



Electricity Distribution Efficiency Improvement Project (P170230)

SOUTH ASIA | Pakistan | Energy & Extractives Global Practice |
IBRD/IDA | Investment Project Financing | FY 2022 | Seq No: 4 | ARCHIVED on 29-Oct-2023 | ISR58209 |

Implementing Agencies: Hyderabad Electric Supply Company Limited, Ministry of Energy (Power Division), Multan Electric Power Company Limited, Peshawar Electric Supply Company Limited, The Islamic Republic of Pakistan

Key Dates

Key Project Dates

Bank Approval Date: 17-Dec-2021

Effectiveness Date: 15-Aug-2022

Planned Mid Term Review Date: 30-Sep-2024

Actual Mid-Term Review Date:

Original Closing Date: 31-Dec-2027

Revised Closing Date: 31-Dec-2027

Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The project development objectives are to improve operational efficiency in targeted areas of selected distribution companies and achieve progress on the power sector reform agenda.

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

No

Components Table

Name

Improving Grid Reliability:(Cost \$89.58 M)
Modernizing Operations and Management:(Cost \$44.50 M)
Capacity Building and Technical Assistance:(Cost \$37.68 M)
Reform Support:(Cost \$20.43 M)
Financing Cost:(Cost \$8.45 M)
Admin and Other Costs:(Cost \$8.44 M)

Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	<input type="checkbox"/> Satisfactory	<input type="checkbox"/> Satisfactory
Overall Implementation Progress (IP)	<input type="checkbox"/> Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Risk Rating	<input type="checkbox"/> Substantial	<input type="checkbox"/> Substantial

Implementation Status and Key Decisions

Electricity Distribution Efficiency Improvement Project (EDEIP) was approved on December 17, 2021 and the Loan Agreement and the Project Agreements were signed on December 23, 2021. The Project was declared effective on August 16, 2022.

The project will help improve operational efficiencies and modernize operations and management of the three DISCOs, namely Hyderabad Electric Supply Company (HESCO), Multan Electric Power Company (MEPCO) and Peshawar Electric Supply Company (PESCO). This will be achieved through the following components: (1) Improving Grid Reliability; (2) Modernizing Operations and Management; and (3) Capacity Building and Technical Assistance. The project will benefit the consumers of these DISCOs by improving the stability, reliability and capacity of the grid as well



as by deploying modern information systems and equipment to improve service delivery. Each DISCO will be engaging Project Implementation and Management Support Consultants (PIMSCs) and expects to complete the process within the next few months. In the first phase, several goods contracts have been advertised and their procurement is underway.

The project will also support power sector reforms through Component 4 to be implemented by the Ministry of Energy (MoE). This component will support: (a) governance and institutional reforms; and (b) transition to wholesale electricity market through the commencement of Competitive Trading Bilateral Contract Market (CTBCM). The first procurement plan for the reform support component has been approved and activities supported through this component are expected to commence soon.

Significant progress has been achieved over the last few months as several procurement packages - at least one by each project implementing entity - have matured and are ready for award and signing. Procurement of larger contracts particularly for grid station works is contingent upon the hiring of PIMSCs by HESCO, MEPCO and PESCO. The hiring of PIMSCs is expected to be completed during this fiscal year.

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	☐ Moderate	☐ Moderate	☐ Moderate
Stakeholders	☐ Moderate	☐ Moderate	☐ Moderate
Other	--	--	--
Overall	☐ Substantial	☐ Substantial	☐ Substantial

Results

PDO Indicators by Objectives / Outcomes

Improving Operational Efficiency - Distribution Business				
▶ SAIDI - HESCO (Minutes, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	7,853.00	7,560.52	7,480.00	4,637.00
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027



Comments:	System Average Interruption Duration Index			
▶ SAIDI - MEPCO (Minutes, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	39,735.00	34,787.00	33,897.00	23,462.00
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027
Comments:	"			
▶ SAIDI - PESCO (Minutes, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	16,033.00	14,425.00	14,229.00	9,467.00
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027
Comments:	"			
▶ SAIFI - HESCO (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	137.00	134.00	132.00	106.00
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027
Comments:	System Average Interruption Frequency Index			
▶ SAIFI - MEPCO (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	471.00	419.00	397.00	365.00
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027
Comments:	"			
▶ SAIFI - PESCO (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	200.00	190.00	185.00	155.00
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027
Comments:	"			



► Transformer Damage Rate - HESCO (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.51	0.33	2.23	0.30
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027
Comments:	Transformers damaged during the year as percentage of total number of transformers.			
► Transformer Damage Rate - MEPCO (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	4.27	3.70	3.10	2.52
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027
Comments:	"			
► Transformer Damage Rate - PESCO (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	7.52	7.70	7.11	4.44
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027
Comments:	"			

Improving Operational Efficiency - Supply Business				
► T&D Losses - HESCO (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	27.99	27.40	27.19	22.26
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027
Comments:	Units lost as a percentage of units purchased.			
► T&D Losses - MEPCO (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	14.93	14.70	14.22	14.30
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027



