



Pakistan: Second Power Transmission Enhancement Investment Program (Tranche 4)

Project Name	Second Power Transmission Enhancement Investment Program (Tranche 4)	
Project Number	48078-006	
Country / Economy	Pakistan	
Project Status	Approved	
Project Type / Modality of Assistance	Loan	
Source of Funding / Amount	Loan 4271-PAK: MFF Power Transmission Enhancement Investment Program II Tranche 4	
	Ordinary capital resources	US\$ 189.00 million
Strategic Agendas	Environmentally sustainable growth Inclusive economic growth	
Drivers of Change	Gender Equity and Mainstreaming Governance and capacity development	
Sector / Subsector	Energy / Electricity transmission and distribution	
Gender Equity and Mainstreaming	Effective gender mainstreaming	
Description	<p>In October 2022, ADB received the project financing request from the government of Pakistan to finance the enhancement of the NTDC transmission grid through a loan totaling \$189 million from ADB's Ordinary Capital Resources (OCR). The proposed project will finance the construction of high-voltage transmission infrastructure and procurement of materials required for asset management and reduction of transmission system constraints. Tranche 4 will support NTDC in meeting growing electricity demand efficiently and reliably at the load centers of Punjab, Sindh and Khyber Pakhtunkhwa provinces through the construction of the transmission network and augmentation of the existing substations. In addition, the equipment and goods to be procured under Tranche 4 will be utilized to restore the transmission lines damaged during the recent floods and the other damages to be identified in the disaster recovery framework under preparation by the government with the support from ADB, World Bank, EU, and the UN. The project will have two outputs. Output 1 will include six subprojects to add a total of 2,680 MVA in substation capacity and about 350 km of transmission lines and procurement of goods for operation and maintenance of NTDC assets to reduce the substations breakouts. An additional electricity sale of 13,481 GWh and associated transmission network loss reduction of 135 GWh are expected due to the project upon commissioning in 2026. Output 2 will involve support to gender mainstreaming in NTDC and increasing number of female professionals. The project is linked and sequenced with the MFF earlier projects. The proposed project is expected to have the positive medium to long term impact on the overall power sector and economy of Pakistan by addressing the emerging needs of the transmission network post floods, scaling up the transmission infrastructure to be at par with the increasing generation capacity contributing to the revival of post pandemic and post-calamity economy of the country and reduction of the circular debt through reliable and unconstrained electricity transmission. The project is aligned with ADB Strategy 2030 operational cluster 3 on infrastructure and economic connectivity and supports four operational priorities: (i) addressing remaining poverty and reducing inequalities; (ii) accelerating progress in gender equality; (iii) tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability; and (iv) strengthening governance and institutional capacity. It is in line with ADB CPS, 2021-2025 for Pakistan. The proposed project supports Pakistan NDC mitigation measure on upgrading the transmission network and is aligned with the Paris Agreement criteria. It will contribute to the annual carbon dioxide emission savings of about 177,193 tons which accounts for energy efficiency and energy savings that will come from the use of high temperature low sag conductors and reduced technical losses. The proposed tranche 4 meets the selection criteria set forth in schedule 4 of the MFF FFA. The project is categorized effective gender mainstreaming (EGM) aiming to support NTDC in institutionalizing gender focused aspects in its operations.</p>	
Project Rationale and Linkage to Country/Regional Strategy	<p>Key issues faced by Pakistan power sector include (i) recurring circular debt, (ii) an unsustainable and unaffordable energy mix with heavy reliance on imported fuel-based electricity generation, (iii) a stressed transmission and distribution network, and (iv) the slow pace of reforms. Lack of access to grid electricity affects 34% of the population and is one of the main constraints to inclusive sustainable growth. Vulnerability to climate change and natural disasters poses an additional significant challenge to the sustainable and reliable electricity supply, as witnessed by the monsoon rains and the subsequent flashfloods in July and August 2022, which wreaked tremendous devastations in Pakistan. The proposed project is expected to have the positive medium to long term impact on the overall power sector and economy of Pakistan by addressing the emerging needs of the transmission network post floods, scaling up the transmission infrastructure to be at par with the increasing generation capacity contributing to the revival of post pandemic and post-calamity economy of the country and reduction of the circular debt through reliable and unconstrained electricity transmission. The project is aligned with ADB Strategy 2030 operational cluster 3 on infrastructure and economic connectivity and supports three operational priorities: (i) addressing remaining poverty and reducing inequalities; (ii) accelerating progress in gender equality; and (iii) tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability. It is in line with ADB CPS, 2021-2025 for Pakistan. The proposed project supports Pakistan NDC mitigation measure on upgrading the transmission network and is aligned with the Paris Agreement criteria. It will contribute to the annual carbon dioxide emission savings of about 177,193 tons which accounts for energy efficiency and energy savings that will come from the use of high temperature low sag conductors and reduced technical losses. The proposed tranche 4 meets the selection criteria set forth in schedule 4 of the MFF FFA. The project is categorized effective gender mainstreaming (EGM) aiming to support NTDC in institutionalizing gender focused aspects in its operations.</p>	
Impact	The improved transmission infrastructure and management, and energy market transparency and efficiency aligned with the National Power Policy 2013 and Pakistan 2025: One Nation, One Vision	
Project Outcome		
Description of Outcome	Improved coverage, reliability, and quality of the power transmission service in Pakistan.	
Progress Toward Outcome		
Implementation Progress		
Description of Project Outputs	Transmission system capacity augmented and expanded Gender capacity of NTDC management and staff strengthened	
Status of Implementation Progress (Outputs, Activities, and Issues)		

