ASIAN DEVELOPMENT BANK

Pakistan: Energy Sector Reforms and Financial Sustainability Program (Subprogram 2)

Project Name	Energy Sector Reforms and Financial Sustainability Program (Subprogram 2)
Project Number	53165-002
Country	Pakistan
Project Status	Approved
Project Type / Modality of Assistance	Loan
Source of Funding / Amount	Loan 4159-PAK: Energy Sector Reforms and Financial Sustainability Program (Subprogram 2) Concessional ordinary capital resources lending — US$ 300.00 million
Strategic Agendas	Environmentally sustainable growth Inclusive economic growth
Drivers of Change	Governance and capacity development Partnerships Private sector development
Sector / Subsector	Energy - Energy sector development and institutional reform
Gender Equity and Mainstreaming	Some gender elements
Description	The programmatic approach and subprogram 1 were approved on 6 December 2019 to address financial, technical, and governance deficits in the energy sector that adversely impact sector sustainability and affordability, and Pakistan's fiscal balance and macroeconomic stability. Subprogram 2 aims to (i) secure financial sustainability by controlling the accumulation of and reducing _circular debt_; (ii) strengthen governance by implementing a road map for a competitive electricity market, separating the policy and regulatory functions in the hydrocarbon segment, appointing appellate tribunals, implementing multiyear tariffs, and unbundling the gas segment; and (iii) reinforce infrastructure improvements through integrated planning to facilitate public and private sector investment across the energy sector. Subprogram 2 is embedded in the programmatic approach and is consistent with the Sustainable Development Finance Policy. It complements and mutually reinforces energy reforms with the International Monetary Fund (IMF) under its $6 billion Extended Fund Facility (EFF) and the World Bank's approved $400 million Program for Affordable Clean Energy 1 for sector sustainability enhancement. The second through fifth reviews of the IMF's EFF were approved on 24 March 2021, effecting a disbursement of $500 million. The sixth review was concluded on 18 November 2021, making available for disbursement $1,059 million, bringing total disbursements under the EFF to about $3,027 million. Subprogram 2 (footnote 4) is linked with operational priority (OP) 1 (addressing remaining poverty and reducing inequalities), OP2 (accelerating progress in gender equality), OP3 (tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability), and OP6 (strengthening governance and institutional capacity) of the Asian Development Bank (ADB) Strategy 2030. Subprogram 2 is aligned with meeting Pakistan's Nationally Determined Contribution targets for climate change through the deployment of renewable energy by replacing thermal generation, improving demand-side energy efficiency, and reducing unaccounted for gas losses. Hence, SP2 contributes to Sustainable Development Goal (SDG) 9 (finding lasting innovation and technological solutions for increased energy resources and efficiency), SDG 12 (encouraging sustainable energy production and consumption patterns), and SDG 13 (taking urgent action to climate change and its impacts). It also contributes to the achievement of Sustainable Development Goal 7 (ensure access to affordable, reliable, sustainable, and modern energy for all) through improved energy access across Pakistan.