Comments:	"			
► T&D Losses - PESCO (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	38.17	37.23	37.40	33.55
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027
Comments:	"			
► Collection Rate - HESCO (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	76.70	75.14	75.90	96.00
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027
Comments:	Percentage of current billed amount collected during the year.			
► Collection Rate - MEPCO (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	86.41	99.73	98.13	100.00
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027
Comments:	"			
► Collection Rate - PESCO (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	91.60	92.00	92.09	97.00
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027
Comments:	"			
► MYT - HESCO (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	Yes	Yes	Yes
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027
Comments:	Timely revision/updates/adjustments as may be applicable under MYT			



► MYT - MEPCO (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	Yes	Yes	Yes
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027
Comments:	"			
► MYT - PESCO (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	Yes	Yes	Yes
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027
Comments:	"			

Implementation of Reforms				
► Implementation of electricity market reforms (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	Market design approved by the regulator	CTBCM regime launched with the grant of Market Operator License to CPPA-G in May 2022, approval of Market Commercial Code and start of dry run.	CTBCM regime launched with the grant of Market Operator License to CPPA-G in May 2022, approval of Market Commercial Code and start of dry run.	Petition to reduce the threshold for bulk power consumers filed with the regulator.
Date	30-Jun-2021	30-Jun-2022	30-Jun-2022	30-Jun-2026
Comments:	Competitive power market stages			

Intermediate Results Indicators by Components

Improving Grid Reliability				
► New or existing grid stations with improved stability, reliability and/or capacity (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	42.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027



Comments:	Covering new as well as conversions, extensions, augmentation, and upgradation works.			
<input type="checkbox"/> HESCO (Number, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	5.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027
<input type="checkbox"/> MEPCO (Number, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	6.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027
<input type="checkbox"/> PESCO (Number, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	31.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027
► MVA Capacity Added (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	941.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027
Comments:	Covering new as well as conversions, extensions, augmentation, and upgradation works.			
<input type="checkbox"/> HESCO (Number, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	253.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027
<input type="checkbox"/> MEPCO (Number, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	332.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027
<input type="checkbox"/> PESCO (Number, Custom Breakdown)				



	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	356.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027
► Transmission line constructed or reconducted (Kilometers, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	173.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027
Comments:	Length of the transmission line			
<input type="checkbox"/> HESCO (Kilometers, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	90.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027
<input type="checkbox"/> MEPCO (Kilometers, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	34.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027
<input type="checkbox"/> PESCO (Kilometers, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	49.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027
► Feeders with reduced losses (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	70.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027
Comments:	Feeders selected for HT ELR proposals or other loss reduction measures.			
<input type="checkbox"/> MEPCO (Number, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target



Value	0.00	0.00	0.00	70.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027

Modernizing Operations and Management

► **Implementation of information technology and systems (Percentage, Custom)**

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	100.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027

□ **MEPCO (Number, Custom Supplement)**

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	9,000.00

□ **PESCO (Percentage, Custom Supplement)**

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	100.00

► **Consumers benefiting from the AMI Program (Number, Custom)**

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	95,000.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027

Comments: Consumers with smart meters

□ **HESCO (Number, Custom Breakdown)**

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	30,000.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027

□ **PESCO (Number, Custom Breakdown)**

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	65,000.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027



► Feeders with reduced non-technical losses (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	60.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027
Comments:	Selected feeders			
□ PESCO (Number, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	60.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027
► Consumer Satisfaction (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	70.00
Date	30-Jun-2021	31-Mar-2023	30-Sep-2023	30-Jun-2027
Comments:	Percentage of the consumers who consider that project interventions have resulted in improved service delivery.			
□ HESCO (Percentage, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	70.00
□ MEPCO (Percentage, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	70.00
□ PESCO (Percentage, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	70.00
Capacity Building and Technical Assistance				
► Application of tools, equipment, training in daily work (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target



Value	Limited to no exposure to international best practices on utility management and use of latest technologies and equipment.	Training/capacity building program has not started.	Training/capacity building program has not started.	Application of acquired knowledge, tools and equipment by DISCO staff and management in their daily work.
Date	30-Jun-2021	30-Jun-2022	30-Sep-2023	30-Jun-2027
Comments:	Effective use of resources and skills acquired			
<input type="checkbox"/> HESCO (Text, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	"	"	"	"
<input type="checkbox"/> MEPCO (Text, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	"	"	"	"
<input type="checkbox"/> PESCO (Text, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	"	"	"	"
► Improved Management (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No clear plan exist.	No clear plan exist.	No clear plan exist.	Continued implementation
Date	30-Jun-2021	30-Jun-2021	30-Jun-2021	30-Jun-2027
Comments:	Compliance with Code of Corporate Governance and regulatory requirements and implementation of plans/actions for institutional strengthening			
<input type="checkbox"/> HESCO (Text, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No clear plan exist.	"	"	Completion of planned activities.
<input type="checkbox"/> MEPCO (Text, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No clear plan exist.	"	"	Completion of planned activities.
<input type="checkbox"/> PESCO (Text, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target



