

Project Administration Manual

Project Number: 53315-001
Grant Number: XXXX

Republic of Tajikistan: Power Sector Development
Program

ABBREVIATIONS

ADB	–	Asian Development Bank
AMI	–	advanced metering infrastructure
APFS	–	audited project financial statement
EBRD	–	European Bank for Reconstruction and Development
EDN	–	Open Joint Stock Company Electricity Distribution Network (Shabakahoi Taqsimoti Barq)
EMP	–	environmental management plan
EPC	–	engineering, procurement and construction
FMA	–	financial management assessment
GAP	–	gender action plan
MEWR	–	Ministry of Energy and Water Resources
MOF	–	Ministry of Finance
OCB	–	open competitive bidding
PIC	–	project implementation consultant
PMU	–	project management unit
STB	–	Open Joint Stock Company Shabakahoi Taqsimoti Barq (Electricity Distribution Network)
TA	–	technical assistance
TOR	–	terms of reference

CONTENTS

	Page
I. PROGRAM DESCRIPTION	1
II. IMPLEMENTATION PLANS	2
A. Program Readiness Activities	2
B. Overall Project Implementation Plan	2
III. PROGRAM MANAGEMENT ARRANGEMENTS	4
A. Program Implementation Organizations: Roles and Responsibilities	4
B. Key Persons Involved in Implementation	4
C. Program Organization Structure	5
IV. COSTS AND FINANCING	6
A. Cost Estimates Preparation and Revisions	6
B. Key Assumptions	6
C. Detailed Cost Estimates by Expenditure Category	7
D. Allocation and Withdrawal of Grant Proceeds	7
E. Detailed Cost Estimates by Financier	8
F. Detailed Cost Estimates by Output	9
G. Detailed Cost Estimates by Year	10
H. Contract and Disbursement Projections	11
I. Fund Flow Diagram	11
V. FINANCIAL MANAGEMENT	12
A. Financial Management Assessment	12
B. Disbursement	14
C. Accounting	15
D. Auditing and Public Disclosure	15
VI. PROCUREMENT AND CONSULTING SERVICES	16
A. Advance Contracting and Retroactive Financing	16
B. Procurement of Works, and Consulting and Non-Consulting Services	16
C. Procurement Plan	17
VII. SAFEGUARDS	18
VIII. GENDER AND SOCIAL DIMENSIONS	19
IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION	23
A. Program Design and Monitoring Framework	23
B. Monitoring	25
C. Evaluation	26
D. Reporting	26
E. Stakeholder Communication Strategy	27
XI. ANTICORRUPTION POLICY	27
XII. ACCOUNTABILITY MECHANISM	27
XIII. RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL	27

APPENDIX

1. TERMS OF REFERENCE OF SECTOR REFORM SUPPORT CONSULTANTS

Project Administration Manual Purpose and Process

The project administration manual (PAM) describes the essential administrative and management requirements to implement the Power Sector Development Program's project component on time, within budget, and following the policies and procedures of the government and Asian Development Bank (ADB). The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The executing agency, Ministry of Energy and Water Resources, and implementing agencies, Ministry of Finance and Open Joint Stock Company Electricity Distribution Network (EDN), or Shabakahoi Taqsimoti Barq (STB), are wholly responsible for implementing the ADB-financed program as agreed jointly between the recipient and ADB, and following the policies and procedures of the government and ADB. ADB staff are responsible for supporting implementation including compliance by the executing and implementing agencies of their obligations and responsibilities for program implementation following ADB's policies and procedures.

At grant negotiations, the recipient and ADB shall agree to the PAM and ensure consistency with the grant and project agreements. Such agreement shall be reflected in the minutes of the grant negotiations. In the event of any discrepancy or contradiction among the PAM and the grant and project agreements, the provisions of the grant agreements shall prevail.

After ADB Board approval of the program's report and recommendations of the President, changes in implementation arrangements are subject to agreement and approval pursuant to relevant government and ADB administrative procedures and upon such approval, they will be subsequently incorporated in the PAM.

I. PROGRAM DESCRIPTION

1. The Power Sector Development Program will tackle the sector's financial crisis by addressing sector reforms and investment challenges simultaneously. The program includes the following policy and project components:

- (i) policy component for comprehensive sector reforms: (i) unbundling of the state-owned vertically integrated power utility, (ii) establishment of a regulator, (iii) new tariff methodology, (iv) debt restructuring, and (v) central control of sector's cash resources to ensure priority payments to commercial liabilities; and
- (ii) Project component for investments in retail metering in Dushanbe and six other major cities to fill key deficiencies in the subsector's power loss accounting and bill collection systems.

2. **Impact and outcome.** The outcome of the program is improved power sector financial sustainability. The program impact will be aligned with the country's overarching development objective of increased sustainable access to energy resources.

3. **Outputs.** The program focuses on five output areas, of which outputs 1 and 2 are for the main policy component, outputs 3 and 4 are for both the policy and project components, and output 5 is for the project component.

4. Policy actions for output 1: power subsector governance structure strengthened, and output 2: financial management of power utilities improved, are included in the program's policy matrix.

5. Under output 3: sustainable corporate management introduced in the new distribution company, the Open Joint Stock Company Electric Distribution Network, or Shabakahoi Taqsimoti Barq will engage a management contractor to operate STB for 5 years. The management contractor will also develop capacity of local staff, including STB's future managers after the contract is completed. They will also create a gender working group led by senior management which will incorporate gender in STB's strategies and organizational functions.

6. For output 4: sector's reform and operational capacity strengthened, the program will support implementation of the gender action plan (GAP), aimed at increasing training and employment opportunities for female workers in the Tajikistan energy sector. The attached TA will also provide internship and training grants to select female trainees. The program will also provide ongoing support for further sector reforms, including support for commercializing the unbundled power utility companies, and strengthening the regulator function and tariff methodology implementation.

7. Under output 5: retail billing and collection system modernized, STB will install an advanced metering infrastructure (AMI) system and network upgrade in seven cities.¹ The AMI component includes installation of about 370,000 smart meters in customer locations, a control center in Dushanbe (where customer relationship management, customer billing systems, and meter management systems will be installed), and a two-way communication system between the control center and the meters. The control center will have capacity for all existing smart meters and new meters being installed under the project, and will have provision for expansion to meet

¹ Buston, Dangara, Dushanbe, Isfara, Istaravshan, Konibodom, and Panjakent.

full country needs.² The project will also expand the capacity of the existing control center in Sugd, and connect the two control centers for 100% redundancy. The network upgrade component includes approximately 750 kilometres of insulated low voltage cable, over 200 new transformers, and selected medium voltage and transformer station upgrades.

8. After the separate planned project in Dushanbe to add AMI and upgrade the associated network for up to 75,000 customers (footnote 2), and with the existing Sugd AMI project now covering up to 76,000 customers and associated network upgrade, then 42% of customers will be served by AMI with network upgrade after the project .

II. IMPLEMENTATION PLANS

A. Program Readiness Activities

Table 1: Program Processing Schedule

Indicative Activity	2020							2021			Responsibility
	Jan-June	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
Advance contracting actions											ADB, MEWR, PMU
Establish program implementation arrangements											ADB, STB, MEWR, PMU
ADB and EBRD Board approvals											ADB, EBRD
Grant signing											ADB, EBRD, MOF
Government legal opinion provided											MOJ, MOF
Government budget inclusion											STB, MOF, MEWR
Grant effectiveness											ADB, EBRD

ADB = Asian Development Bank; EBRD = European Bank for Reconstruction and Development, STB = Open Joint Stock Company Shabakahoi Taqsimoti Barq, MEWR = Ministry of Energy and Water Resources, MOF = Ministry of Finance, PMU = project management unit.

Source: Asian Development Bank.

B. Overall Project Implementation Plan

9. Table 2 summarizes the implementation schedule for the project component. Detailed procurement and implementation milestones are in Appendix 1.

² Barki Tojik is negotiating a separate AMI project for an additional 75,000 customers in Dushanbe. The scope of the proposed project includes for expansion of the control centre built under the separate project. The proposed project contract will include optional control center scope to cover the case if the separate project does not proceed.

Table 2: Project Implementation Schedule

Indicative Activity	2020				2021				2022				2023				2024				2025				2026				2027			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 3. Sustainable corporate management introduced in the new distribution company																																
1. Advertise a request for expressions of interest (Q1 2020)	■																															
2. Issue bidding document (Q3 2020)		■																														
3. Complete bid evaluation (Q4 2020)			■																													
4. Award the contract and mobilize the management contractor (Q1 2021)				■																												
5. Complete the management contract (Q1 2026)																																
Output 4. Sector's reform and operational capacity strengthened																																
1. Recruit consultants (Q2 2021)				■	■	■	■	■																								
2. Complete analyses and gender strategies, including education program plans (Q4 2021)				■	■	■	■	■																								
3. Start training and incorporate gender strategies in corporate plans (Q2 2021 – Q2 2022)									■	■																						
4. Provide support for the government's overall sector reform actions (Q2 2024)																	■	■	■	■	■	■	■	■								
Output 5. Retail billing and collection system modernized																																
1. Issue invitation for bids for turnkey contracts (Q4 2020)				■																												
2. Award turnkey contracts (Q2 2021)					■	■																										
3. Complete installation of equipment (Q2 2025)																																
Project Management Activities																																
Issue request for proposal for PIC (Q1 2020)	■																															
Complete the recruitment of PIC (Q4 2020)		■	■	■																												
Implement environmental management and gender action plans, and communications strategy.									■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■								
Semi-annual review missions																																
Project completion report																																

PIC = project implementation consultant, Q = quarter.

