



GEOCAP
Geothermal Capacity Building Program Indonesia - Netherlands

- OPEN SCIENCE DAY

6 February 2019 at the Erasmus Huis Jakarta

Transition from fossil fuels to renewable energy sources is one of the biggest challenges and game changers for the coming decades both in the Netherlands as well as in Indonesia but an essential one if we wish to reach the Paris agreements on climate fostering a CO2 neutral society. GEOCAP is a bilateral Indonesian-Netherlands program focusing on capacity building in geothermal in Indonesia particularly engaging with universities and polytechnics outside Java that are establishing curricula that will deliver skilled personnel to the local geothermal market. The program focused on renewable electricity production and direct use of geothermal resources for a range of industrial applications such as heating of buildings, drying of agricultural products, heat for industries with a large heat demand (e.g., paper industry), etc. GEOCAP formally started in 2013 and will be closed during a formal closing event on 7 February 2019.

Although geothermal energy is environmentally friendly there are hurdles for the uptake in Indonesia. The most important ones are: (1) there is not enough skilled personnel to work on the development of geothermal fields particularly in prospective areas outside Java, (2) the fact that many prospective geothermal areas are in forest conservation areas thus there are competing claims between forest management and energy production, and (3) a negative cultural connotation of the general public to exploration for resources. GEOCAP contributes to capacity building in geothermal by means of training of personnel and engaging with decision makers in government and private sector. Business cases have been developed to ease the generation and uptake of renewable energy. Best practices have been shared through awareness creation workshops to align forest conservation and geothermal exploration.

GEOCAP will share its scientific achievements with the general public and interested parties on 6 February 2019 through the 'GEOCAP open science day' at the Erasmus Huis Jakarta on the premises of the Embassy of the Kingdom of the Netherlands. Backstopping and sustainability of the network is important for the community of practice that we have built over the last years. Hence we will also share some activities that are continuing that can be joined and we will discuss novel issues we may want to develop under a new program.

**We hope to welcome you at the Erasmus Huis Jakarta
on the 6th of February!**



Freek van der Meer
GEOCAP project leader



Sanusi Satar
GEOCAP project leader



Program

09:00 - 09:30	Registration and Welcome coffee & tea
09:30 - 09:50	Welcome Speeches: Embassy, BAPPENAS, INAGA, GEOCAP
09:50 - 10:10	Review of Indonesian Geothermal Development toward 2025 and Beyond - Sanusi Satar (INAGA)
10:10 - 10:50	Key Note presentation by Fabby Tumiwa
10:50 - 11:10	Use of low-enthalpy geothermal heat for tea drying - Widodo Wahyu Purwanto and Dijan Supramono (Universitas Indonesia)
11:10 - 11:30	Geothermal exploration in the Netherlands - Fred Beekman (Utrecht University)
11:30 - 11:50	How to optimize MT Imaging Technology to reduce geothermal drilling risks - Yunus Daud (Universitas Indonesia)
11:50 - 12:10	Geological lineament density and geothermal manifestation distribution analysis based on aster, dem and satellite gravity imagery integration at southern part of Bajawa, Ngada District, Nusa Tenggara Timur province – Dani Mardiaty (Universitas Gadjah Mada)
12:10 - 13:30	Lunch
13:30 - 14:10	Key Note presentation by Jan Diederik van Wees entitled “A mission oriented approach towards geothermal energy development: enacting wishful or visionary thinking? perspectives from EU and NL”
14:10 - 15:00	Rapid Fire presentations by PhD candidates: (1) Assessing the role of pull-apart basins for high enthalpy geothermal resource in transcurrent tectonic setting: Sumatra case study - Lukman Sutrisno, (2) Tectonic Evolution of Flores Island, Indonesia - Ahmad Fauzi Purwandono, (3) Ecosystem Services Mapping of Geothermal Working Area - Jarot Semedi, (4) Q&A
15:00 - 15:30	Afternoon Tea
15:30 - 15:50	Airborne LiDAR and Thermal Infrared Survey for Surface Manifestation Mapping in Bajawa, Flores Island - Chris Hecker (University of Twente)
15:50 - 16:10	Geothermal direct use in the industry: opportunities for standard wells and slim hole wells - Rob Kleinlugtenbelt (IF Technology)
16:10 - 16:30	On the importance of regional understanding for geothermal energy exploration - Damien Bonté (Utrecht University)
16:30 - 16:50	Going small: a way to succeed in geothermal? - Fiorenza Deon (GFZ, Technical University of Delft, University of Twente)
16:50 - 17:00	Concluding remarks
17:00 - 18:00	Networking Drinks

About the Keynote Speakers

Fabby Tumiwa

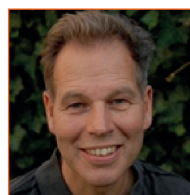


Fabby Tumiwa is the Executive Director of Institute for Essential Services Reform (IESR). He has been working extensively on energy and climate change issues for more than fifteen years. His expertise is in energy policy and regulation, renewable energy technology and

economics and organizational development. He has been carrying out studies and analysis on energy and electricity policies in Indonesia and global level.

Fabby writes his thoughts in a number of articles in media and speaks at various forums at national and international level. Fabby is a member of the Indonesian delegation for the International conference on climate change and provides analysis and inputs related to funding and mitigation actions. He is a member of the climate finance and international negotiation working group on the national climate change council, a member of the Indonesian Climate Change Trust Fund (ICCTF) and a member of the Sumba Iconic Island taskforce under the Ministry of Energy and Mineral Resources. Fabby was a fellow of LEAD (Cohort 12) and Eisenhower in 2009

Jan-Diederik van Wees



Jan-Diederik van Wees is principal scientist geothermal research at TNO, and professor at Utrecht University. He has published over 100 ISI journal papers in leading international journals on tectonics, reservoir engineering, induced seismicity, resource assessment, and

techno-economic models. His current research expertise focuses towards geothermal energy development in the Netherlands and internationally. Van Wees serves in various co-ordinating roles in major European and Dutch geothermal research projects, including sub-program management (resource assessment) in the Joint Program on Geothermal Energy of the European Energy Research Alliance and vice president of the European Technology and Innovation Platform for Deep Geothermal Energy (ETIP-DG) for the SET-PLAN. Under his leadership, TNO has developed various state-of-the-art geothermal information systems and performance assessment methodologies, including thermoGIS and the portfolio approach for accelerating geothermal development in the Netherlands. Apart from geothermal energy applications, models have been developed for CO2 storage, and hydrocarbon exploration and production.

Participation is free or charge!

Register your participation through this page www.itc.nl/geocapopenscienceday

before January 30th 2019. LIMITED SEATS AVAILABLE