



## Turkey Geothermal Development Project (P151739)

EUROPE AND CENTRAL ASIA | Turkey | Energy & Extractives Global Practice |  
IBRD/IDA | Investment Project Financing | FY 2017 | Seq No: 5 | ARCHIVED on 13-Jun-2019 | ISR37006 |

Implementing Agencies: Turkiye Sinai Kalkinma Bankasi A.S. (TSKB), Turkiye Sinai Kalkinma Bankasi A.S. (TSKB), Turkiye Kalkinma Bankasi A.S. (TKB), Turkiye Kalkinma Bankasi A.S. (TKB)

### Key Dates

#### Key Project Dates

Bank Approval Date: 01-Nov-2016

Effectiveness Date: 16-Feb-2017

Planned Mid Term Review Date: 29-Nov-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 Project Development Objective is to scale up private sector investment in geothermal energy development in Turkey.

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

No

### Components

Name

Risk Sharing Mechanism for Resource Validation:(Cost \$39.80 M)

Loan Facility for Resource Development:(Cost \$312.50 M)

### Overall Ratings

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

### Implementation Status and Key Decisions

Project implementation is progressing satisfactorily.

TKYB has completed evaluation of applications under the first round of the the Risk Sharing Mechanism (RSM). It is expected that up to seven Beneficiary Agreements will be signed by August 30, 2019.

Two sub-projects financed by TKYB under its IBRD Credit Line involve the installation of a total of 33 MW and include investments in capacity drilling and power plant construction. An additional three sub-projects have been financed by TSKB which involve the installation of a total of 183 MW and also include investments in capacity drilling and power plant construction.

## Risks

### Systematic Operations Risk-rating Tool

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

## Results

### PDO Indicators by Objectives / Outcomes

Mobilization of private capital				
▶ Private Capital Mobilized (Amount(USD), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	649.43	649.43	619.00
Date	30-Jun-2015	20-Nov-2018	30-May-2019	31-Dec-2021

Increased generation capacity from geothermal resources				
▶ Generation Capacity of Renewable Energy (other than hydropower) constructed (Megawatt, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	198.00	198.00	110.00
Date	30-Jan-2015	20-Nov-2018	30-May-2019	31-Dec-2021
▲ Generation Capacity of Renewable Energy constructed-Geo-thermal (Megawatt, Custom Breakdown)				



	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	33.20	198.00	110.00
Date	31-Dec-2014	19-Mar-2018	30-May-2019	31-Dec-2021

Reduction of CO2 emissions				
►Potential CO2 emissions reductions (Metric tons/year, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	650,927.00
Date	15-Feb-2017	20-Nov-2018	30-May-2019	31-Dec-2021

### Intermediate Results Indicators by Components

Risk Sharing Mechanism for Resource Validation				
►Volume of direct financing catalyzed by CTF financing (Amount(USD), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	202.00
Date	30-Jun-2015	20-Nov-2018	30-May-2019	31-Dec-2022
►Exploration drilling projects supported under the Risk Sharing Mechanism (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	20.00
Date	30-Jun-2015	20-Nov-2018	30-May-2019	31-Dec-2022
►Geothermal resources (for electricity and heat) confirmed through exploration drilling (Megawatt, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	192.00
Date	30-Jun-2015	20-Nov-2018	30-May-2019	31-Dec-2022
►Grievance registered related to delivery of project benefits addressed within stipulated service standards for response times (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	100.00	100.00	100.00
Date	30-Jun-2015	20-Nov-2018	30-May-2019	31-Dec-2022



Loan Facility for Resource Development				
▶Volume of indirect financing catalyzed by CTF financing – (Core) (Amount(USD), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	117.00
Date	30-Jun-2015	20-Nov-2018	30-May-2019	31-Dec-2022
▶Geothermal resources developed through capacity drilling (Megawatt, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	147.00	147.00	120.00
Date	30-Jun-2015	20-Nov-2018	30-May-2019	31-Dec-2022
▶Capacity drilling projects supported by the Loan Facility (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	4.00	4.00	5.00
Date	30-Jun-2015	20-Nov-2018	30-May-2019	31-Dec-2022
▶Grievance registered related to delivery of project benefits addressed within stipulated service standards for response times (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	100.00	100.00	100.00
Date	30-Jun-2015	20-Nov-2018	30-May-2019	31-Dec-2022
▶Portfolio at risk 90 days (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	4.00	4.00	4.00
Date	30-Jun-2015	20-Nov-2018	31-May-2019	31-Dec-2022

