



## ID-Geothermal Energy Upstream Development (P155047)

EAST ASIA AND PACIFIC | Indonesia | Energy & Extractives Global Practice |  
Recipient Executed Activities | Investment Project Financing | FY 2017 | Seq No: 6 | ARCHIVED on 15-Apr-2019 | ISR36485 |

Implementing Agencies: PT Sarana Multi Infrastruktur (Persero), PT Sarana Multi Infrastruktur (Persero)

### Key Dates

#### Key Project Dates

Bank Approval Date: 09-Feb-2017

Effectiveness Date: 04-Aug-2017

Planned Mid Term Review Date: 31-Oct-2019

Actual Mid-Term Review Date: --

Original Closing Date: 31-Dec-2022

Revised Closing Date: 31-Dec-2022

### Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The PDO is to facilitate investment in geothermal power generation and reduce greenhouse gas emissions.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

### Components

Name

Risk Mitigation for Geothermal Exploration Drilling:(Cost \$98.00 M)

Capacity Building on Geothermal Exploration and Environmental and Social Safeguards Management

### Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	● Satisfactory	● Moderately Satisfactory
Overall Implementation Progress (IP)	● Moderately Satisfactory	● Moderately Satisfactory
Overall Risk Rating	● Substantial	● Substantial

### Implementation Status and Key Decisions

The Project has made progress in procurement and work planning for Waesano as the first sub-project. The second sub-project has been identified to be Jailolo in North Maluku. Ground mobilization for Waesano and preparatory studies for Jailolo are expected in the second half of 2019. At least one more sub-project is expected to be identified to be included in the Project.

### Risks



## Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	● Substantial	● Substantial	● Substantial
Macroeconomic	● Moderate	● Moderate	● Moderate
Sector Strategies and Policies	● Substantial	● Substantial	● Substantial
Technical Design of Project or Program	● Moderate	● Moderate	● Moderate
Institutional Capacity for Implementation and Sustainability	● Substantial	● Substantial	● Substantial
Fiduciary	● Substantial	● Substantial	● Substantial
Environment and Social	● Substantial	● Substantial	● Substantial
Stakeholders	● Substantial	● Substantial	● Substantial
Other	--	--	--
Overall	● Substantial	● Substantial	● Substantial

## Results

### PDO Indicators by Objectives / Outcomes

To facilitate investment in geothermal power generation				
▶ Electric power generation capacity enabled through the issuance of geothermal development licenses (Megawatt, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	65.00
Date	01-May-2017	13-Sep-2018	31-Mar-2019	30-Dec-2022
▶ Commercial capital mobilized for investment in geothermal power generation (million) (Amount(USD), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	195.00
Date	01-May-2017	13-Sep-2018	31-Mar-2019	30-Dec-2022
To reduce greenhouse gas emissions				
▶ Estimated GHG emission reduction compared to a business-as-usual baseline (Metric ton, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	0.33



Date	01-May-2017	13-Sep-2018	31-Mar-2019	30-Dec-2022
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### Intermediate Results Indicators by Components

Risk Mitigation for Geothermal Exploration Drilling				
▶ Total generating capacity-equivalent of steam yield from all wells drilled (Megawatt, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	48.00
Date	01-May-2017	13-Sep-2018	31-Mar-2019	30-Dec-2022
▶ Average generating capacity-equivalent of steam yield per well drilled (Megawatt, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	6.00
Date	01-May-2017	13-Sep-2018	31-Mar-2019	30-Dec-2022
▶ Issuance of geothermal development licenses (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	4.00
Date	01-May-2017	13-Sep-2018	31-Mar-2019	30-Dec-2022
▶ Estimated increase in the number of connected households for the associated local electricity networks (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	116,411.00
Date	01-May-2017	13-Sep-2018	31-Mar-2019	30-Dec-2022
▶ Direct project beneficiaries (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	582,055.00
Date	01-May-2017	13-Sep-2018	31-Mar-2019	30-Dec-2022
▲ Female beneficiaries (Percentage, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	50.00



►Delivery of Inferred Resource Capacity Reports by Exploration Management Team (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	1.00	1.00	5.00
Date	01-May-2017	13-Sep-2018	31-Mar-2019	30-Dec-2022
►Villages located next to exploration sites with at least one public consultation held (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	100.00	100.00	100.00
Date	01-May-2017	13-Sep-2018	31-Mar-2019	30-Dec-2022
►Share of public consultations segregated by gender (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	12.00	12.00	50.00
Date	01-May-2017	13-Sep-2018	31-Mar-2019	30-Dec-2022