III. PROGRAM MANAGEMENT ARRANGEMENTS

A. Program Implementation Organizations: Roles and Responsibilities

Table 3: Summary of Program Implementation Roles and Responsibilities

Program Implementation Organization	Management Roles and Responsibilities
Recipient - Ministry of Finance	Grant recipient
Executing agency: Ministry of Energy and Water Resources	Responsible for overall program, supervision, fulfillment of policy matrix actions, and compliance with grant covenants.
Implementing agencies: Ministry of Finance (policy component) Open Joint Stock Company Electric Distribution Network (project component)	Implement and report on status of policy matrix actions. Through the PMU, coordinate project implementation activities such as planning, procurement and contract management, financial management, and monitoring and evaluation. Manage disbursements to consultant and contractors. This includes implementing statement of account procedure following applicable terms, and preparing and submitting withdrawal applications to Asian Development Bank.
Project Management Unit (PMU) for Electro-Energy Sector	Responsible for day-to-day procurement, financial management, and safeguards implementation and monitoring. The PMU will be assisted by the project implementation consultant. The PMU will be headed by a Program Director in Dushanbe.
Asian Development Bank, and European Bank for Reconstruction and Development	Financiers

Source: Asian Development Bank.

B. Key Persons Involved in Implementation

Ministry of Energy and Water Resources	Usmonali Usmonzoda Minister Telephone: + 992-37-221-87-30 uusmonov@gmail.com 5/1 Shamsi Street, 734064, Dushanbe, Tajikistan
Joint Stock Company Barqi Tojik/ Shabakahoi Taqsimoti Barq (Electricity Distribution Network)	Mirzo Ismoilzoda Chairman Telephone: +992 37 235 87 66 m.ismoilzoda@mail.ru 64 I.Somoni Street, Dushanbe
Project Management Unit for Electro-Energy Sector	Nazar Nazarzoda Executive Director pmu_tj@mail.ru 39-A Kahorov Street, Dushanbe
Asian Development Bank	Joonho Hwang Director

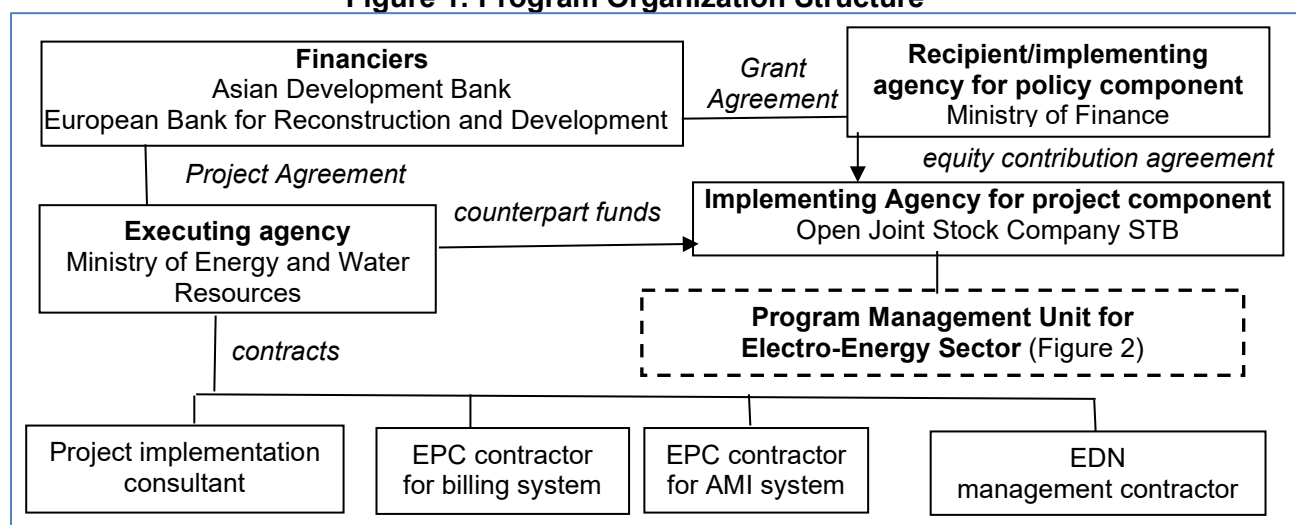
Energy Division, Central and West
Asia Department

Telephone: +632 632 6558
jhwang@adb.org
6 ADB Avenue, Mandaluyong City, Manila, Philippines

Yuki Inoue
Position: Finance Specialist (Energy), CWEN/CWRD
Telephone No.: +632-632-5803
yinoue@adb.org
6 ADB Avenue, Mandaluyong City, Manila, Philippines

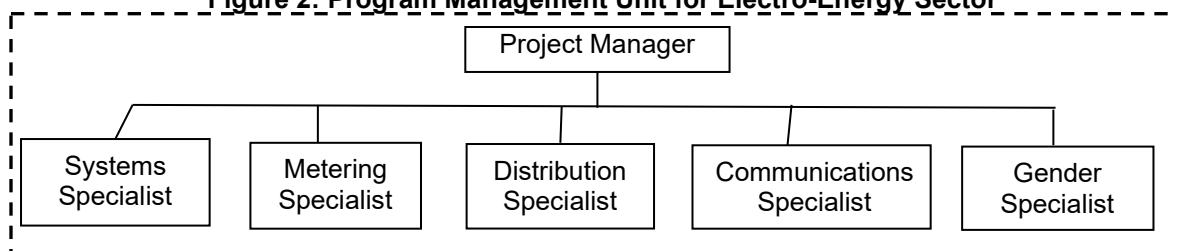
C. Program Organization Structure

Figure 1: Program Organization Structure



AMI = advanced metering infrastructure; STB = Shabakahoi Taqsimoti Barq, EPC = engineering, procurement and construction.

Figure 2: Program Management Unit for Electro-Energy Sector



IV. COSTS AND FINANCING

10. The project costs cover the following:

- (i) engineering, procurement and construction (EPC) contracts for billing and AMI systems financed by the Asian Development Bank (ADB) and European Bank for Reconstruction and Development (EBRD) on a cost sharing basis as per the grant agreements;
- (ii) project implementation consultant's (PIC) contract for the AMI system financed by ADB;
- (iii) management contractor to support STB financed by ADB;
- (iv) sector reform consultants financed by ADB; and
- (v) taxes and duties to be exempted by the Ministry of Finance (MOF) or STB.

A. Cost Estimates Preparation and Revisions

11. The project's base cost estimates were prepared by ADB, and consultants engaged under the Regional Power Transmission Project³ and regional technical assistance (TA) facility for Preparing Sustainable Energy Projects in Central Asia.⁴ The cost estimates will be updated during program implementation.

B. Key Assumptions

12. The following key assumptions underpin the cost estimates and financing plan:

- (i) Exchange rate: Tajikistan Somoni (TJS) 9.17 = \$1.00 as of July 2020.
- (ii) Price contingencies based on expected cumulative inflation over the implementation period are as follows:

Table 4: Escalation Rates for Price Contingency Calculation

Item	2020	2021	2022	2023	2024	2025	2026	Average
Foreign rate of price inflation	-0.5%	1.1%	2.8%	4.6%	6.4%	8.1%	9.9%	4.6%
Domestic rate of price inflation	9.0%	17.7%	26.0%	34.8%	44.2%	54.3%	65.1%	35.9%

Source: Asian Development Bank estimates.

³ ADB. 2010. *Report and Recommendation of the President to the Board of Directors (RRP): Regional Power Transmission Project (Grant 0213)*. Manila.

⁴ ADB. 2019. *Regional Technical Assistance for Preparing Sustainable Energy Projects in Central Asia (RETA 9792)*. Manila.

C. Detailed Cost Estimates by Expenditure Category

Table 5: Detailed Cost Estimates by Expenditure Category (\$ million)

Item	Foreign Exchange	Local Currency	Total Cost
A. Base Cost ^a			
1 Turnkey: Advanced metering infrastructure	57.7	19.3	77.0
2 Turnkey: Billing system	3.2	0.6	3.8
3 Project implementation consultant ^b	4.4	0.5	4.9
4 Sector development consultant	1.7	0.8	2.5
5 STB management contractor	13.5	1.5	15.0
6 Taxes and duties	-	13.4	13.4
Subtotal (A): (1 + 2 + 3)	80.5	36.1	116.6
B. Contingencies ^c			
1 Physical	1.6	0.9	2.5
2 Price	2.9	1.5	4.4
Subtotal (B)	4.5	2.4	6.9
C. Financing Charges During Implementation ^d			
1 Interest	0.9	-	0.9
2 Commitment Charges	0.6	-	0.6
Subtotal (C)	1.5	-	1.5
Total (A+B+C)	86.5	38.5	125.0

ADB = Asian Development Bank, EBRD = European Bank for Reconstruction and Development, STB = Open Joint Stock Company Shabakahoi Taqsimoti Barq.

^a In mid-2020 prices. Recurrent costs of the executing and implementing agencies are excluded as a centralized project management unit for energy sector manages all ADB-financed projects.

^b Includes external auditor costs for project financial statements to be financed by STB.

^c Physical contingencies computed at 4.0% of turnkey contracts.

^d Financing charges arise from the loan from EBRD. No financing charges will be incurred on the ADB grant, which will be provided to STB as equity.

Source: ADB estimates.

