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

**Phase 1**

**Action 1:** Strengthening the National Steering processes
**Action 2:** Strengthening the regional steering processes
**Action 3:** Policy, Technical and Capacity needs assessment and partnerships setting
**Action 4:** Prefeasibility analysis and regional geothermal implementation plan

**Phase 2**

**Action 5:** Institutional technical support to governments
**Action 6:** Education and Training

- Q4 - 2015 to Q1 - 2016
- Q2 - 2016
- Q3 2016 – Q4 2017
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

- **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