



Note to Task Team: The following sections are system generated and changes must be made in Data Sheet(s). *Delete this note when finalizing the document.*

@#&OPS~Doctype~OPS^blank@pidsimplifiedaprcoverpage#doctemplate

Updated Project Information Document (PID)

Technical Design Stage | Date Prepared/Updated: 12-Sep-2026 | Report No:

BASIC INFORMATION

A. Basic Project Data

Project Beneficiary(ies)	Region	Operation ID	Operation Name
Yemen, Republic of	MID EAST,NORTH AFRICA,AFG,PAK	P516972	Recovery of Electricity Sector for Equitable Transition in Yemen (RESET)
Financing Instrument		Estimated Approval Date	Practice Area (Lead)
Investment Project Financing (IPF)		23-Oct-2026	Energy
Borrower(s)	Implementing Agency		
United Nations Development Programme, UNITED NATIONS OFFICE FOR PROJECT SERVICES	UNITED NATIONS OFFICE FOR PROJECT SERVICES, United Nations Development Programme		

Is this an Urgent Need / Capacity Constraint situation?

No

Proposed Development Objective(s)

The project development objective (PDO) is to enhance electricity system efficiency and resilience in Aden and expand energy access in rural and peri-urban areas through privately operated solar mini-grid systems.

Sector & Institutional context / Problem Statement

Yemen's electricity sector is one of the weakest in the MENAAP region. Despite a 76% nominal access rate, most connections provide only a few hours of power daily or rely on basic solar systems, with public grid access reaching just 12% of the population. Conflict severely damaged generation, transmission, and distribution infrastructure, while heavy reliance on diesel and fuel oil drives up costs and emissions. Governance is fragmented across multiple institutions — the Ministry of Electricity and Energy, the Public Electricity Corporation (PEC), and the Rural Electrification Authority — with no independent regulator, leaving Electricity Law of 2009 and renewable energy strategies largely unimplemented. Financially, the sector is unsustainable: generation covers less than half of peak demand, the grid is split into isolated zones, and PEC recovers under two cents per dollar spent due to losses, and poor bill collection, perpetuating a cycle of decline and a heavily subsidized sector.

Summary Description

Yemen’s electricity sector is in a severe crisis, with generation capacity far below peak demand—especially in major urban centers like Aden—after conflict dismantled the national transmission network into fragmented, weakly connected service zones. Aging infrastructure and urgent rehabilitation needs (including critical transmission lines)

further reduce reliability and efficiency, while the Public Electricity Corporation cannot properly maintain generation assets, forcing an expensive and fiscally unsustainable dependence on rented power that still leaves much demand unmet. The situation is most acute in Aden, where very high technical and commercial losses (about 44%), weak revenue collection, and large unpaid public-sector bills undermine financial viability and block investment in maintenance; prioritizing Aden is strategic because it is well-studied and investment-ready, its grid supports neighboring governorates, and reducing its losses and improving commercial operations could deliver outsized fiscal and service benefits—providing a realistic foundation for broader sector recovery.

Beyond the urban crisis, the vast majority of Yemen's population in rural areas—nearly 70 percent—lacks access to reliable electricity, hindering basic service delivery and economic recovery. The geographic dispersion and poverty in these regions make conventional grid expansion economically unviable, and previous short-term solutions have proven unsustainable. To address this, a differentiated approach is necessary, transitioning from emergency measures to a long-term, sustainable model. A market-oriented mini-grid program, leveraging Yemen's high solar potential and mobilizing private sector investment through concessional financing, presents a scalable and climate-resilient solution to increase energy access, improve livelihoods, and foster economic development in these underserved rural communities.

Drawing upon the foundational analytical work from the World Bank-financed Aden Electricity Master Plan and the mini-grid studies conducted under YEEAP II, the proposed project is a direct, evidence-based response to Yemen's multifaceted energy crisis. The Aden Master Plan identified the severe generation gaps and critical need for network rehabilitation, justifying the project's focus on strengthening the urban grid in Aden to create rapid, fiscally meaningful impacts that stabilize the wider network. Simultaneously, the YEEAP II studies confirmed the unsustainability of conventional grid expansion for rural areas and assessed the viability of alternative models, thus informing the project's dual-track approach. Consequently, the project design incorporates a dedicated, market-oriented solar mini-grid program to provide a scalable and sustainable solution for the Yemen's population in underserved rural communities, directly translating the findings on affordability and private sector engagement into a concrete strategy for increasing energy access.