D. Allocation and Withdrawal of Grant Proceeds

Table 6: Allocation and Withdrawal of Grant Proceeds

Number	Item	Total Amount Allocated for ADB Financing (\$)	Basis of Withdrawal from the Grant Account
1	Turnkey: Advanced metering infrastructure and grid enhancement**	52,000,000	67.5% of total expenditure claimed*
2	Turnkey: Billing system**	3,800,000	100% of total expenditure claimed*
3	Consulting Services**	7,300,000	100% of total expenditure claimed*
4	Management contract**	15,000,000	100% of total expenditure claimed*
5	Unallocated	6,900,000	
	Total	85,000,000	

ADB = Asian Development Bank.

* Exclusive of taxes and duties imposed within the territory of the Recipient. This represents ADB's share of financing for contracts to be financed under this category.

** Subject to the condition for withdrawal described in paragraph 6 of Schedule 2 of the Grant Agreement.

Source: ADB estimates.

E. Detailed Cost Estimates by Financier

Table 7: Detailed Cost Estimates by Financier (\$ million)

Item	<u>ADB ADF</u>		<u>EBRD</u>		<u>Government/STB</u>		Total Cost (E)
	Amount (A)	% of cost category (A)/(E)	Amount (B)	% of cost category (B)/(E)	Amount (C)	% of cost category (C)/(E)	
A. Base Cost ^a							
1 Turnkey: advanced metering infrastructure	52.0	62.5%	25.0	37.5%	-	0.0%	77.0
2 Turnkey: Billing system	3.8	100.0%	-	0.0%	-	0.0%	3.8
3 Project implementation consultant ^b	4.8	97.0%	-	0.0%	0.1	3.0%	4.9
4 Sector development consultant	2.5	100.0%	-	0.0%	-	0.0%	2.5
5 STB Management contractor	15.0	100.0%	-	0.0%	-	0.0%	15.0
6 Taxes and duties	-	0.0%	-	0.0%	13.5	100.0%	13.4
Subtotal (A): (1 + 2 + 3)	78.1	67.0%	25.0	0.0%	13.6	11.6%	116.6
B. Contingencies ^c							
1 Physical	2.5	100.0%	-	0.0%	-	0.0%	2.5
2 Price	4.4	100.0%	-	0.0%	-	0.0%	4.4
Subtotal (B)	6.9	100.0%	-	0.0%	-	0.0%	6.9
C. Financing Charges During Implementation^d							
1 Interest	-	0.0%	-	0.0%	0.9	100.0%	0.9
2 Commitment Charges	-	0.0%	-	0.0%	0.5	100.0%	0.5
Subtotal (C)	-	0.0%	-	0.0%	1.4	100.0%	1.4
Total (A+B+C)	85.0	68.0%	25.0	20.0%	15.0	12.0%	125.0

ADB = Asian Development Bank, ADF = Asian Development Fund, EBRD = European Bank for Reconstruction and Development, STB = Open Joint Stock Company Shabakahoi Taqsimoti Barq.

^a In mid-2020 prices. Recurrent costs of the executing and implementing agencies are excluded as a centralized project management unit for energy sector manages all ADB-financed projects.

^b Includes external auditor costs for project financial statements to be financed by STB.

^c Physical contingencies computed at 4.0% of turnkey contracts.

^d Financing charges arise from the loan from EBRD. No financing charges will be incurred on the ADB grant, which will be provided to STB as equity.

Source: ADB estimates.

F. Detailed Cost Estimates by Output

Table 8: Detailed Cost Estimates by Output (\$ million)

Item	Total	<u>Output 3</u>		<u>Output 4</u>		<u>Output 5</u>	
		Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category
A. Base Cost ^a							
1 Turnkey: Advanced metering infrastructure	77.0	-	0.0%	-	0.0%	77.0	100.0%
2 Turnkey: Billing system	3.8	-	0.0%	-	0.0%	3.8	100.0%
3 Project implementation consultant ^b	4.9	-	0.0%	-	0.0%	4.9	100.0%
4 Sector development consultant	2.5	-	0.0%	2.5	100.0%	-	0.0%
5 STB management contractor	15.0	15.0	100.0%	-	0.0%	-	0.0%
6 Taxes and duties	13.4	-	0.0%	-	0.0%	13.4	100.0%
Subtotal (A) : (1 + 2 + 3)	116.6	15.0	12.9%	2.5	2.1%	99.1	85.0%
B. Contingencies ^c							
1 Physical	2.5	-	0.0%	-	0.0%	2.5	100.0%
2 Price	4.4	-	0.0%	-	0.0%	4.4	100.0%
Subtotal (B)	6.9	-	0.0%	-	0.0%	6.9	100.0%
C. Financing Charges During Implementation ^d							
1 Interest	0.9	-	0.0%	-	0.0%	0.9	100.0%
2 Commitment Charges	0.6	-	0.0%	-	0.0%	0.6	100.0%
Subtotal (C)	1.5	-	0.0%	-	0.0%	1.5	100.0%
Total (A+B+C)	125.0	15.0	12.0%	2.5	2.0%	107.5	86.0%

ADB = Asian Development Bank, EBRD = European Bank for Reconstruction and Development, STB = Open Joint Stock Company Shabakahoi Taqsimoti Barq.

^a In mid-2020 prices. Recurrent costs of the executing and implementing agencies are excluded as a centralized project management unit for energy sector manages all ADB-financed projects.

^b Includes external auditor costs for project financial statements to be financed by STB.

^c Physical contingencies computed at 4.0% of turnkey contracts.

^d Financing charges arise from the loan from EBRD. No financing charges will be incurred on the ADB grant, which will be provided to STB as equity.

Source: ADB estimates.

G. Detailed Cost Estimates by Year

Table 9: Detailed Cost Estimates by Year (\$ million)

Item	Total Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
		2020	2021	2022	2023	2024	2025	2026
A. Base Cost ^a								
1 Turnkey: Advanced metering infrastructure	77.0	-	11.5	7.9	15.6	20.5	21.5	-
2 Turnkey: Billing system	3.8	-	0.6	-	1.3	0.5	1.4	-
3 Project implementation consultant ^b	4.9	0.7	0.8	0.8	0.8	0.9	0.9	-
4 Sector development consultant	2.5	-	0.3	0.7	1.2	0.3	-	-
5 STB management contractor	15.0	-	3.1	2.4	2.8	2.8	2.8	1.1
6 Taxes and duties	13.4	-	2.0	1.4	2.7	3.6	3.7	-
Subtotal (A) : (1 + 2 + 3)	116.6	0.7	18.3	13.2	24.4	28.6	30.3	1.1
B. Contingencies ^c								
1 Physical	2.5	-	-	-	-	-	-	2.5
2 Price	4.4	-	-	-	-	-	-	4.4
Subtotal (B)	6.9	-	-	-	-	-	-	6.9
C. Financing Charges During Implementation ^d								
1 Interest	0.9	-	-	0.1	0.1	0.2	0.2	0.3
2 Commitment Charges	0.6	0.1	0.1	0.1	0.1	0.2	-	-
Subtotal (C)	1.5	0.1	0.1	0.2	0.2	0.4	0.2	0.3
Total (A+B+C)	125.0	0.8	18.4	13.4	24.6	29.0	30.5	8.3

ADB = Asian Development Bank, EBRD = European Bank for Reconstruction and Development, STB = Open Joint Stock Company Shabakahoi Taqsimoti Barq.

^a In mid-2020 prices. Recurrent costs of the executing and implementing agencies are excluded as a centralized project management unit for energy sector manages all ADB-financed projects.

^b Includes external auditor costs for project financial statements to be financed by STB.

^c Physical contingencies computed at 4.0% of turnkey contracts.

^d Financing charges arise from the loan from EBRD. No financing charges will be incurred on the ADB grant, which will be provided to STB as equity.

Source: ADB estimates.

H. Contract and Disbursement Projections

Table 10: Quarterly Contract Award and Disbursement Projections (\$ million)

Year	Contract Awards					Disbursements				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
2020	0.0	0.0	0.0	4.8	4.8	0.0	0.0	0.0	0.7	0.7
2021	18.8	54.5	0.0	0.0	73.3	1.5	1.4	8.7	0.9	12.5
2022	0.0	0.0	0.0	0.0	0.0	0.9	0.9	1.0	6.4	9.2
2023	0.0	0.0	0.0	0.0	0.0	8.1	6.4	1.1	1.1	16.7
2024	0.0	0.0	0.0	0.0	0.0	1.5	0.8	7.7	8.3	18.3
2025	0.0	0.0	0.0	0.0	0.0	9.0	1.3	8.7	0.6	19.6
2026	0.0	0.0	0.0	6.9	6.9	1.1	0.0	0.0	6.9	8.0
Total					85.0					85.0