Project Rationale and Linkage to Country/Regional Strategy	Macroeconomic management challenges. The coronavirus disease (COVID-19) pandemic hit Pakistan's macroeconomic performance at a critical juncture in its macroeconomic recovery program. The economy was affected by the COVID-19 pandemic in 2020, causing real gross domestic product (GDP) growth to contract to 0.5% in fiscal year (FY) 2020; GDP per capita continued to decrease from $1,321 in FY2019 to $1,250 in FY2020; inflation was exacerbated, averaging 10.7% in FY2020; and total debt climbed to 87.2% of GDP. The government announced a relief package of PRs1,200 billion (2.9% of GDP) in March 2020, of which PRs715 billion (1.7% of GDP) was budgeted for FY2020 and PRs485 billion (1.2% of GDP) was for FY2021. Support to consumers in agriculture, residential, and small and medium-sized enterprises was provided through deferred bill payments and industry support packages with a fixed tariff regime. Due to the government's swift response to the pandemic, GDP growth rebounded strongly to 3.9% in FY2021. Inflation declined from 10.7% in FY2020 to 8.9% in FY2021, but rising food and energy prices kept it above the central bank's 6.5% target for the year. The current account deficit eased slightly from the equivalent of 1.7% of GDP in FY2020 to 0.6% in FY2021, driven by healthy growth in remittances. In response to the COVID-19 crisis, the government shifted its policy priorities to sustain the economy, save lives and livelihoods, and expand social safety nets to prevent people from plunging into poverty. However, the economy is still struggling. Poverty incidence, measured at $3.2/day, has risen from 35.4% in 2019 to 39.1% in 2020; it is projected to remain around 31.9% even in 2021. The unemployment rate for FY2021, is still being assessed and is expected to increase to 9.56% in FY2021 from 5.79% in FY2018. In FY2020, losses of large state-owned enterprises (SOEs) grew rapidly, constraining the government's fiscal position. Energy SOEs, which comprise about 60% of total SOE assets, were a major driver of these losses. The pandemic has stressed the finances and fragmented the supply chain of the energy sector. This disruption has led to a substantial slowdown in the pace of sector reforms initiated by the government since early 2019. The impact on the country's energy sector circular debt arising from these losses, and exacerbated by the pandemic relief measures, has put unprecedented pressure on sector liquidity and finances. The programmatic approach has been adjusted to continue with the reforms in the current challenging environment. Circular debt. During the processing of subprogram 1 in January December 2019, in parallel with the approval and first review of the IMF's EFF program in the first half of FY2020, the cabinet approved a 3-year Circular Debt Management Plan (CDMP). The implementation of the plan was on track and circular debt accumulation decreased during FY2019 and in early FY2020 to $215 million per month, from an average buildup of $272 million per month in FY2018. However, with the challenges of the pandemic during the second half of FY2020, circular debt accumulation soared to nearly $300 million per month. The demand for electricity plunged to 52% for industrial users and 66% for commercial users compared with FY2019 volumes, while demand for domestic and agricultural users grew 10% 15%. Since agriculture and residential consumer tariffs are cross-subsidized by industrial and commercial tariffs, given the decrease in industrial and commercial energy use and the Ministry of Finance's delayed disbursement of subsidies, the revenues of power distribution companies (DISCOs) decreased significantly. Further, collection rates during FY2020 for domestic customers fell to 34% on average, partially because of the government's COVID-19 relief measures (tariff moratorium and rolling bill installments) during April December 2020. Total bill collections decreased from around 91% in FY2019 to 86% in FY2020. The result was increased circular debt accumulation to PRs538 billion against the government's business-as-usual forecasts of PRs127 billion for FY2020. Despite the FY2020 circular debt challenges, FY2021 evidenced significantly lower circular debt flow of PRs297 billion as compared to previously forecasted PRs436 billion. To continue the constructive mitigation of increased circular debt flow, reform policies must continue. Causes of circular debt continue to include (i) inadequate tariffs and inefficient subsidies, (ii) high generation costs, (iii) unsustainable losses, (iv) weak governance and collections, and (v) lack of integrated planning. These need to be addressed through reform actions to manage and reduce circular debt accumulation, in line with the government's updated 2021 CDMP (footnote 15). Figure 1 shows updated 2021 CDMP circular debt trend and projections, and Figure 2 shows updated 2021 CDMP accumulated circular debt projections with and without reforms. Inadequate tariffs and inefficient subsidies. The government aims to reduce the sector's financial deficits through regular annual and automatic quarterly tariff assessments and notifications. Under subprogram 1 in 2019, the National Electric Power Regulatory Authority (NEPRA) determined and the Ministry of Energy (MOE) Power Division notified the FY2018 and FY2019 tariffs, adjusting tariffs to cover a PRs469 billion backlog accumulated since early 2017. With a tariff increase trajectory in place for FY2020 FY2022, under the cabinet-approved CDMP, the government budgeted only PRs130 billion, 46% less than the FY2020 budget, for power subsidies in FY2021. The challenges of the pandemic in the first half of FY2021 caused tariffs to be frozen; bill payments to be phased over a 9-month period (April December 2020); and agriculture, export-oriented industries, and small and medium-sized enterprise consumers to be provided with subsidy support packages to limit their energy costs. Disruptions to collection cash flows and irregular subsidy payments to DISCOs, among others, caused circular debt flow to grow by PRs211 billion during July December 2020, against the projected savings surplus of PRs54 billion. High cost of generation. Pakistan's power policies of 1994, 2002, 2006, and 2015 were reactive to the country's generation crises and encouraged aggressive private sector participation through the establishment of fossil fuel-based generation because of the short gestation period. This distorted the generation mix toward imported fuels (oil, liquified natural gas [LNG], and coal) under the take-or-pay contracts, while reduced reliance on indigenous hydropower, renewable energy sources, and local fuels increased the cost of generation. Independent power producers (IPPs) were offered 16% 20% returns on investment, pegged to the US dollar, which turned out to be much higher as the US dollar appreciated 5.3 times against the Pakistan rupee in 1995 2020. The high cost of generation is also because of multiple other factors, including (i) indecision on hydropower profits, (ii) transmission constraints that cannot evacuate about 13,000 megawatts of power, (iii) a flawed dispatch merit order policy, (iv) the financing cost of circular debt, and (v) pricing of local gas and imported LNG. In April 2020, the government initiated discussions to renegotiate power purchase agreements with IPPs to reduce capacity payments, by lowering returns and interest on debt, extending debt tenors, and sharing operation and maintenance expenses equitably. Further, the National Electricity Policy (2021) and the Alternative and Renewable Energy Policy (2020) were prepared under subprogram 1. Both policies mandate competitive procurement of energy to optimize the generation cost and mix Unsustainable losses. The unrecovered cost of the generated units, combined with the lack of regulatory and private sector mechanisms to improve DISCOs' operational performance, remain a recurring cause of circular debt. Of the 123 billion energy units (kilowatt-hours) generated in FY2019, the revenue of nearly 30% of these units was unaccounted for because (i) transmission and distribution losses averaged 20%, and (ii) non-recoveries of the billed amount averaged 10%. The average DISCO inefficiency losses and under-recoveries in FY2020 were PRs241 billion. The programmatic approach and the government's reform program focus on mitigating technical and commercial losses, and reducing inefficiencies through private sector targeted investments in the sector. Weak governance. Heavy reliance on sovereign financing has led to a heavy public sector influence on energy sector governance. Board and management positions of government-owned generation, transmission, and distribution companies continue to be held primarily by civil servants with limited sector experience and commercial focus. Under subprogram 1, the MOE adopted a general government policy applicable to all SOEs, to select board candidates through a competitive and transparent process with at least one female board member. In April 2020, the cabinet approved the SOE governance reforms to divest and commercialize SOEs through private sector and public private participation modalities. Instead of targeting outright privatization of power DISCOs, which had been unsuccessful in the past, the government aims to consider concession, management contracting, and outsourcing models. An SOE law, supported by ADB, is close to final approval and public announcement. Federal and provincial public private partnership laws and government agencies are already working to achieve these outcomes. Currently, not all boards have female members, and increased focus is needed to diversify and open the sector's talent pool. Without open, inclusive, and transparent appointments of board and management with adequate sector experience, poor governance will accentuate sector inefficiencies and adverse impacts on circular debt. Lack of integrated system planning. Without integrated system planning accounting for the total cost of supply and service, Pakistan will continue to face intermittent energy supply demand imbalances, an uneven generation mix, unbalanced switching costs between the gas and power segments, and mismatch between idle generation capacity and network availability. With no generation crisis and the availability of surplus power, the government has utilized this opportunity to develop, with ADB support, a 25-year Indicative Generation Capacity Expansion Plan, the 5-year National Electricity Policy and Electricity Plan, and a market-oriented multi buyer multi seller electricity trading model to address these planning constraints. Without further reform action to prepare the sector for a market-oriented trading model, lack of integrated system planning will instill inefficiencies and contribute to mounting circular debt.
Impact	