Safeguard Categories	
Environment	B
Involuntary Resettlement	B
Indigenous Peoples	C

Summary of Environmental and Social Aspects

Environmental Aspects	NTDC prepared the initial environmental examinations reports for subprojects 1, 2, 4 and 5, and the environmental audit report for subprojects 3 and 6, which were disclosed on 28 October 2022. Anticipated impacts during construction include soil erosion, deterioration of ambient air quality, generation of noise and vibration, waste streams, and occupational and community health and safety. Risks related to electromagnetic fields and natural hazards, such as earthquakes, landslides, and rockfalls, can result in adverse impacts during operation. These impacts can be readily mitigated by careful line routing, resilient design, and effective environmental management plan implementation, which were budgeted in the project cost. NTDC built the environmental requirements into the turnkey contracts to be funded by ADB and the civil works contracts to be funded by NTDC. NTDC will report on the environmental management plan implementation through semiannual environmental monitoring reports.
Involuntary Resettlement	In September 2022, NTDC updated the MFF Land Acquisition and Resettlement Framework (LARF) to allow a phased construction approach and a three-tier compensation mechanism requiring validation of compensation disbursement before commencement of the phased construction. NTDC prepared five Resettlement Plans and a social audit report, which were disclosed on 26 October 2022. Overall, the project impacts are deemed insignificant as no Affectees will be displaced from their houses. Temporary impact to cropped areas is also expected to remain below 10%. Hence, the project is classified as category B for Involuntary Resettlement. NTDC submits the semi-annual safeguards monitoring reports on a regular basis. NTDC has also engaged an independent external monitoring expert who reviews the internal monitoring reports and validates implementation of RPs/LARPs based on field visits, public consultations, and verification of compensation disbursement record. All semi-annual safeguards monitoring reports for January-June 2022 were disclosed on 26 October 2022. Construction work in the transmission lines right of way and the proposed new grid station will not commence until RPs/LARPs are fully implemented and APs fully compensated based on the agreed phased approach and ADB acceptance of a third-party monitoring report validating compliance with implementation of RPs/LARPs and disbursement of compensation to APs.
Indigenous Peoples	The field survey found that no ethnic minority, as defined by the Safeguard Policy Statement, is involved, or affected.
Stakeholder Communication, Participation, and Consultation	
During Project Design	Approximately 50 individual and public consultations were held with 327 participants (affected persons, authorities and residents of local communities including poor) in preparation of Tranche 4 subprojects safeguard documents, and gender action plan (GAP). Information about the subprojects was consulted with people including the anticipated resettlement and environmental impacts and mitigation measures provided in resettlements plans (RPs) and environmental management plans (EMP). Local people have positive expectation and wish to work in subprojects civil works which are reflected in the safeguard documents disclosed on ADB website.
During Project Implementation	Project information will be strategically disseminated through media at main milestones including loan signing, contract awards and project completion. A grievance redress mechanism will be established on site for each subproject. Consultations with stakeholders, project affected persons and communities will be continued during the resettlement plans (RP) update and implementation. Drafts RPs for Tranche 4 subprojects with involuntary resettlement impact have been prepared in consultation with affected persons (APs) and communities. Information booklets on resettlement process will be distributed to APs and communities during public consultations to disseminate information about the projects works, resettlement impact and mitigation measures. Subprojects RPs and environmental management plans (EMPs) include requirements and plans for participation of civil society, APs and communities.

Responsible ADB Officer	Mukhamedova, Takhmina
Responsible ADB Department	Central and West Asia Department
Responsible ADB Division	Energy Division, CWRD
Executing Agencies	National Transmission & Despatch Company Limited

Timetable

Concept Clearance	-
Fact Finding	-
MRM	04 Nov 2022
Approval	08 Dec 2022
Last Review Mission	-
Last PDS Update	08 Dec 2022

Loan 4271-PAK

Financing Plan		Loan Utilization			
	Total (Amount in US\$ million)	Date	ADB	Others	Net Percentage
Project Cost	296.00	Cumulative Contract Awards			
ADB	189.00	-	0.00	0.00	%
Counterpart	107.00	Cumulative Disbursements			
Cofinancing	0.00	-	0.00	0.00	%

Project Page	https://www.adb.org/projects/48078-006/main
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