakistan, Philippines

Europe: France, Iceland, Poland, Turkey

 America: Bolivia, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Peru

• Small islands: Fiji, Saint Vincent and the Grenadines, Tonga, Papua New Guinea, Vanuatu,

Partner Institutions

- Development partners: African Development Bank (AFDB), African Union Commission (AUC), Inter-American Development Bank (IDB), Eastern Africa Power Pool, International Renewable Energy Agency (IRENA), New Partnership for Africa's Development (NEPAD), Nordic Development Fund, Southern African Power Pool, United Nations Environment Programme (UNEP), World Bank – Energy Sector Management Assistance Program (ESMAP)
- Industry: European Geothermal Energy Council, International Geothermal Association
- Geothermal research institutions and academia: Andean Geothermal Centre of Excellence of Chile, Serbian Geological Society, Energy Institute Hrvoje Pozar