Components

- Component 1: Enhancing Efficiency and Resilience of the Transmission and Distribution Networks in Aden
- Component 2: Expanding energy access and building climate resilience with privately operated solar mini-grid syst
- Component 3: Project Management for Components 1 and 2
- Component 4: Promoting Localization and Strengthening Institutions
- Component 5: Contingency Emergency Response Component (CERC)

Environmental And Social Risk Classification

Substantial

Decision



BASIC INFORMATION

A. Basic Project Data

Project Beneficiary(ies)	Region	Operation ID	Operation Name
Yemen, Republic of	MID EAST,NORTH AFRICA,AFG,PAK	P516972	Recovery of Electricity Sector for Equitable Transition in Yemen (RESET)
Financing Instrument Investment Project Financing (IPF)	Estimated Appraisal Date	Estimated Approval Date	Practice Area (Lead)
		23-Oct-2026	Energy
Borrower(s)	Implementing Agency		
United Nations Development Programme, UNITED NATIONS OFFICE FOR PROJECT SERVICES	UNITED NATIONS OFFICE FOR PROJECT SERVICES, United Nations Development Programme		

Proposed Development Objective(s)

The project development objective (PDO) is to enhance electricity system efficiency and resilience in Aden and expand energy access in rural and peri-urban areas through privately operated solar mini-grid systems.

Components

Component 1: Enhancing Efficiency and Resilience of the Transmission and Distribution Networks in Aden

Component 2: Expanding energy access and building climate resilience with privately operated solar mini-grid syst

Component 3: Project Management for Components 1 and 2

Component 4: Promoting Localization and Strengthening Institutions

Component 5: Contingency Emergency Response Component (CERC)

@#&OPS~Doctype~OPS*dynamics@pidsimplifiedaprojectfinancing#doctype

PROJECT FINANCING DATA (US\$, Millions)

Maximizing Finance for Development

Is this an MFD-Enabling Project (MFD-EP)? Yes

Is this project Private Capital Enabling (PCE)? Yes

SUMMARY

Total Operation Cost	146.00
Total Financing	146.00



of which IBRD/IDA	120.00
Financing Gap	0.00

DETAILS	
World Bank Group Financing	
International Development Association (IDA)	120.00
IDA Grant	120.00
Non-World Bank Group Financing	
Other Sources	26.00
Private Commercial Sources (identified)	16.00
Foreign Multilateral Institutions (unidentified)	10.00

@#&OPS~Doctype~OPS^dynamics@pidsimplifiedenvsocriskdecision#doctemplate	
Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Area OP 7.60	No
Decision	

Note to Task Team: End of system generated content, document is editable from here. *Delete this note when finalizing the document.*

B. Proposed Development Objective(s)

Note to Task Team: The PDO has been pre-populated from the datasheet for the first time for your convenience. Please keep it up to date whenever it is changed in the datasheet. *Delete this note when finalizing the document.*

Development Objective(s)

The project development objective (PDO) is to enhance electricity system efficiency and resilience in Aden and expand energy access in rural areas through privately operated solar mini-grid systems.

Note to Task Team: This section should indicate PDO level results indicators that are expected to be achieved under the proposed operation to reflect and measure success in achieving the PDO, keeping in mind that the indicators should be specific, measurable, realistic, and relevant. The completed table on the Results Framework and Monitoring should be provided in Project Paper Annex 1. Not more than half page. *Delete this note when finalizing the document.*

Key Results

C. Project Description

Note to Task Team: This is a part of the project description and components and is necessary to understand and review projects. *Delete this note when finalizing the document.*

D. Environmental and Social Risks and Impacts

Summary of Assessment of Environmental and Social Risks and Impacts

Project scope and expected benefits. The project will support the rehabilitation and strengthening of electricity transmission and distribution infrastructure in Aden Governorate and the expansion of electricity access through privately operated solar photovoltaic (PV) mini-grid systems in rural and peri-urban areas. The investments include new substations, overhead transmission and distribution lines, underground cable connections, medium- and low-voltage network rehabilitation, distribution transformers, solarization of public buildings, and future mini-grid investments. These activities are expected to generate significant environmental and social benefits through improved reliability of electricity supply, reduced technical losses, increased use of renewable energy, reduced reliance on diesel-based generation, and improved access to electricity services for households, businesses, and public facilities. Environmental risk profile. The environmental and social risks are assessed as Substantial, reflecting the nature of the proposed activities, the FCV context, the presence of legacy infrastructure, the uncertainty associated with future mini-grid locations, and institutional capacity constraints. Environmental risks are primarily associated with construction activities, occupational health and safety hazards, hazardous materials and waste management, historical contamination at existing substations and electricity facilities, and biodiversity risks associated with overhead transmission and distribution lines. Particular attention will be required for the management of asbestos-containing materials (ACM), PCB-containing equipment, contaminated oils, electronic waste, batteries, solar panels, and other end-of-life equipment. Biodiversity risks are associated with overhead line investments that may occur in proximity to coastal habitats and migratory bird areas in Aden, including potential bird collision and electrocution risks. Additional environmental risks relate to future mini-grid investments and the potential presence of explosive remnants of war (ERW) or unexploded ordnance (UXO) in some project areas. Social and labor risks. Social risks are associated with construction activities in dense urban areas and future rural mini-grid investments. Potential impacts include traffic and access disruptions, temporary livelihood impacts, temporary restrictions on land use, disruption of



