Programme Women In Geothermal Workshop
Celebrating anniversary of 60 years of diplomatic relations
between New Zealand and Indonesia (1958 - 2018)
& marking International Women’s Day

BUSSINESS CASE FOR WOMEN IN GEOTHERMAL ENERGY SECTOR IN INDONESIA

Nenny Miryani Saptadji
Institut Teknologi Bandung (ITB)

March 8, 2018, Fairmont Hotel, Jakarta
<table>
<thead>
<tr>
<th>Year Range</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982 - now</td>
<td>Institut Teknologi Bandung (ITB)</td>
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<tr>
<td></td>
<td>1982 - now : Petroleum Engineering Program.</td>
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<tr>
<td></td>
<td>2008 - now : Geothermal Master Program.</td>
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<tr>
<td>1986</td>
<td>Geothermal Institute, University of Auckland, NZ.</td>
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<td></td>
<td>Post-graduate Dipl. Course in Geothermal Energy Technology.</td>
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<tr>
<td>1987</td>
<td>Geothermal Institute, University of Auckland, NZ.</td>
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<td></td>
<td>3-months courses on Geothermal Reservoir Engineering.</td>
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<tr>
<td>1988 - 1995</td>
<td>University of Auckland, NZ, Master Leading to PhD.</td>
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<tr>
<td>2008 - 2014</td>
<td>Head of ITB Geothermal Master Program.</td>
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<tr>
<td>2010</td>
<td>Co-chair of Technical Session Committee, WGC2010.</td>
</tr>
<tr>
<td>2012 - 2015</td>
<td>PIC of US-Indonesian Geothermal Education Capacity Building Program</td>
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</tbody>
</table>
| 2015        | Member of the Advisory Board of ITB’s Geothermal Master Program
Women in Faculty of Mining, Petroleum and Geothermal Engineering of ITB, incl. geophysists

<table>
<thead>
<tr>
<th>Year</th>
<th>Women</th>
<th>Men</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>85</td>
<td>264</td>
<td>349</td>
</tr>
<tr>
<td>2015</td>
<td>103</td>
<td>329</td>
<td>432</td>
</tr>
<tr>
<td>2016</td>
<td>98</td>
<td>333</td>
<td>431</td>
</tr>
<tr>
<td>2017</td>
<td>109</td>
<td>343</td>
<td>452</td>
</tr>
</tbody>
</table>

male-dominated

- women: 85, 103, 98, 109
- men: 264, 329, 333, 343

- women: 20%, 23%, 22%, 24%
- men: 80%, 77%, 78%, 76%
ITB Geothermal Master Program (Number of graduates: 172)

Applicant | Student Intake | Graduated
---|---|---
2008 | 19 | 18 | 7
2009 | 16 | 13 | 7
2010 | 23 | 19 | 7
2011 | 53 | 37 | 15
2012 | 37 | 35 | 16
2013 | 66 | 49 | 21
2014 | 35 | 15 | 7
2015 | 31 | 31 | 23
2016 | 27 | 24 | 15
2017 | 26 | 22 | 12

Geothermal ITB
ITB Geothermal Master Program

male-dominated

Class 2015

Class 2016

Class 2017
Where are the geothermal graduates now?

Number of graduates: 172

Waiting time for Job Hire

- 0-3 months: 70%
- 3-6 months: 10%
- 6-12 months: 7%
- 1-2 years: 4%
- >2 years: 4%

- 24% Private Sector
- 10% Government
- 4% PhD Program
- 11% Unemployed/
  No Recent Status
- 4% Service Company
- 4% Fresh Graduate
- 35% Geothermal Developer

Lecturer
Where are the women graduates now?

**WING at the Geothermal Industry:**
1. PT Pertamina Geothermal Energy
2. Termochem Ltd.
3. Star Energy Geothermal Ltd.
4. PT. Rekayasa Industri (EPC Company)
5. SOL - Sarulla Operation Ltd.

**WING at the Ministry of Energy:**
1. Geology Agency
2. Research and Development Centre
3. Directorate of New & Renewable Energy
4. BPPT - Agency for the Assessment and Application Technology

**WING at Universities:**
1. Geothermal ITB - lecturer of Geothermal Master Program
2. Prasetiya Mulya University - lecturer of Renewable Energy Program
3. Tanri Abeng University - lecturer of Petroleum Engineering Program
4. Kyoto University - PhD Program

**WING as Freelancer:** PT Gada Energy, LAPI ITB, Consultant of Indonesia Power, GCoE
Suryantini (Ninik)

ITB Lecturer, Head of the ITB Geothermal Workshop

• She has multiple roles in her lives.
• She always fulfill her commitment as a teacher and as a mother.
• She create an environment to enable flexibility in the workplace.
• She is hardworking lecturer, self-sufficient, tough
WING at ITB Geothermal Master Program

WING are:
1. Approachable (work well with others),
2. Charismatic (can be a leader when need be),
3. Cheerful (develop a positive work environment),
4. Clever (can juggle multiple tasks),
5. Competitive (thrive under pressure),
6. Confident (not afraid to ask questions),
7. Cooperative (get along well in a team setting),
8. Creative (think outside the box),
9. Curiosity (eager to learn),
10. Devoted (committed to the team’s success).
11. Diligent (always work their hardest)
12. Easygoing (easily adapt to new situations).
13. Energetic (able to work long and hard hours),
14. Enthusiastic (put their all into every project)
How to decrease the gender gap between men and women enroll at ITB Geothermal Master Program

- Encourage female undergraduate students who have good potential to continue their studies at ITB Geothermal Master Program, through the fast-track program.
- Provide good potential undergraduate students more information about geothermal plan of development in Indonesia.
CLOSING REMARK

We want women to be visible and to inspire, to be up front, in positions of influence, making decisions and leading. We want them to then have the courage to step into these roles too.

Andrea Blair

Always work with passion and enthusiasm, have the courage to take bigger opportunities and responsibilities. Keep balancing careers and family commitments and **BE DIFFERENCE MAKER** in the community.

Nenny Saptadji