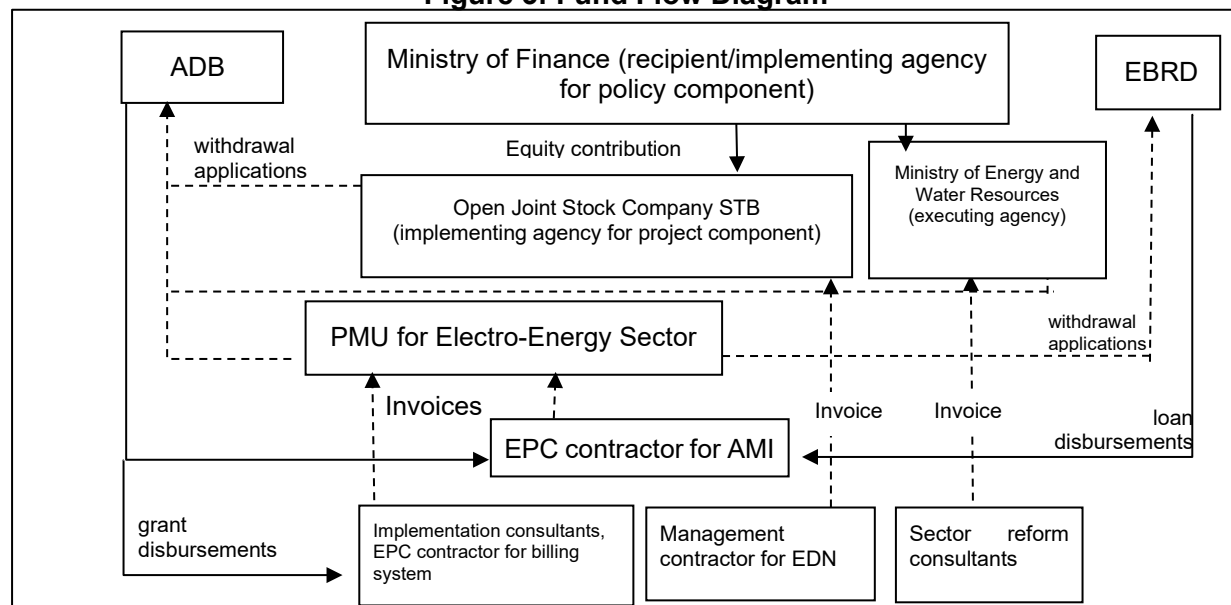
Q = quarter.

Note: The projected contract awards include contingencies/unallocated amounts in Q4 2026, and exclude financing charges during implementation.

Source: Asian Development Bank estimates.

I. Fund Flow Diagram

Figure 3: Fund Flow Diagram



ADB = Asian Development Bank; AMI = advanced metering infrastructure; EBRD = European Bank for Reconstruction and Development; STB = Open Joint Stock Company Shabakahoi Taqsimoti Barq; EPC = engineering, procurement and construction; PMU = Project Management Unit.

Source: ADB.

V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

13. The financial management assessment (FMA) was conducted in June 2020 in accordance with ADB's *Guidelines for the Financial Management and Analysis of Projects* (2005), and the *Financial Due Diligence: A Methodology Note* (2009).⁵ The FMA considered STB's capacity, including its fund flow arrangements, staffing, accounting and financial reporting systems, financial information systems, and internal and external auditing arrangements.

14. Based on the FMA, the key financial management risks identified for STB relate to the weaknesses of Open Joint Stock Company Barqi Tojik which STB will inherit. It is concluded that the overall pre-mitigated financial management risk of the Ministry of Energy and Water Resources (MEWR) and STB is high. MEWR and STB have agreed to implement a financial management action plan to mitigate the key risks (Table 11). Except for the actions related to tariff setting and the transition to STB which commenced before grant approval, most of the recommended actions are expected to be started around grant effectiveness.

Table 11: Financial Management Action Plan

Risk	Action	Responsibility	Resources	Timing
STB's financial performance remains heavily dependent on the tariffs set by the regulator. Although a new tariff methodology has been approved, it has yet to be implemented. A government decree and implementation plan should be issued before STB begins operations.	Implement the tariff setting methodology as required by the Government Decree # 259 "On the Electricity Sector Tariff Regulation Concept for the Republic of Tajikistan".	MEWR	Government	From 2 nd Quarter 2021
	Transfer assets, liabilities and staff to STB, and commence independent electricity distribution operations.	BT and STB	BT	4 th Quarter 2020
Continued legacy of BT's weaknesses. The majority of BT's weaknesses have been known for some time, and may remain unresolved by STB.	Appoint an experienced international management contractor who will be free of any vested interest.	STB	ADB grant	2 nd Quarter 2021
	Engage external auditors and conduct independent audit based on ISA.	STB	BT	4 th Quarter 2021
Insufficient audit and IT capacity to provide training on, and operate	Update the organization structure of STB by introducing an internal	BT/STB	BT	From 1 st Quarter 2021

⁵ The guidelines and methodology note are available in <https://www.adb.org/documents/financial-management-and-analysis-projects> and <https://www.adb.org/documents/financial-due-diligence-methodology-note>.

Risk	Action	Responsibility	Resources	Timing
new audit and IT systems and procedures	audit unit and a central IT department.			
Accounting issues. BT's financial statements are reported based on the IFRS, as required by the Law of Accounting and State's decrees, but the audit opinion is qualified due to accounting issues associated with the recognition of revenues and trade receivables.	Introduce IFRS-compliant accounting policies and procedures, particularly with regards to income recognition and receivables across STB's head office and the regional distribution branches.	STB	STB	From 2 nd Quarter 2021
Inconsistent financial statements across distribution branches. Financial statements are not currently prepared for the distribution operating unit, and there are no consistent IFRS-compliant accounting policies and procedures across the planned 6 regional distribution branches, and its head office.	Introduce procedures to consolidate the financial results of all operating units and produce quarterly financial statements for STB.	STB and Management contractor	STB	From 2 nd Quarter 2021
Ineffective financial management. Issues with inconsistencies between different reports and timeliness of information have been a constant feature in BT's financial management assessments. Comparing budgeted figures with the actual performance is ineffective and made difficult because the cost structures used in planning are different to those used for accounting.	Improve the quality of management reporting based on agreed key performance indicators (which will be proposed by the management contract after the first year of operations).	STB and Management contractor	STB	From 2 nd Quarter 2021
	Develop a reliable customer and accounts receivable database to ensure sales and collections are accurately recorded and closely monitored.	STB, Management contractor	ADB grant of \$45 million for advanced metering infrastructure	From 2 nd Quarter 2021 with investment planned for 2021-2023

Risk	Action	Responsibility	Resources	Timing
Potentially non-IFRS compliant financial statements. STB staff are yet to be appointed. BT has limited number of staff with appropriate financial training, and the accounting staff have received only preliminary in-house training in IFRS.	Build capacity of the accounting department in management and financial reporting to prepare IFRS compliant financial statements auditable by independent auditors.	STB and Management contractor	STB	From 2 nd Quarter 2021

ADB = Asian Development Bank, BT = Open Joint Stock Company Barqi Tojik, STB = Open Joint Stock Company Shabakahoi Taqsimoti Barq, IFRS = International Financial Reporting Standards, ISA = International Standards of Auditing, IT = information technology, MOF = Ministry of Finance
Source: ADB

B. Disbursement Arrangements

15. Condition for **withdrawal of grant proceeds**: No withdrawals shall be made from the grant account until a grant agreement between ADB and MOF, and an equity contribution agreement between MOF and STB, both for the purposes of the program and in form and substance satisfactory to ADB, shall have been duly executed and become effective in accordance with their terms.

16. Grant proceeds will be disbursed following ADB's *Loan Disbursement Handbook* (2017, as amended from time to time),⁶ and detailed arrangements agreed upon between the government and ADB. Online training on disbursement policies and procedures is available.⁷ The project management unit (PMU) is encouraged to avail of this training to help ensure efficient disbursement and fiduciary control.

17. The program will primarily use direct payment and commitment procedures for the EPC contracts. The statement of expenditure procedure may also be used for reimbursing eligible expenditures.⁸ All invoices for the AMI turnkey contract will be financed by ADB and EBRD on a cost sharing basis per financing ratio. All other packages will be financed by ADB grant. The PMU, assisted by the PIC, will prepare disbursement projections, collect and retain supporting documents, and prepare and send all withdrawal applications to ADB for the payments from the ADB grant, and to EBRD for payments from the EBRD loan. For the PIC and management contractor for STB, direct payment method will be used. Reimbursement method may be used when necessary.

18. Before submitting the first withdrawal application, MOF should submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the government, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is stipulated in the *Loan Disbursement Handbook*. Individual payments below such amount should be paid by STB or MEWR and subsequently claimed to ADB and EBRD through reimbursement, unless otherwise accepted by ADB and EBRD. The recipient should ensure sufficient category and contract balances before requesting

⁶ The handbook is available in <https://www.adb.org/documents/loan-disbursement-handbook>.

⁷ Disbursement eLearning. http://wpqr4.adb.org/disbursement_elearning

⁸ Supporting documents for expenditures claimed under the statement of expenditure should be made readily available for review by ADB's disbursement and review missions on a sampling basis, and for independent audit.

disbursements. Use of ADB's Client Portal for Disbursements⁹ system is encouraged for submitting withdrawal applications to ADB.

C. Accounting

19. STB and PMU will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the project following cash-based accounting system following the government's financial regulations. STB and PMU will prepare project financial statements in accordance with the government's accounting laws and regulations which are consistent with international accounting principles and practices and the international financial reporting standards (IFRS).

D. Auditing and Public Disclosure

20. STB and PMU will cause the detailed project financial statements to be audited in accordance with International Standards on Auditing, by an independent auditor acceptable to ADB. The audited project financial statements (APFS) together with the auditor's opinion and management letter will be presented in the English language to ADB within 6 months from the end of the fiscal year by STB.

21. STB's audited entity financial statements, together with the auditor's report and management letter, will be submitted in the English language to ADB within 1 month after their approval by the relevant authority but not later than 12 months from the end of the fiscal year.

22. The audit report for the project financial statements will include a management letter and auditor's opinions, which cover whether the (i) project financial statements present an accurate and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting standards and based on fair presentation framework;¹⁰ (ii) proceeds of the grant were used only for the purpose(s) of the project; and (iii) the recipient or STB was in compliance with the financial covenants contained in the legal agreements (where applicable).

23. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal program supervision, and followed up regularly with all concerned, including the external auditor.

24. MOF, MEWR and STB have been made aware of ADB's approach to delayed submission, and the requirements for satisfactory and acceptable quality of the APFS.¹¹ ADB reserves the right to require a change in the auditor (in a manner consistent with the constitution of the

⁹ The portal facilitates online submission of withdrawal applications to ADB, resulting in faster disbursement. The forms to be completed by the Recipient are available online at <https://www.adb.org/documents/client-portal-disbursements-guide>.

¹⁰ Refer to International Standards of Auditing ISA 701.

¹¹ ADB's approach and procedures regarding delayed submission of audited project financial statements (APFS):

- (i) When APFS are not received by the due date, ADB will write to the executing agency advising that (a) the audit documents are overdue; and (b) if they are not received within the next 6 months, requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.
- (ii) When APFS are not received within 6 months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (a) inform the executing agency of ADB's actions, and (b) advise that the loan may be suspended if the audit documents are not received within the next 6 months.
- (iii) When APFS are not received within 12 months after the due date, ADB may suspend the grant.

recipient), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

25. Public disclosure of the APFS, including the auditor's opinion on the project financial statements, will be guided by ADB's Access to Information Policy 2018.¹² After the review, ADB will disclose the APFS and the opinion of the auditors on the project financial statements on ADB's website within 14 days of ADB's confirmation of their acceptability. The management letter, additional auditor's opinions, and audited entity financial statements will not be disclosed.¹³

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting and Retroactive Financing

26. Advance contracting will apply to all contract awards for the EPC contracts for the billing and AMI systems, PIC for the AMI system, and management contractor for STB. Invitations to bid will be issued subject to ADB approval. MOF, MEWR and STB have been advised that approval of advance contracting does not commit ADB and EBRD to finance the project. Retroactive financing will not exceed 20% of the project grant amount for expenditures incurred not more than 12 months prior to the signing of the project grant agreement.

B. Procurement of Works, and Consulting and Non-Consulting Services

27. Procurement of works, and consulting and non-consulting services financed under the program, including advance contracting, will follow the *ADB Procurement Policy* (2017, as amended from time to time) and *Procurement Regulations for ADB Borrowers* (2017, as amended from time to time). Universal procurement will apply as the program will be cofinanced by EBRD. An 18-month procurement plan indicating thresholds and review procedures is in Section C. The procurement plan will be updated yearly or as necessary. Before the start of any procurement, ADB and the government will review the public procurement laws of the central and state governments to ensure consistency with the *ADB Procurement Policy*.

28. **Works.** The EPC contract for the billing system, estimated at \$3.8 million (with an optional scope for a control center estimated at \$3.8 million), will be directly contracted to Hexing (PRC), the contractor for the EBRD-financed Sugd billing system project. The EPC contract for the AMI system will be procured through open competitive bidding (OCB) with international advertising, using single-stage, two-envelope procedure. ADB's standard bidding document for Plant - design, supply and installation (June 2018) will be used for both contracts. Both contracts shall be completed in 3 years. Procurement of both EPC packages will be conducted by the PMU.

29. **Consulting and non-consulting services.**¹⁴ MEWR and PMU will recruit the PIC for consulting services estimated at \$4.8 million, through OCB with international advertising using the quality-and cost-based selection method with quality-cost ratio of 90:10. Around 234 person-months (96 international and 138 national) are required over 40 months. The PIC will provide project management, design audit, and construction supervision services to implement the AMI system following international best practice. For the PIC's terms of reference, refer to the issued

¹² ADB. 2018. Access to Information Policy: <https://www.adb.org/documents/access-information-policy>.

¹³ This type of information would generally fall under the information policy exceptions to disclosure. ADB. 2018. *Access to Information Policy*. Chapter III.B.

¹⁴ Checklists for actions required are available in the [e-Handbook on Project Implementation](#).

request for proposals.

30. MEWR will recruit the management contractor for STB for non-consulting services estimated at \$15 million through OCB with international advertising using fixed-budget selection method. Around 304 person-months of international inputs are required over 5 years. The management contractor will provide day-to-day management services to STB following international best practice and the service requirements. For the schedules of services requirements, refer to the issued bidding document; the bidding document, based on World Bank's Standard Bidding Document for Management Services (December 2007) following single-stage, two-envelope bidding procedure, was issued to the shortlisted firms.

C. Procurement Plan

Basic Data

Project Procurement Classification: Category A	Implementing Agency: Shabakahoi Taqsimoti Barq (Electric Distribution Network)	
Project Procurement Risk: High	Advance Contracting: Yes	e-GP: No

1. Methods, Review and Procurement Plan

31. Except as ADB may otherwise agree, the following methods shall apply to procurement of goods, works, and consulting and non-consulting services.

Method	Comments
Open competitive bidding (OCB) for works	Prior review, international advertisement
Quality and cost-based selection for consulting services	
OCB and fixed-budget selection for non-consulting services	Prior review, international advertisement

2. Lists of Active Procurement Packages (Contracts)

32. The table lists goods, works, and consulting and non-consulting services contracts for which the procurement activity is either ongoing or expected to commence within the procurement plan duration.

Package Number	General Description	Estimated Value	Procurement/ Selection Method	Review	Bidding Procedure/ Type of Technical Proposal	Advertisement (quarter/year)	Comments
Works							
G1	Billing systems	\$3,800,000	Direct contracting	Prior		Quarter 4 2020	No. of contracts: 1 Bidding Document: Plant, with optional scope for the control center. To be financed by ADB. Universal procurement applies.
G2	AMI, Low-Voltage and Medium-Voltage Enhancement for Dushanbe, Buston, Dangara,	\$77,000,000	Open competitive bidding	Prior	One-stage, two-envelope bidding procedure	Quarter 4 2020	Advertising: International No. of contracts: 1 Prequalification of Bidders: No Domestic Preference Applicable: No Bidding Document: Plant To be financed by ADB

Package Number	General Description	Estimated Value	Procurement/ Selection Method	Review	Bidding Procedure/ Type of Technical Proposal	Advertisement (quarter/ year)	Comments
	Panjakent, Konibodom, Isfara and Istaravshan, plus Boundary Meters						and EBRD. Universal procurement applies.
Consulting Services							
C1	Project implementation consultant	\$4,800,000	Quality- and cost-based selection	Prior	Full technical proposal	Quarter 1 2020	Type: Firm Assignment: International Quality-Cost Ratio: 90:10 Universal procurement applies.
C2	Sector development support	\$2,500,000	Quality- and cost-based selection	Prior	Full technical proposal	Quarter 2 2021	Type: Firm Assignment: International Quality-Cost Ratio: 90:10
C3	Gender consultants	\$150,000	Quality- and cost-based selection	ADB selection		Quarter 1 2021	Type: firm Assignment: international Quality-cost ratio: 90:10 To be financed from an attached TA to the program. Recruitment activities to be conducted by ADB.
Non-consulting Services							
N1	Management contractor for Electricity Distribution Network	\$15,000,000	Fixed-budget selection	Prior	One-stage, two-envelope bidding procedure	Quarter 1 2020	Advertising: International No. of contracts: 1 Prequalification of Bidders: No Domestic Preference Applicable: No Bidding Document: Customized document for management services Universal procurement applies.

ADB = Asian Development Bank, AMI = advanced metering infrastructure, EBRD = European Bank for Reconstruction and Development, TA = technical assistance.

VII. SAFEGUARDS

A. Project Component

33. **Environment.** Following ADB's *Safeguard Policy Statement* (2009), the project component is categorized B for environment. The initial environmental examination and environmental management plan (EMP) will be prepared and submitted for ADB review and disclosure. Potential environmental impacts of the project are mainly occupational health and safety, waste generation, noise, socioeconomic impacts and influx of workers, dust and exhaust emissions from equipment and construction vehicles, and construction traffic. As the detailed designs are not yet available, the initial environmental examination will be prepared based on preliminary design and will be updated based on detailed design and site-specific information. All statutory clearances and permits will be obtained prior to start of construction works. The EPC

contractor(s) will be required to submit, as part of their bids, the expected costs for implementation of the EMP, thus ensuring that required resources are allocated for EMP implementation.

34. **Land acquisition and resettlement.** The project component is classified as Category C for involuntary resettlement. All the proposed works under Output 4 will be done within the existing facilities owned and controlled by Barqi Tojik in the seven cities (footnote 1) and selected substations. None of the works will be done in the premises of individual households. No land acquisition and involuntary impact is expected from these works. During project implementation, the project (through its PIC) will monitor overall project implementation in order to identify any unanticipated social risks, resettlement impacts, and/or sensitive gender impacts. If such risks and/or impacts eventuate, appropriate mitigation measures or corrective actions will be made to ensure compliance with SPS (2009) requirements.

35. **Indigenous peoples.** The project component is classified as Category C for indigenous peoples' safeguard. The project locations are in Dushanbe and six other major cities where there are no groups that may be considered as indigenous people.

B. Policy Component

36. The policy-based component is classified as Category C for environment, involuntary resettlement, and indigenous peoples safeguards. A safeguard policy assessment matrix has been prepared confirming the absence of environmental and social impacts from the proposed policy actions.

37. **Prohibited investment activities.** Funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth in Appendix 5 of the Safeguard Policy Statement.