Capacity Building on Geothermal Exploration and Environmental and Social Safeguards Management				
►Practice guides for safeguards implementation (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	2.00
Date	01-May-2017	13-Sep-2018	31-Mar-2019	30-Dec-2022

## Data on Financial Performance

### Disbursements (by loan)

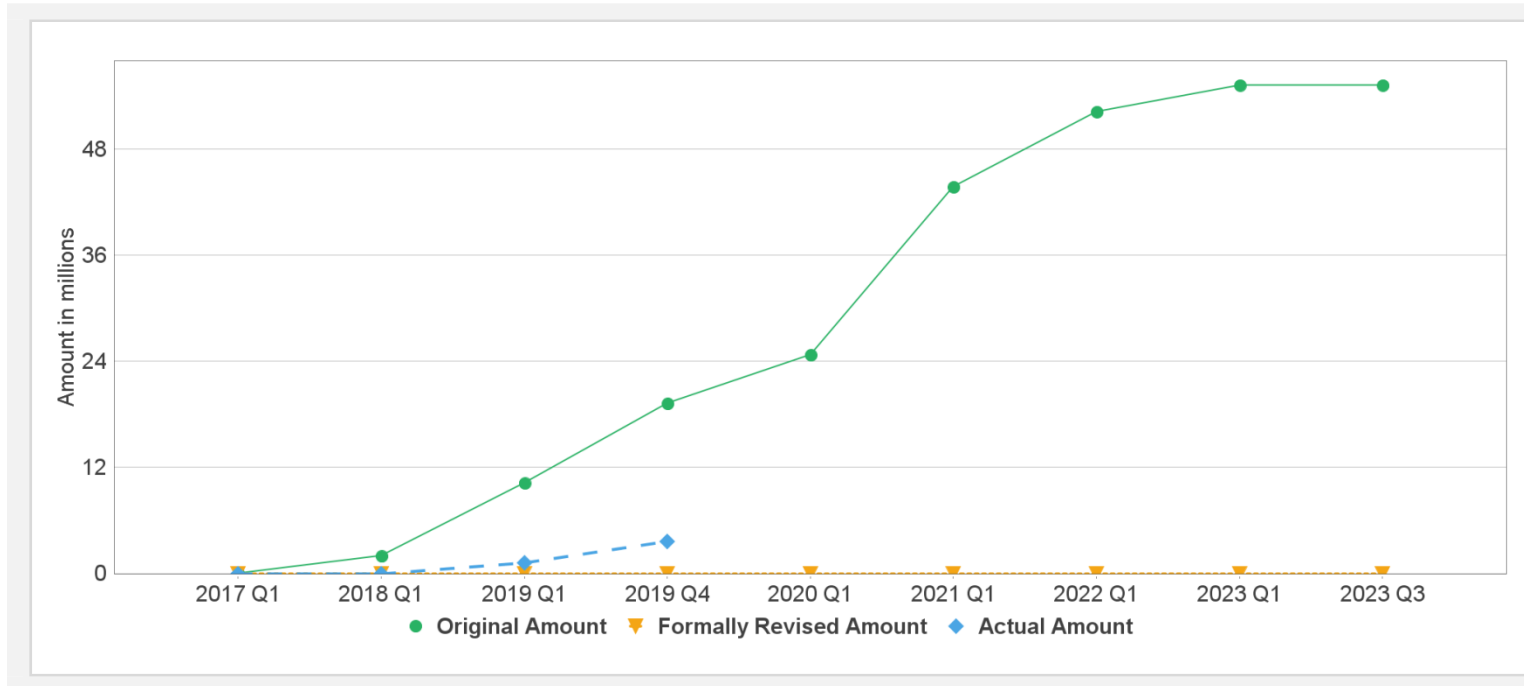
Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P161644	TF-A4086	Effective	USD	6.25	6.25	0.00	1.54	4.71	25%
P155047	TF-A4089	Effective	USD	49.00	49.00	0.00	2.10	46.90	4%

### Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
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P161644	TF-A4086	Effective	09-Feb-2017	07-Mar-2017	04-Aug-2017	31-Dec-2022	31-Dec-2022
P155047	TF-A4089	Effective	09-Feb-2017	07-Mar-2017	04-Aug-2017	31-Dec-2022	31-Dec-2022

### Cumulative Disbursements



### Restructuring History

There has been no restructuring to date.

### Related Project(s)

P161644-ID-Geothermal Energy Upstream Development