Yoshifumi Imamura
NZTE Tokyo

The 3rd wave continues
The 3rd Wave continues…

Source: TENPES, JOGMEC
The 3rd wave in Japan

>50 projects are on-going

Adopted Projects from FY2012 to FY2016

Currently, more than 50 exploration projects are on the road by electric companies, oil companies, mining companies, local government and other entities.

- Subsidized projects (57)
- Equity Capital projects (1)
- Liability Guarantee projects (4)
Japanese government budget for Geothermal Industries

JPY 25 Billion (NZ$ 350 Million) has been spent to boost geothermal industries in fiscal year 2016.

Source: NEDO Feb. 2017
FIT: Feed In Tariff

Japanese government sees geothermal as a baseload resource.

- Wholesales price:
  - JPY 26 (NZ$ 0.34) for \( \geq 15 \text{MW} \)
  - JPY 40 (NZ$ 0.52) for < 15
- Guaranteed for 15 years
- FIT can be applied for replace/refurbishments of existing plants

Agency for Natural Resource & Energy, The Ministry of Economy Trade & Industry (Japan) 2017

Agenda

Update on the Geothermal Energy Situation in Japan

Strategic Directions for Geothermal

Investment Landscape – Opportunities and Challenges

NZTE – led Geothermal activities
Japan Energy Mix

Percentage composition of generated power by electric sources

- New Energy: 3.2%
- Nuclear Power: 1.0%
- LNG: 46.1%
- Petroleum: 10.6%
- Coal: 31.0%
- Hydroelectric: 8.4%

[Graph depicting percentage composition of generated power by electric sources with specific percentages for each source.]
Nuclear Power Plants in Japan

Resumed 5 as of today.

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<tr>
<th>Status</th>
<th># of Reactors</th>
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<td>Discontinued</td>
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Source: Japan Atomic Energy Relations Organization. Data partially processed.
Japan “Tripling” Geothermal Capacity

Geothermal shall be 1.0% of the power supply by FY 2030.

Source: JOGMEC, 20 November 2017
What NZ can do for Japan?

Can NZ share experience & experts?

What NZ can do for Japan?
Massive introduction of renewable energy

The amount of RE generation has doubled due to the introduction of the Feed-In Tariff in 2012. The Japanese government set the proportion of renewable energy at 22-24% in the energy mix of 2030.


Energy Mix (2016 and 2030)

(Source) International Energy Agency
(http://www.iea.org/statistics/statisticssearch/report/?country=JAPAN=&product=electricityandheat)

(http://www.enecho.meti.go.jp/committee/council/basic_policy_subcommittee/025/pdf/025_008.pdf) (JPN Only)
JETRO’s activities and services

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  - History of supporting foreign companies’ investment in Japan

- **1,700**
  - Cases of successful investment by foreign companies with our support

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  - Projects supported (FY2003-2017)

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  - JETRO staff members supporting your business in Japan

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Japan Geothermal Event – Tokyo 2018

The 3rd networking event in February 2018

- New Zealand Geothermal Seminar in Tokyo, taking place at the New Zealand Embassy in Tokyo on February 2018.
- This is an opportunity for New Zealand companies to present at an exclusive seminar and engage with local industry representatives.
- There is a required cost contribution of NZ$1000 per company to support the preparation and running of this seminar.
Country Perception Research

Through the Japan Looking Glass – Country Perception Research

- 20 pages of a research booklet available on NZ Story: https://www.nzstory.govt.nz/
- Contents:
  - WHAT DO WE KNOW ABOUT JAPAN?
    - The research identified a number of distinctive Japanese characteristics which represent key cultural differences that impact business and buying decisions.
    - Exporters and their advisors should remember these aspects of Japan when they work in this market.
  - HOW DOES JAPAN PERCEIVE NEW ZEALAND?
  - WHAT ARE KEY POINTS TO REMEMBER WHEN DOING BUSINESS IN JAPAN?
  - HOW DO WE CREATE PERSUASIVE MESSAGING AND STORIES FOR JAPAN?
  - MESSAGING CONCEPTS
Summary

The 3rd wave is on.

- >50 geothermal projects are on going.
- Japanese government is spending >$350mn for boosting the wave
- Improving FIT
- “Tripling” Geothermal Capacity

Find right partner(s).

Join Geothermal Seminar in Japan on February 2018.