VIII. GENDER AND SOCIAL DIMENSIONS

38. The program is categorized as Effective Gender Mainstreaming. The GAP developed for the program will address concerns related to women's employment in the energy sector through setting of targets for women's employment and representation at the management level of the energy companies. It will pave the way for possible employment of women graduates of science, technology, engineering and mathematics in energy companies through the internship program. The GAP includes the creation of a gender working group in STB who will spearhead the mainstreaming of gender in the company's organizational mechanisms, human resources programs, and operations. The GAP also includes activities to promote awareness on the use of new meters and efficient energy use among the women in the communities. The complete GAP is in Table 12. Additional TA support will be provided to increase the pool of potential women technical workers in the energy sector.¹⁵

¹⁵ The TA paper for gender support is a linked document to the program's Report and Recommendation of the President.

Table 12: Gender Action Plan

Activity	Indicators/Targets	Responsibility	Timeframe
Output 1: Power Subsector Governance Structure Sthrengthened			
1.1 Include targets for women in management positions in the corporate strategies of generation, transmission, and distribution companies	<p>1.1.1 Gender diagnostic study report prepared, including: (i) assessment of gender-responsiveness of human resource policies and programs (ii) proportion of male/female employees; (iii) data on jobs occupied by male/female employees; and (iv) assessment of training needs of male/female employees (baseline: N/A)</p> <p>1.1.2 At least 10% of female management position figures included in corporate strategies of the generation, transmission, and distribution companies by 2022 (2019 baseline: N/A)^a</p> <p>1.1.3 Corporate targets of female employees set by generation, transmission and distribution companies by 2022 (2020 baseline: N/A) (DMF)</p>	CTRTA, PIC, PMU, Barqi Tojik, Transco, STB	2021
1.2 Conduct gender training including on sexual harassment among staff and management of the generation, transmission and distribution companies	<p>1.2.1 Training modules on gender mainstreaming and sexual harassment developed (baseline: N/A)</p> <p>1.2.2. Trainings conducted for all staff and members of management of the generation, transmission, and distribution companies (baseline: 0)</p> <p>1.2.3. At least 70% of staff and management report knowledge and understanding of basic concepts on gender mainstreaming, prevention of and addressing sexual harassment (baseline: 0)</p> <p>1.2.4. annual report on the number and types of trainings conducted for women and men included in the report to the company's Board.</p>	CTRTA, PIC, PMU, Barqi Tojik, Transco, STB	2021–2024
1.3. Develop sex-disaggregated database on staff complement	1.3.1 Sex- disaggregated database of employees including training profiles developed for unbundled companies and updated annually (2020 baseline: 0)	CTRTA, PIC, PMU, Barqi Tojik, Transco, STB	2021–2024
Output 3: Sustainable corporate management introduced in the new distribution company			
3.1 Create Gender working group in STB by 2021. ^b	<p>3.1.1 Gender working group created in STB by 2021 (2018 baseline: N/A) (DMF)</p> <p>3.1.2 Gender mainstreaming training modules developed for Gender Focal Point/Working Group (baseline: N/A)</p> <p>3.1.3 All members of the working group participated in at least 1 training per year and reported knowledge on gender mainstreaming principles (2020 baseline: 0)</p> <p>3.1.4 Quarterly meeting records of the Gender Working Group including actions taken are submitted to the Board, and made available within STB (baseline: N/A)</p>	STB (with its management contractor)	2021–2025
Output 4. Sector's reform and operational capacity strengthened			
4.1 Conduct Stocktaking of STEM-related university and TVET course offerings	<p>4.1.1 Assessment of the relevance and adequacy of STEM-related courses of the university and TVET system to the power sector skills requirements conducted.</p> <p>4.1.2 Proportion of male and female students enrolled in STEM courses in universities and TVET institutions identified and documented.</p>	CTRTA, Barqi Tojik, Transco, STB, MoEWR	2021–2024

Activity	Indicators/Targets	Responsibility	Timeframe
	4.1.3 Technical training programs tailored for work and skills requirements of power sector utilities/companies developed.		
4.2 Provide educational and training opportunities for women's employment in the energy sector	4.2.1 Potential graduating female students or female graduates of engineering and other STEM-related courses interested in on-the-job training in power companies identified and documented. 4.2.2 At least 50 female graduates or graduating students in science- and engineering-related courses trained for technical work in the generation, transmission, and distribution companies by 2023 ^c (2020 baseline: NA) (DMF)	C-TRTA, Barqi Tojik, STB, Transco.	2021–2024
Output 5: Retail billing and collection system modernized			
5.1 Install smart meters in 7 cities	5.1.1. AMI installed in 7 cities, including 340,000 households, by 2026 (2019 baseline: one city) (DMF)	STB	2021–2024
5.2 Conduct awareness campaign on the use of new meters and efficient energy use in the 7 cities with focus on women's participation	5.2.1 Awareness campaign on the use of new meters and efficient energy use, conducted in the 7 cities, with women comprising at least 50% of the participants by 2025 (2018 baseline: N/A) ^d (DMF) 5.2.2. Women's initiative groups established in at least 4 cities during the implementation of the awareness-raising campaign (baseline: N/A) 5.2.3. All leaders of women's initiative groups trained as trainers on the use of AMI and on consumer rights and reported knowledge on these topics. (baseline: 0) 5.2.4. 80% of beneficiaries, including at least 150 women, in post-information campaign surveys reported increased knowledge on energy saving household appliances and electricity efficiency using installed meters. (baseline:0)	STB, PIC, PMU	2021–2024
5.3 Develop a monitoring mechanism to evaluate customers' knowledge on advanced metering system	5.3.1 Questionnaires on the knowledge of awareness campaign information for pre- and post- campaign developed (baseline: N/A) 5.3.2 Baseline survey conducted for 5% of households in at least 50% of the target cities (baseline: N/A) 5.3.3 Database of the baseline survey respondents, including household profiles developed (baseline: N/A) 5.3.4 End-line survey among the same respondents of the baseline survey conducted. (baseline: N/A)	PIC, PMU, STB.	2021–2024
5.4. Promote employment of women in advanced metering operations and customer service operations centers	5.4.1. Manual on the rudiments of advanced metering operations developed and distributed to applicants. ^e 5.4.2. At least 30% of new hires for advanced metering operations and customer services are women. 5.4.3 Training programs developed on customer service and advanced metering operations (baseline: N/A) 5.4.4. All female staff in customer service operations demonstrated knowledge and skills in responding to customer queries and complaints. ^f (baseline: N/A)	PIC, PMU, STB	2021–2024

AMI = advanced metering infrastructure, CTRTA = Cluster transaction technical assistance, GAP = Gender Action Plan, PIC = Project implementation consultant, PMU = Project Management Unit, IG = initiative group, STEM = science, technology, engineering and math, TVET: Technical and Vocational Education and Training.

^a Based on Barqi Tojik's data in 2019, the number of female management staff in Barqi Tojiks is 3.3%.

^b STB's Gender Working Group will be led by a member of the senior management and composed of men and women representatives from different job levels and departments. The working group will provide inputs to the corporate

- management for: (i) the integration of gender in strategic objectives and annual operational plans (ii) the development of gender policies and guidelines for human resource operations (e.g. anti-sexual harassment policy, grievance mechanisms), (iii) integration of gender perspective in the human resources plans to (a) facilitating internship and employment of women STEM graduates, (b) supporting training and professional development of women staff for technical and management positions; (iv) planning and coordinating regular capacity development of staff and management on gender and development and application in the energy sector; (v) mainstreaming gender in the operations of the company, to include among others: (a) community awareness raising activities on efficient energy use especially through metering investment, and (b) regular review of energy tariffs and impacts on poor households.
- ^c Training for 50 female graduates are under an internship program of the program's attached technical assistance.
 - ^d Other trainings will include advanced metering technologies or smart meters for efficient use of appliances, energy saving, and consumer rights.
 - ^e The basic manual is to give opportunities to women applicants to familiarize themselves with the work. Women applicants for advanced metering operations positions will be encouraged to study the manual prior to undergoing examination and other screening procedures.
 - ^f Number of staff: Dushanbe – 115 female, 773 male including 67 managers; Penjikent – 36 female, 355 male including 34 managers; Isfara 19 female, 154 male including 15 managers; Buston – 16 female, 96 male including 19 managers, Central office OJSHC BT: 142 female, 186 male. The number of operators/ controllers in 2019: Dushanbe – 13 female, 416 male; Penjekent – 27 female, 90 male; Isfara – 46 female, 25 male; Buston – 5 female, 5 male. Totally: 91 female, 536 male.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