Value	No clear plan exist.	"	"	Completion of planned activities.
► Female Staff (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	739.00	739.00	813.00	1,814.00
Date	30-Jun-2021	30-Jun-2021	30-Jun-2023	30-Jun-2027
Comments:	Improving gender diversity			
<input type="checkbox"/> HESCO (Number, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	218.00	218.00	251.00	535.00
<input type="checkbox"/> MEPCO (Number, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	379.00	379.00	404.00	930.00
<input type="checkbox"/> PESCO (Number, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	142.00	142.00	158.00	349.00
► Grievances redressed/resolved (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	80.00
Date	30-Jun-2021	30-Jun-2021	30-Jun-2023	30-Jun-2027
Comments:	Registered grievances satisfactorily resolved in line with the Grievance Redress System			
<input type="checkbox"/> HESCO (Percentage, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	80.00
<input type="checkbox"/> MEPCO (Percentage, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	80.00
<input type="checkbox"/> PESCO (Percentage, Custom Supplement)				



	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	80.00

Reform Support

► Engagement of Consultants (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	30-Jun-2021	30-Jun-2022	30-Jun-2023	30-Jun-2027
Comments:	Constant support to MoE			

Performance-Based Conditions

Data on Financial Performance

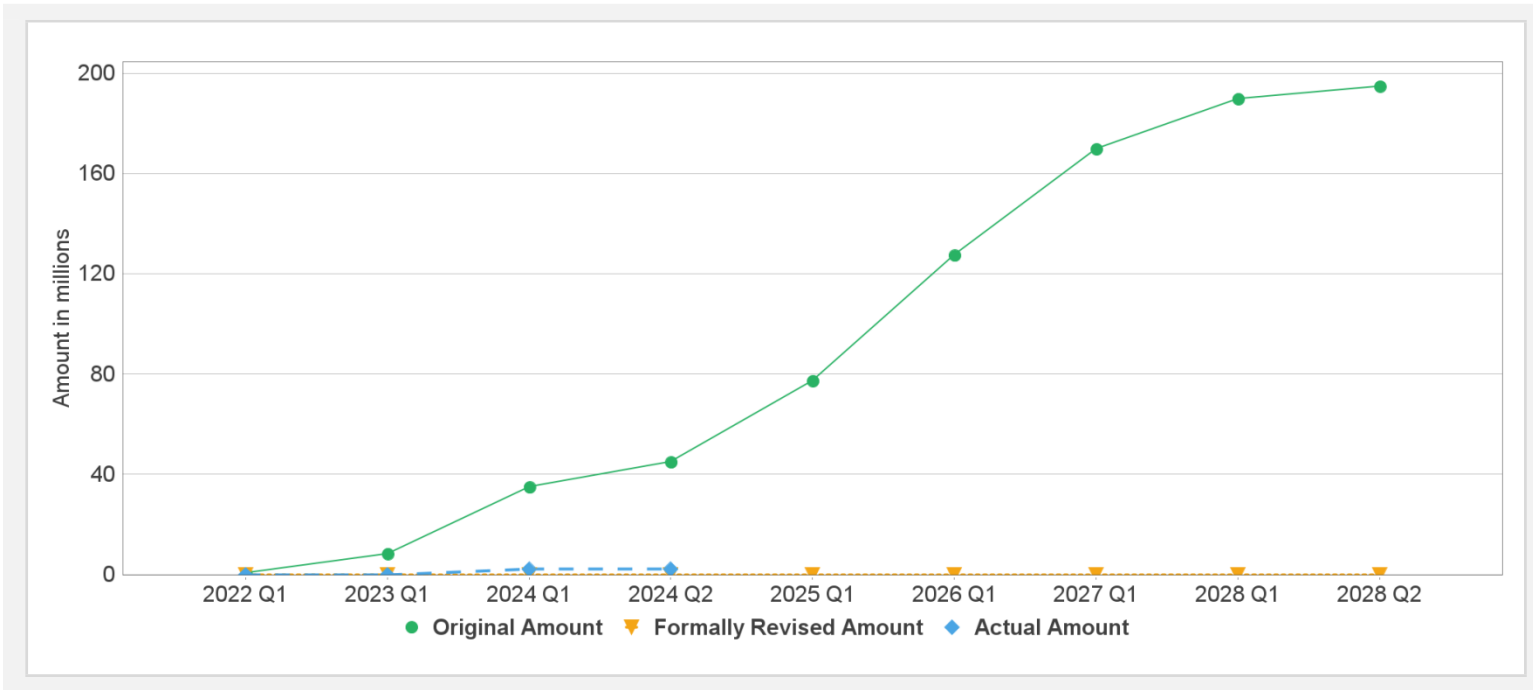
Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P170230	IBRD-93180	Effective	USD	195.00	195.00	0.00	3.19	191.81	1.6%

Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P170230	IBRD-93180	Effective	17-Dec-2021	23-Dec-2021	15-Aug-2022	31-Dec-2027	31-Dec-2027

Cumulative Disbursements



Restructuring History

There has been no restructuring to date.

Related Project(s)

There are no related projects.