## **Industry Update 2015**

**Jacobs** 

New Zealand Geothermal Workshop 2015



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#### **Overview of Jacobs**

- 1. Strong relationships
- 2. Pulling projects through from start to steam
- 3. Merger of Jacobs and SKM –almost 2 years
  - Same Team
  - Same Services
  - Broader reach
  - Access to broader and deeper pool of specialists



## **Jacobs Philippines**

- Philippine Geothermal Production Company, Inc.
  - Geoscience Advisory
  - "Sustaining-Capital" programme of engineering work at Mak-Ban and Tiwi
- Aboitiz Power Renewables, Inc.
  - Geothermal Technical Advisory
  - Geothermal Engineering
- Lenders Technical Advisory and Due Diligence











## **Philippines - Workshare**

- 120 staff in the Philippines Operation
- Core capability to support international workshare is in structural engineering and drafting
- In conjunction with our Indonesia office we provide cost competitive/high value engineering to the centre of excellence in Auckland, New Zealand.

**Aaron Hochwimmer** 



#### Indonesia

- Chevron Geothermal Indonesia.
  - Strong & lasting "partner" relationship
  - "Sustaining-Capital" programme of engineering work
    Salak & Darajat
  - Support on early stages of New Development Activity
- Star Energy
  - Support bidding for a new concession
- Supreme
  - Owners engineer for new development



#### Indonesia - Workshare

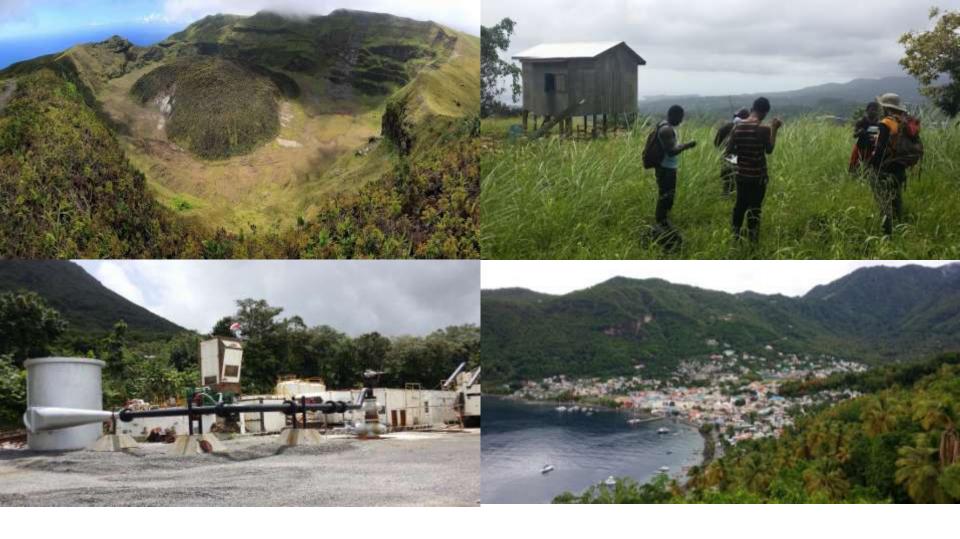
- 60 staff in the Indonesia Operation
- Core capability to support international workshare is in piping design, general industrial engineering and drafting



## **Caribbean Geothermal Development**

- New Zealand Aid funding for Technical Assistance for Caribbean Development Programme
- Jacobs New Zealand contracted with Advisor in region
- Activities
  - Surface exploration studies in St Lucia & Grenada
  - Technical Advisory to St Vincent, Dominica, St Kitts & Nevis
  - Regional capacity building
- Phase 3 programme (2015-18)





## **JACOBS**

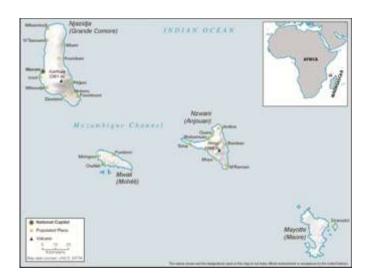
## **Phase 3 Programme**

- 1. Advisory and peer review
  - Provide governments with a second opinion or independent assessment of technical studies / reports.
  - Addresses capacity or knowledge gaps of Energy Unit staff.
  - Is required by senior officials / Ministers to make key decisions on progressing development
- 2. Technical studies identified through forward work plan
  - Infill MT survey in Grenada
  - Additional MT in St Lucia
  - Caribbean Development Bank GeoSmart Facility
- Capacity building activities including presentations, working with regional educational providers and identifying opportunities for internships or secondments.



#### Comoros

- New Zealand Aid funding for Technical Assistance for surface exploration 2014-2015
- GRMF funding for 80% costs SS
- Application submitted AR3 for exploration drilling
- Seeking co-funding for this next stage







## **Nicaragua**

- New drilling campaign at San Jacinto Jacobs providing on going support
- Assisting client in developing project plan for Casita geothermal prospect
- Statement of geothermal reserves and resources for IGA

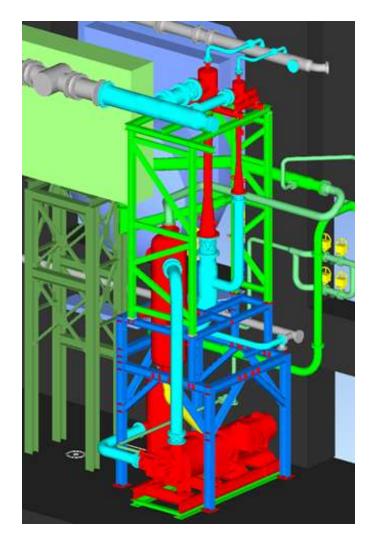




#### **Jacobs New Zealand**

- Te Ahi O Maui Partnership Ltd
  - Te Ahi O Maui Project Development
- Contact
  - Wairakei Gas Extraction System Upgrade









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