A. Program Design and Monitoring Framework

Table 13: Design and Monitoring Framework

Impact the Program is Aligned with Sustainable access to energy resources increased (National Development Strategy of the Republic of Tajikistan for the period up to 2030 ^a)			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
Outcome Financial sustainability of the power subsector improved	<p>a End-user tariffs reach cost-recovery levels by 2025 (2019 baseline: about 50% of estimated cost recovery level)</p> <p>b. Nationwide collection rate improved to 91% by 2024 (2017 baseline: 86%)</p> <p>c. Power distribution network loss reduced to 7.3% by 2027 (2020 baseline: 15.2%) (RFI A)</p> <p>d. STB's net profit improved (2020 baseline to be determined by the management contractor)^b</p>	<p>a. Government decree on effective tariffs</p> <p>b–c. Management contractor's annual performance report</p> <p>d. Management contractor's first year assessment report on STB with baseline and targets, and annual performance report.</p>	The government's priorities change because of economic shocks and power subsector reforms slow down
Outputs 1. Power subsector governance structure strengthened	<p>1.1 Separated operations of three unbundled companies (generation, transmission, and distribution) started by 2020 (2019 baseline: no management personnel appointed)</p> <p>1.2 New power sector regulator established and staffed by 2020 (2018 baseline: no agency with regulatory mandate existed)</p> <p>1.3 A tariff methodology with a cost recovery principle adopted by 2019 (2019 baseline: N/A)</p> <p>1.4 Corporate targets for female employees in management positions set by generation, transmission and distribution companies by 2022 (2020 baseline: N/A)</p>	<p>1.1 Monthly billing and payment records among three companies</p> <p>1.2 Records of the meeting of the regulator and the ADB mission.</p> <p>1.3 A government decree adopting the methodology</p> <p>1.4 Annual reports of the generation, transmission, and distribution companies</p>	Economic shocks continue and limit the management contractor's chances of improving EDN's performance.
2. Financial management of power utilities improved	<p>2.1 \$400 million of multilateral development bank grants converted into equity of the generation company by 2020 (2019 baseline: 0)</p> <p>2.2 A tariff methodology with a cost recovery principle adopted by 2019 (2019 baseline: N/A)</p> <p>2.3 Opening balance sheets of the new transmission and distribution companies developed with no outstanding liabilities by 2022 (2019 baseline: N/A)</p>	<p>2.1 Audited annual financial statements of the generation company (Barqi Tojik)</p> <p>2.2 Government decree.</p> <p>2.3 Annual audited financial statements of the transmission, and distribution companies</p> <p>2.4 Government decree</p>	

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
	2.4 Escrow account for centralized cash control established by 2020 (2019 baseline: N/A)		
3. Sustainable corporate management introduced in the new distribution company	<p>3.1 Management contractor's operation in the new distribution company started by 2021 (2019 baseline: N/A)</p> <p>3.2 Key operational performance indicators based on thorough assessment of STB by the management contractor are approved by STB's supervisory board by 2022 (2020 baseline: no indicators based on assessments exist)</p> <p>3.3 Gender working group led by senior management and with male and female members from various levels and departments created in STB by 2021 (2018 baseline: N/A)</p>	3.1–3.3 Distribution company's annual report	
4. Sector's reform and operational capacity strengthened (including increased female participation in power subsector activities)	<p>4.1 Implementation plans for commercialization of power utilities is developed by 2021 (2020 baseline: NA)</p> <p>4.2 Under the attached technical assistance, at least 50 female graduates and/or graduating students in science- and engineering-related courses trained for technical work in the generation, transmission, and distribution companies by 2023 (2020 baseline: NA)</p>	<p>4.1 Consultant's completion report</p> <p>4.2 Implementation consultant's annual progress report</p>	
5. Retail billing and collection system modernized	<p>5.1 Advanced metering system installed in 7 cities, covering 340,000 households, by 2026 (2019 baseline: one city)^c</p> <p>5.2 Awareness campaign on the use of new meters and efficient energy use, with focus on women's participation, conducted in the 7 cities, with women comprising at least 50% of the total number of participants by 2026 (2018 baseline: N/A)</p> <p>5.3 At least 750 kilometers of STB's distribution network is upgraded by 2026 (2019 baseline: 0) (RFI B)</p>	<p>5.1 STB's annual report</p> <p>5.2–5.3 Contractor's annual progress report</p>	
Key Activities with Milestones for Project Component (Outputs 3–5)			
<p>1. Output 3. Sustainable corporate management introduced in the new distribution company</p> <p>1.1 Advertise a request for expressions of interest (Q1 2020)</p> <p>1.2 Issue bidding documents (Q3 2020)</p> <p>1.3 Complete bid evaluation (Q4 2020)</p> <p>1.4 Award the contract and mobilize the management contractor (Q1 2021)</p> <p>1.5 Complete the management contract (Q1 2026)</p>			

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
<p>2. Output 4. Sector's reform and operational capacity strengthened</p> <p>2.1 Recruit consultants (Q2 2021)</p> <p>2.2 Complete analyses and gender strategies, including education program plans (Q4 2021)</p> <p>2.3 Start training and incorporate gender strategies in corporate plans (Q2 2022)</p> <p>2.4 Provide support for the government's overall sector reform actions (Q2 2024)</p> <p>3. Output 5. Retail billing and collection system modernized</p> <p>3.1 Issue invitation for bids for turnkey contracts (Q4 2020)</p> <p>3.2 Award turnkey contracts (Q2 2021)</p> <p>3.3 Complete installation of equipment (Q3 2025)</p> <p>Project Management Activities</p> <p>Issue request for proposal for project implementation consultant (Q1 2020)</p> <p>Complete the recruitment of project implementation consultant (Q4 2020)</p>			
<p>Inputs</p> <p>ADB:</p> <p>Policy-based grant: \$20 million (ADF)</p> <p>Project grant: \$85 million (ADF)</p> <p>Technical assistance: \$0.2 million (TASF 6)</p> <p>European Bank for Reconstruction and Development: \$25 million (loan)</p>			
<p>Assumptions for partner financing</p> <p>None</p>			

ADB = Asian Development Bank, STB = Open Joint Stock Company Shabakahoi Taqsimoti Barq, N/A = not applicable, Q = quarter, RFI = results framework indicator, TASF = Technical Assistance Special Funds.

^a Government of Tajikistan. 2016. *National Development Strategy of the Republic of Tajikistan for the Period up to 2030*. Dushanbe.

^b STB is a newly established company and its opening balance sheets are being developed. The management contractor will propose the levels of key performance indicators after 1 year of operation, which will be approved by the board of the distribution company. The key indicator will be the adjusted net profit of the company, and the baseline and target will be determined and monitored based on this approval (expected by the end of 2021).

^c The smart metering infrastructure project in Khujang, Sugd Region, financed by the European Bank for Reconstruction and Development, was completed in 2019.

Contribution to the ADB Results Framework: 2019–2024 to be determined.

Source: ADB.

B. Monitoring

39. **Project performance monitoring.** STB, with the management contractor, will submit quarterly progress reports to MEWR and ADB within 30 days from the end of each quarter during project implementation. The progress reports will describe the progress made during the reporting period, any changes to the implementation schedule and problems, the PIC's performance, and the work to be carried out in the next period. The progress reports will also include a summary financial account for the project, consisting of project expenditures for the year to date and total expenditure to dates. Performance will be evaluated on the basis of indicators and targets stipulated in the design and monitoring framework.

40. **Covenant compliance monitoring.** Grant covenants—policy, financial, economic, environmental, and others—will be monitored through the semi-annual progress reports due by 20 July and 20 January every year, and ADB review missions.

41. **Safeguards monitoring.** The PMU, with the PIC's support, will ensure that the EMP is implemented. They will submit semi-annual environmental monitoring reports to ADB within 1 month of the reporting period until ADB issues the project completion report. All monitoring reports and corrective action plans will be disclosed in ADB and MEWR's websites.

42. **Gender and social dimensions monitoring.** The progress in GAP implementation will be included in the quarterly progress reports with the PIC's support and the attached TA consultants. A social and gender specialist at the PMU will be engaged to support the implementation of the GAP and report on progress towards achieving GAP targets. Among the key gender indicators are (i) female employees in management positions in the generation, transmission and distribution companies, (ii) creation of gender working groups in distribution companies, (iii) female graduates of science- and engineering-related courses provided on-the-job training in the generation, transmission and distribution companies, (iv) installation of advanced meters in households.

C. Evaluation

43. **Inception mission.** ADB will field an inception mission within 6 months of the program approval and before grant effectiveness to mainly (i) re-establish the working relationship among ADB, MEWR and STB; (ii) reconfirm the program implementation schedule, and contract award and disbursement projections (Sections II and IV); and (iii) finalize the detailed disbursement arrangements.

44. **Review missions.** ADB will field semi-annual review missions to check overall project implementation, including the progress against the project outcome and outputs, covenant compliance, safeguards, gender and social dimensions, and utilization of both ADB and government counterpart funds. The project implementation schedule will also be updated as necessary.

45. **Midterm review mission.** ADB will field a midterm review mission 2.5 years after grant effectiveness to primarily assess whether the program outcome is still likely to be achieved, as well as the contract award and disbursement projections. The midterm review will also review the engineering, resettlement, and environmental aspects of the ADB-supported investments, and STB's operational efficiency and financial status.

46. **Program completion reports.** MEWR and STB will submit completion reports for the policy and project components, respectively. ADB, with MOF, MEWR and STB, will field a program completion mission to primarily evaluate whether the program outcome was achieved, and assess the performance of all parties. ADB will then prepare and disclose its own program completion report. The schedule for completion reports is in Table 13.

Table 14: Completion Report Schedule

Program Component	Responsibility	Timing
Policy component	MEWR	Between 1 and 2 years from grant signing
Project component (including management contract)	STB	Within 6 months from completion of the project component
Policy and project components	ADB	Within 1 year of grant closing

ADB = Asian Development Bank, STB = Open Joint Stock Company Shabakahoi Taqsimoti Barq, MEWR = Ministry of Energy and Water Resources.

D. Reporting

47. STB will provide ADB and EBRD with the (i) quarterly progress reports in a format consistent with ADB's project performance reporting system; (ii) consolidated annual progress reports (in lieu of the quarterly progress report) due by 20 January every year including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions, (c) updated procurement plan, and (d) updated implementation plan for the next 12 months; (iii) semiannual progress reports, including

compliance with loan covenants, financial management action plan implementation, and safeguard monitoring reports; and (iv) program completion report. To ensure that the program will continue to be both viable and sustainable, project accounts and APFS together with the associated auditor's report, should be adequately reviewed.

