

## Turkey Geothermal Development Project (P151739)

EUROPE AND CENTRAL ASIA | Turkey | Energy & Extractives Global Practice | IBRD/IDA | Investment Project Financing | FY 2017 | Seq No: 3 | ARCHIVED on 06-Apr-2018 | ISR31854 |

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**

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Bank Approval Date:01-Nov-2016

Planned Mid Term Review Date:22-Oct-2018

Original Closing Date:31-Dec-2022

Effectiveness Date:16-Feb-2017
Actual Mid-Term Review Date:-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?

#### 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	<ul><li>Satisfactory</li></ul>	<ul><li>Satisfactory</li></ul>
Overall Implementation Progress (IP)	<ul><li>Moderately Satisfactory</li></ul>	<ul><li>Moderately Satisfactory</li></ul>
Overall Risk Rating	<ul><li>Substantial</li></ul>	<ul><li>Substantial</li></ul>

#### Implementation Status and Key Decisions

Project implementation is progressing satisfactorily.

TKB has completed the selection process for the Risk Sharing Mechanism (RSM) Consultant. The workshop to launch the first round of applications to the RSM is expected to be held the first week of June.

Two sub-projects presented by TKB 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 two sub-projects have been presented by TSKB which involve the installation of a total of 165 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	<ul><li>Moderate</li></ul>	<ul><li>Moderate</li></ul>	<ul><li>Moderate</li></ul>
Macroeconomic	<ul><li>Moderate</li></ul>	<ul><li>Moderate</li></ul>	Moderate
Sector Strategies and Policies	Low	Low	• Low
Technical Design of Project or Program	<ul><li>Substantial</li></ul>	<ul><li>Moderate</li></ul>	Moderate
Institutional Capacity for Implementation and Sustainability	• High	<ul><li>High</li></ul>	• High
Fiduciary	<ul><li>Substantial</li></ul>	<ul><li>Substantial</li></ul>	<ul><li>Substantial</li></ul>
Environment and Social	<ul><li>Moderate</li></ul>	<ul><li>Substantial</li></ul>	<ul><li>Substantial</li></ul>
Stakeholders	<ul><li>Moderate</li></ul>	<ul><li>Moderate</li></ul>	Moderate
Other			
Overall	<ul><li>Substantial</li></ul>	<ul><li>Substantial</li></ul>	<ul><li>Substantial</li></ul>

### Results

#### **Project Development Objective Indicators**

▶ Private Capital Mobilized (Amount(USD), Custom)							
	Baseline	Actual (Previous)	Actual (Current)	End Target			
Value	0.00	0.00	78.70	619.00			
Date	30-Jun-2015	15-Sep-2017	19-Mar-2018	31-Dec-2021			

▶ Generation Capacity of Renewable Energy (other than hydropower) constructed (Megawatt, Custom)						
	Baseline	Actual (Previous)	Actual (Current)	End Target		
Value	0.00	0.00	33.20	110.00		
Date	30-Jan-2015	15-Sep-2017	19-Mar-2018	31-Dec-2021		

▲ Generation Capacity of Renewable Energy constructed-Geo-thermal (Megawatt, Custom Breakdown)						
	Baseline	Actual (Previous)	Actual (Current)	End Target		
Value	0.00	0.00	33.20	110.00		
Date	31-Dec-2014	15-Sep-2017	19-Mar-2018	31-Dec-2021		

▶ 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	15-Sep-2017	19-Mar-2018	31-Dec-2021			

#### **Overall Comments**

#### **Intermediate Results Indicators**

▶ Volume of indirect financing catalyzed by CTF financing (Amount(USD), Custom)						
	Baseline	Actual (Previous)	Actual (Current)	End Target		
Value	0.00	0.00	0.00	117.00		
Date	15-Feb-2017	15-Sep-2017	19-Mar-2018	31-Dec-2021		

▶ 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	0.00	100.00	100.00
Date	30-Jun-2015	15-Feb-2017	19-Mar-2018	31-Dec-2021

# ▶ 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	15-Sep-2017	19-Mar-2018	31-Dec-2021

# ▶ Volume of direct financing catalyzed by CTF financing – (Core) (Amount(USD), Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	202.00
Date	30-Jun-2015	15-Sep-2017	19-Mar-2018	31-Dec-2021

#### ▶ 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	15-Sep-2017	19-Mar-2018	31-Dec-2021

▶ Geothermal resources developed through capacity drilling (Megawatt, Custom)							
	Baseline	Actual (Previous)	Actual (Current)	End Target			
Value	0.00	0.00	33.20	120.00			
Date	30-Jun-2015	15-Sep-2017	19-Mar-2018	31-Dec-2021			

► Capacity drilling projects supported by the Loan Facility (Number, Custom)							
	Baseline	Actual (Previous)	Actual (Current)	End Target			
Value	0.00	0.00	2.00	5.00			
Date	30-Jun-2015	15-Sep-2017	19-Mar-2018	31-Dec-2021			

#### **Overall Comments**

## **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	0.25	99.75	0.3%
P151739	IBRD-86530	Effective	USD	150.00	150.00	0.00	30.38	119.63	20%
P151739	TF-A1532	Effective	USD	39.80	39.80	0.00	0.53	39.27	1.3%

# **Key Dates (by Ioan)**

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**

There has been no restructuring to date.

# Related Project(s)

There are no related projects.