## Work package 1.06

# Study guide

#### **Development and use**

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## Abstract

Keywords: decision making, best practices, renewable energy markets, strategy development, energy transition, policy design,

The course focuses on giving the participants a broader perspective of the renewable energy market and understanding of the policy framework, while providing insight in tools and methodologies to reach Geothermal targets (define targets). The participant will gain insight in decision (more specific about the decisions needs to be taken) making processes, methodologies and best practices that can be applied for the development of new projects and new policies.

## **Target Group**

The primary target group is decision high level makers at (central) government for the department of Energy, Finance, forestry, and the energy commission. Secondary, the course is intended for decision makers of (state owned and private) companies and industries.

Required knowledge: understanding of Geothermal law, understanding of project finance, understanding of risk evaluation and decision making methodologies Required skills: Recommended course(s): WP 1.07 and WP 1.08

## Content

The following topics are addressed in the course:

## Knowledge

- Overview energy transition strategies (global and regional)
- Renewable energy schemes examples (NL, DE, US, New Zeeland, UAE) (lessons learned)
- Geothermal policy framework Indonesia (practice vs policy)
- Outlook Indonesian Energy mix (targets and challenges, gap analysis)
- Early experience with Geothermal policy framework
- Introduction into decision making methodologies and processes

- Project development phases, decision criteria and gates
- Bankability criteria, process and documents (WB, IFC)
- Decision strategies and evaluation criteria
- Methodology to achieve targets and mix (roadmap development and scheduling)

## Practical capability

Participants can apply the knowledge in:

- Decision aspects related to selecting best in class developers
- Apply best practices into policy (re)design
- Develop frameworks to achieve national geothermal targets (e.g. roadmaps)

## Skills and attitude

Participants have developed appropriate communicative skills and attitude for:

- Create a framework/basis to take informed decisions
- Provide guidance and context to working teams
- Disseminate strategic insight through oral presentations
- Communicate and transfer insight with peers
- Provide strategic insight through concise and effective written methods

## Study load

3 – 5 day workshop without homework

## **Course structure**

Part I – Context

- General
  - Paris COP and implications for Indonesia
  - Strategies energy transition (global and regional)
  - Example: Renewable energy schemes (NL, DL, US, NZ)
- Indonesia
  - Geothermal policy framework (practice vs policies)
  - Outlook Indonesian energy mix
  - Early experience/ lessons learned
- Part II Decision making methods
  - Decision making methodologies and processes
  - Project development phases, decision criteria and gates
- Part III Tools
  - SEA (strategic environmental assessment) approach (WP 1.08, Joan)
  - Risk analysis methods (WP 1.07, Christiaan )
  - Bankability criteria, processes and documents
- Part IV Decision making
  - Decision strategies and evaluation criteria
  - Methodology to achieve targets and mix (roadmap development and scheduling)
  - Discussion/ interactive: Support government different methods
  - Relevance National Database discussion (content?) Failure database plant + results drilling

## **Teaching and learning methods**

- Lectures

- Exercises
- Group assignments

#### Assessment

Attendance during the complete workshop required

## Study materials/ Teaching materials

- Power point presentation