Project Outcome	
Description of Outcome	
Progress Toward Outcome	
Implementation Progress	
Description of Project Outputs	
Status of Implementation Progress (Outputs, Activities, and Issues)	
Geographical Location	Nation-wide

Safeguard Categories	
Environment	C

Involuntary Resettlement	C
Indigenous Peoples	C

Summary of Environmental and Social Aspects
Environmental Aspects
Involuntary Resettlement
Indigenous Peoples
Stakeholder Communication, Participation, and Consultation
During Project Design
During Project Implementation

Responsible ADB Officer	Hewitt, Kelly Desheil
Responsible ADB Department	Central and West Asia Department
Responsible ADB Division	Energy Division, CWRD
Executing Agencies	Ministry of Finance Q-Block, Finance Division, Pak Secretariat, Red Zone, Islamabad, Pakistan

Timetable	
Concept Clearance	30 Oct 2021
Fact Finding	05 Apr 2021 to 16 Apr 2021
MRM	11 May 2021
Approval	10 Dec 2021
Last Review Mission	-
Last PDS Update	10 Dec 2021

Loan 4159-PAK

Financing Plan		Loan Utilization			
	Total (Amount in US$ million)	Date	ADB	Others	Net Percentage
Project Cost	300.00	Cumulative Contract Awards			
ADB	300.00	-	0.00	0.00	%
Counterpart	0.00	Cumulative Disbursements			
Cofinancing	0.00	-	0.00	0.00	%

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