# Program Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 28-Sep-2023 | Report No: PIDA36207

## BASIC INFORMATION

### A. Basic Project Data

| Country | Project ID | Project Name | Parent Project ID (if any) |
|---|---|---|---|
| South Africa | P179077 | South Africa Sustainable and Low-Carbon Energy Transition Development Policy Loan (P179077) | |
| **Region** | **Estimated Board Date** | **Practice Area (Lead)** | **Financing Instrument** |
| EASTERN AND SOUTHERN AFRICA | 26-Oct-2023 | Macroeconomics, Trade and Investment | Development Policy Financing |
| **Borrower(s)** | **Implementing Agency** | | |
| Republic of South Africa | National Treasury | | |

**Proposed Development Objective(s)**

To advance the restructuring of the power sector to promote long-term energy security and support a low carbon transition.

**Financing (in US$, Millions)**

**SUMMARY**

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|---|---|
| **Total Financing** | 1,000.00 |

**DETAILS**

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|---|---|
| **Total World Bank Group Financing** | 1,000.00 |
| World Bank Lending | 1,000.00 |

Decision
The review did authorize the team to appraise and negotiate

### B. Introduction and Context

1. **The proposed Development Policy Loan (DPL) supports the Government of South Africa's (GoSA) effort to advance the restructuring of the power sector to promote long-term energy security and a low carbon transition.** The operation, for an amount of US$1 billion, builds on recently approved government strategies to respond to the current energy crisis, including the President's Energy Action Plan. Consequently, the operation aims to address the biggest existing constraint to economic growth. The operation is aligned with the 2022-26 Country Partnership

Framework (CPF) and operationalizes several recommendations of the South Africa Country Climate and Development Report (CCDR).[1] It is in line with the World Bank's new vision and supports regional priorities on climate change, private sector financing, and gender. The operation has been jointly prepared with other development partners who plan to provide complementary budget support to the GoSA.[2]

2. **Reliable electricity service provision is a necessary condition for economic growth and job creation; yet after years of deterioration in energy supply, South Africa faces a severe crisis**. Rolling blackouts (or load shedding) reached all-time highs, averaging 8.8 hours per day in 2022 and over 10 hours per day in the first six months of 2023. The economy is estimated to have lost between 0.7 and 3.2 percentage points of gross domestic product (GDP) in 2022 because of load shedding.[3] The root causes of the crisis are found in the outdated, vertically integrated market structure that is no longer adapted to respond to the needs of the energy sector and to weak governance with poor oversight of the national state-owned power utility, Eskom. Delayed and inefficient investments in generation and transmission aggravate the problem. Low collection of revenue due to inadequate tariff levels and structure, high levels of arrears accumulated by municipalities, and chronic operational issues further weaken Eskom. There are alleged actions of state capture in the sector,[4] alleged plant sabotage, and regulatory obstacles, which have not been adequately addressed despite previous efforts.

3. **The unprecedented energy crisis comes at a time when South Africa has been working to implement a just transition to a low carbon economy**. Globally, South Africa is among the top 20 greenhouse gas (GHG) emitters. Energy represents 81 percent of the country's emissions profile, of which electricity represents 45 percent. The CCDR indicates that its high-carbon intensity has affected millions of citizens through high air and water pollution, with disproportionate negative impacts on the poorest households. Moreover, it will lead to a reduction in the country's competitiveness since some of its current exports will likely be subject to the European Union's Carbon Border Adjustment Mechanism scheduled for a transitional implementation phase in October 2023. In line with the World Bank's Evolution, the DPL thus supports an approach that links country-level benefits with regional and global public goods. South Africa's long-term energy security and a low carbon transition should benefit the country and contribute to Africa's energy transition.

Relationship to CPF

4. **The DPL aligns with the World Bank CPF for South Africa FY22-FY26** (Report No. 154318-ZA), and priorities from the regional and corporate strategies.[5] The CPF builds flexibility to respond to the government's financing needs and emerging priorities on two focus areas and objectives, which are relevant for this operation: (i) *Under Focus Area 1:* Promote increased competition and improved business environment for sustainable growth; Objective 1.2: Greater climate change resilience and environmentally sustainable investments in selected sectors; and (ii) *Under Focus Area 3:* Improve Infrastructure Investment Framework and Selected Infrastructure Services; Objective 3.2: Improved Infrastructure Services by Selected SOEs. This operation supports World Bank's priorities of supporting climate change mitigation efforts.