E. Stakeholder Communication Strategy

48. Following ADB's *Public Communications Policy* (2011),¹⁶ ADB and EBRD will disclose the safeguards and gender monitoring reports on implementation of the EMP, GAP, and resettlement plan; APFS; and procurement information (e.g. invitations for bids, contract awards, and procurement plan updates) on their websites immediately after they are made available. Barqi Tojik will also disclose the same on their website, as well as the quarterly progress reports.

XI. ANTICORRUPTION POLICY

49. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the project.¹⁷ All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all project contractors, suppliers, consultants, and other service providers. Individuals and/or entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the project.¹⁸ To support these efforts, relevant provisions are included in the loan agreements and bidding documents for the project.

50. MEWR and STB will also apply their existing systems, controls and procedures for reporting fraud, corruption, and waste and misuse of resources to the project. For this, MEWR and STB's internal audit units are expected to play a major role, and all employees within and outside of the project are expected to be whistle blowers. ADB's resolutions in the *Tajikistan: Country Partnership Strategy (2016–2020)* related to using country systems and managing governance risks will also apply to the program.

XII. ACCOUNTABILITY MECHANISM

51. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make an effort in good faith to solve their problems by working with ADB's Central and West Asia Department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.¹⁹

XIII. RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL

52. All revisions and/or updates during the course of implementation should be retained in this section to provide a chronological history of changes to the implementation arrangements recorded in the Project Administration Manual, including revision to contract award and disbursements.

¹⁶ Public Communications Policy: <https://www.adb.org/documents/anticorruption-policy>.

¹⁷ Anticorruption Policy: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>.

¹⁸ ADB's Integrity Office web site: <https://www.adb.org/site/integrity/main>.

¹⁹ Accountability Mechanism. <http://www.adb.org/Accountability-Mechanism/default.asp>.

INDICATIVE TERMS OF REFERENCE OF SECTOR REFORM SUPPORT CONSULTANTS²⁰

A. Background

1. The power sector is comprised of the state owned vertically integrated utility, Barqi Tojik (BT), three independent power producers, and a small concession operating in the eastern part of the country. BT has 1.3 million customers, with total annual consumption of 17.1 GWh, and installed capacity of 6.08 MW. Grid connected electricity supply is universal. Challenges to the power sector include winter supply deficits, poor financial performance, high losses, and below cost tariffs.

2. The Government of TAJ is implementing sector reforms which include (i) unbundling BT into separate generation, transmission, and distribution companies, (ii) employing a 5-year management contractor to run the newly established distribution company (the Disco), (iii) introducing a revised tariff setting methodology, (iv) establishment of a sector regulator, and (v) investing in Advanced Metering Infrastructure in the Disco.

3. In response to the government's request, Asian Development Bank (ADB) is processing the Power Sector Development Program to assist the government to implement its planned reforms. The proposed program will intensify the implementation of ongoing reforms and improve the financial sustainability of the power subsector in Tajikistan.²¹ ADB support to the Tajikistan power subsector reforms through the Sector Operation Performance Improvements (SOPI) program since 2012 built the basis for the proposed fundamental reform program that includes unbundling the vertically integrated power utility company, restructuring the utility's excessive liabilities, establishing a regulator, adopting a tariff methodology, and establishing a new centralized cash control system among unbundled entities.

4. The reforms will, however, continue to require further implementation efforts by the government, especially the Ministry of Energy and Water Resources (MoEWR). With the completion of the SOPI program in June 2020, MoEWR requires new support for further reforms in the sector (see ADB's Power Sector Development Program's policy matrix for more details of the reforms and further implementation framework).

B. Scope of Services

5. The consultants will support ongoing reforms especially in terms of developing a more market-based power subsector financial transaction mechanisms, implementation of the newly adopted tariff methodology. Reforms will require supporting drafting of government regulations and coordination among stakeholders such as various ministries in the government, power utility companies. Main tasks will be to follow up on the post program partnership framework of the policy matrix of ADB's Power Sector Development Program.

C. Qualifications

6. The consultants will be a consulting firm, or consulting firms in joint venture, with extensive experience in both technical and regulatory issues of energy sector development with focus on power subsector.

²⁰ Detailed terms of reference will be finalized before starting the recruitment process.

²¹ The program is included as the Power Sector Development Project in ADB. 2019. [Country Operations Business Plan: Republic of Tajikistan, 2020–2022](#). Manila. The program's design and monitoring framework is in [Appendix 1](#).

D. PIC Team Composition, Tasks, and Qualifications

7. The consultants will provide key experts as in Table 2.

Table 2: PIC Experts, Tasks, and Qualifications

	Expert	Tasks	Minimum Qualification Requirements
International Consultants			
1	Team Leader/energy sector specialist	<p>Team Leader</p> <ol style="list-style-type: none"> 1) Prepare a detailed work program and implementation schedule. 2) Liaise with MoEWR, coordinate the input and activities of the consultant team 3) Review and monitor reform implementation schedules and progress 4) Develop a project performance monitoring system 5) Prepare quarterly progress reports and project completion reports in ADB formats 6) Prepare and implement capacity building measures especially to relevant stakeholders from MoEWR and power utilities. 	<p>Team Leader</p> <ul style="list-style-type: none"> • Team Leader on one AMI project of similar complexity. <p>Systems Specialist</p> <ul style="list-style-type: none"> • A graduate degree in engineering or a related field or equivalent • 15 years of experience in energy infrastructure projects and energy sector regulatory/reform issues • Experience with ADB's disbursement, procurement and project monitoring requirements is desirable. • Knowledge of Russian language is desirable.
2	Deputy Team Leader/energy sector and energy efficiency specialist	<ol style="list-style-type: none"> 1) Support the team leader on work program development and implementation 2) Support the team leader on government liaison and coordination. 3) Identify and develop a program for energy efficiency opportunities through sector reforms 	<ul style="list-style-type: none"> • a graduate degree in engineering or equivalent; • 10 years of experience in electrical systems and control and instrumentation engineering to include 5 years of metering projects.
3	Advisor	<ol style="list-style-type: none"> 1) Provide senior level liaison from the consultant team to the high level officials in the government 2) Support the team through providing guidance and advisory on reform success from other countries. 	<ul style="list-style-type: none"> • a graduate degree in engineering or a related field or equivalent • 25 years of power sector experience
4	Power generation Specialist	1) Support the team leader on work program development and implementation	<ul style="list-style-type: none"> • a graduate degree in relevant engineering field or a related field or equivalent • 10 years of experience in the respective field of expertise • Knowledge of the Central Asian Power System, former Soviet Union countries energy sector and Russian or Tajik would be a plus
5	Power transmission Specialist	2) Conduct an assessment of the relevant field of the sector, especially in consideration of future shift to a market model	
6	Power distribution Specialist	3) Provide recommendations for sector development in the respective field of expertise	
7	Power sector regulatory specialist	4) Support MoEWR's drafting of policies and regulations from the respective field of expertise.	
8	Finance	4) Support the team leader on work	<ul style="list-style-type: none"> • a graduate degree in a

	Expert	Tasks	Minimum Qualification Requirements
	Specialist	program development and implementation 5) Conduct a holistic financial assessment of the sector, especially in consideration of future shift to a market model, and provide recommendations	relevant finance field or equivalent <ul style="list-style-type: none"> • 10 years of experience in the respective field of expertise • Knowledge of the Central Asian Power System, former Soviet Union countries energy sector and Russian or Tajik would be a plus
National Consultants			
9	<ul style="list-style-type: none"> • National deputy team leader • Power generation specialist • Power transmission specialist • Power distribution specialist • Power sector regulatory specialist • Finance specialist 	Support the international consultants in the performance of their terms of reference	The National Consultants will have: <ul style="list-style-type: none"> • a university degree in relevant area of expertise from a reputable University. • 8 years of general experience of which at least 5 years in the relevant area of expertise. • experience with international organizations • ability to speak and write in English and Russian.

Notes: Systems Specialist or Metering Specialist may be proposed as Team Leader.
 Social Specialist and Gender Expert may be filled by the same consultant.

E. Estimated Level of Effort

8. The consultants will provide key experts as in Table 3.

Table 3: Level of Effort (in person-months)

#	Expert	International	National
1	Team Leader/energy sector reforms specialist	9	
2	Deputy Team Leader/energy sector reforms and energy efficiency specialist	9	15
3	Advisor (energy sector reforms specialist)	5	
4	Power generation specialist	5	5
5	Power transmission specialist	5	5
6	Power distribution specialist	5	5
7	Energy sector regulation specialist	5	5
8	Financial specialist	5	5
	Total	48	40

Notes: Depending on the travel restrictions for the COVID-19 pandemic, but international consultants are expected to spend the substantial part of their inputs in Tajikistan.

F. Counterpart's Input

9. MoEWR will provide counterpart staff, office space, including telephone and internet connection. The consultants will be responsible for their personal computers and other facilities for producing reports.

G. Reporting Schedule

10. The consultants will submit reports in Table 4.

Table 4: Reporting Schedule

Report	Due Date
Inception Report	Within 4 weeks of mobilization
Quarterly Progress Report	Within 10 working days of reporting period
Draft Project Completion Report	Within 10 weeks before contract completion
Final Project Completion Report	Within 4 weeks of receiving MOEWR's and ADB comments on draft project completion report.

11. The quarterly progress reports will summarize the key activities and issues during the reporting period for submission to MoEWR and ADB. The project completion report will be a final review of the progress of the reforms and sector development, leading to recommendations on the next steps required for the sector development.