## Data on Financial Performance

### Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P151739	IBRD-86520	Effective	USD	100.00	100.00	0.00	52.77	47.23	53%

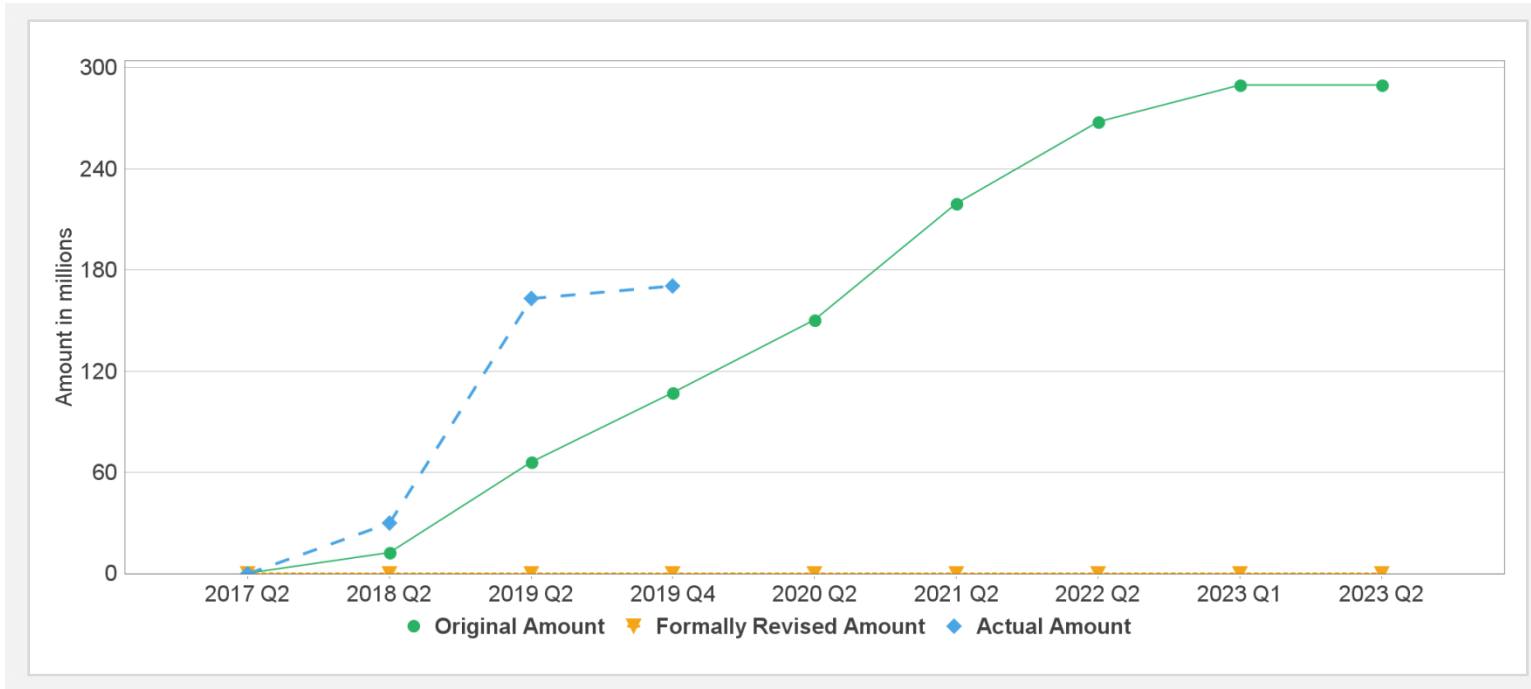


P151739	IBRD-86530	Effective	USD	150.00	150.00	0.00	117.88	32.13	<div style="width: 79%; height: 15px; background-color: #4CAF50;"></div>	79%
P151739	TF-A1532	Effective	USD	39.80	39.80	0.00	0.53	39.27	<div style="width: 1.3%; height: 15px; background-color: #4CAF50;"></div>	1.3%

**Key Dates (by loan)**

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P151739	IBRD-86520	Effective	01-Nov-2016	30-Nov-2016	16-Feb-2017	31-Dec-2022	31-Dec-2022
P151739	IBRD-86530	Effective	01-Nov-2016	30-Nov-2016	16-Feb-2017	31-Dec-2022	31-Dec-2022
P151739	TF-A1532	Effective	30-Nov-2016	30-Nov-2016	04-Apr-2017	31-Dec-2022	31-Dec-2022

**Cumulative Disbursements**



**Restructuring History**

Level 2 Approved on 20-Aug-2018

**Related Project(s)**

There are no related projects.