existing services and utilities, community exposure to construction activities, electrical safety risks, labor and working condition risks, security-related risks, and risks of sexual exploitation and abuse and sexual harassment (SEA/SH). Labor risks include occupational health and safety hazards, child labor and forced labor risks in primary supply chains, and worker security concerns associated with Yemen's FCV context. Although the project is designed to avoid physical resettlement and significant involuntary land acquisition, some investments may require temporary access restrictions or may result in limited livelihood impacts that will need to be screened and managed in accordance with ESS5. For certain mini-grid activities, land may be made available through voluntary land donation or community land donation arrangements consistent with ESS5 requirements. Risk management instruments and due diligence. The project will prepare and implement an Environmental and Social Commitment Plan (ESCP), Environmental and Social Management Framework (ESMF), Labor Management Procedures (LMP), Stakeholder Engagement Plan (SEP), SEA/SH Action Plan, and Security Management Plan (SMP). The ESMF will establish environmental and social screening procedures, risk classification criteria, exclusion criteria, and requirements for site-specific environmental and social instruments. The ESCP and ESMF will include eligibility and exclusion criteria to ensure that the project does not finance activities requiring physical resettlement, significant involuntary land acquisition, significant adverse biodiversity impacts, or other high-risk environmental or social activities that cannot be managed consistent with the ESF. A site-specific ESIA and ESMP, together with a Biodiversity Management Plan, will be prepared for the Al-Hiswa–Ber Nasser transmission line and associated substations, while additional site-specific instruments such as Livelihood Restoration Plan (LRP) will be prepared as required through the screening process. Environmental and social instruments will also assess and define approaches for management of hazardous materials, historical contamination, biodiversity impacts, electronic waste, batteries, solar panels, and end-of-life equipment, including consideration of equipment lifespan, quality-certified technologies, supplier take-back arrangements, and other relevant good international industry practices. Implementation and oversight arrangements. Environmental and social risk management will be implemented by the United Nations Office for Project Services (UNOPS), which has demonstrated satisfactory environmental and social performance under the ongoing Yemen Emergency Electricity Access Project Phase II. UNOPS will retain overall responsibility for environmental and social compliance and will be supported by dedicated environmental and social specialists, an SEA/SH specialist, contractor management arrangements, capacity-building activities for national counterparts, and independent Third-Party Monitoring (TPM) arrangements to verify implementation of environmental and social commitments and compliance with the ESF.

Note to Task Team: This summary section is downloaded from the Readiness ESRS Document and is editable. It should match the text provided by E&S specialist. If it is revised after the initial download the task team must manually update the summary in this section. *Delete this note when finalizing the document.*

Note to Task Team: To view the Environmental and Social Risks and Impacts, please refer to the Readiness ESRS Document. *Delete this note when finalizing the document.*



Grievance Redress Services:

Note to Task Team: All IPF PIDs should include the following mandatory language (do not edit or add text in this section). *Delete this note when finalizing the document.*

Grievance Redress. Communities and individuals who believe that they are adversely affected by a project supported by the World Bank may submit complaints to existing project-level grievance mechanisms or the Bank’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project related concerns. Project affected communities and individuals may submit their complaint to the Bank’s independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of Bank Management and after Management has been given an opportunity to respond. For information on how to submit complaints to the Bank’s Grievance Redress Service (GRS), please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the Bank’s Accountability Mechanism, please visit <https://accountability.worldbank.org>

E. Implementation

Institutional and Implementation Arrangements

Note to Task Team: The following sections are system generated and can only be edited in Data Sheet. *Delete this note when finalizing the document.*

CONTACT POINT
World Bank
Djamali Ibrahime Senior Energy Specialist
Ali Ahmad Senior Energy Specialist
Borrower/Client/Recipient



United Nations Development Programme

UNITED NATIONS OFFICE FOR PROJECT SERVICES

Implementing Agencies

UNITED NATIONS OFFICE FOR PROJECT SERVICES

United Nations Development Programme

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: <http://www.worldbank.org/projects>

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Area OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

APPROVAL

Task Team Leader(s):	Ali Ahmad
Co- Team Leader(s):	Djamali Ibrahime, Mohammad Zubair Stanikzai

Approved By

Country/Division Director:		
----------------------------	--	--

Note to Task Team: End of system generated content, document is editable from here. *Delete this note when finalizing the document.*