### C. Proposed Development Objective(s)

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[1] The World Bank, Climate Change and Development Report for South Africa, November 2022.
[2] The African Development Bank (AfDB), KfW Development Bank (KfW), and Government of Canada are preparing complementary budget support loans to South Africa based on similar objectives to the Sustainable and Low-C Energy Transition DPL. Agence Française de Développement (French Development Agency, AFD) is also exploring budget support to GoSA.
[3] South African Reserve Bank, June 2023. Occasional Bulletin of Economic Notes. OBEN/23/01
[4] Report of the Judicial Commission of Inquiry into State Capture, 2022.
[5] World Bank; International Finance Corporation; Multilateral Investment Guarantee Agency. 2021. Country Partnership Framework for the Republic of South Africa for the Period FY22-FY26. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/36027 License: CC BY 3.0 IGO.

5. The PDO is to advance the restructuring of the power sector to promote long-term energy security and support a low carbon transition.

Key Results

6. **The theory of change supported by this operation is illustrated below.** The short-term actions are the reforms supported by this operation, while the medium-term actions are the ones envisioned by the authorities necessary to achieve the pillars of the operation as described below.

**Theory of Change Supported by this DPL**

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| **Overarching goal** | **Advance the restructuring of the power sector to promote long-term energy security and support a low carbon transition** | |
| Medium term outcomes/ Intermediary results (by March 2025) | **Improve energy security**<br>•Operationalize NTCSA<br>•Reduce Eskom debt.<br>•Improve Eskom operational margin<br>•Increase investments in transmission.<br>•Reduce NERSA licensing processing time<br>•Increase coverage of FBE program | **Reduce GHG Emissions**<br>•Increase new embedded renewable generation - 3000 MW.<br>•Increased private capital mobilized in new Renewable Energy registered with NERSA – R55 billion.<br>•Number of beneficiaries from the bounce back mechanism – 1/3 women<br>•21% increase in revenue collected from the carbon tax. |
| Pillars/ Policy areas | **Advance the restructuring of the power sector to promote long-term energy security** | **Support a low carbon transition** |
| Short-term actions | •Establish a TSO with authority to develop an open market with transparent and non-discriminatory access to the grid.<br>•Strengthen the licensing powers of the National Energy Regulator of South Africa.<br>•Restricts Eskom's capital investments to transmission, distribution and environmental compliance.<br>•Increases budgetary allocation to municipalities for FBE. | •Remove licensing threshold for new embedded generation projects (only registration with NERSA required).<br>•Establish a guarantee fund (bounce back) to support SMEs and individuals that purchase or lease RE equipment<br>•Adopt tax incentives for solar panel installations for residential and commercial installations.<br>•Approve gradual increase in the carbon tax rate. |
| Medium-term actions | •Complete the unbundling of Eskom generation and distribution.<br>•Set regulations for tariffs adequate to the new (unbundled) market structure.<br>•Develop the primary and secondary legislation required to create an independent TSO and a competitive market with transparent and non-discriminatory basis.<br>•Develop measures to support sustainability of municipal power distribution business. | •Ensure IPPs can access the network in a non-discriminatory basis with published tariffs.<br>•Adopt a wheeling framework based on international best practice.<br>•Streamline application process for embedded generation projects by establishing a one-stop shop.<br>•Reduce allowances offered to those liable to carbon tax and increase effective carbon tax rate.<br>•Adopt framework for Domestic Carbon Standards.<br>•Promulgate the Climate Change Bill.<br>•Implement the mandatory phase of the Carbon Budget policy and introduce sectoral emissions targets. |

### D. Project Description

7. **The DPL supports the GoSA's reform efforts to advance the restructuring of the power sector to promote long-term energy security and support a low carbon transition**. The magnitude of the crisis has incentivized policymakers to take several actions that will help transform the sector despite the presence of vested interests that had slow down reforms in the past. This operation is part of a multi-donor effort to support the government's program and complements other ongoing activities, such as the JET-IP, and dedicated technical assistance. It is anchored on two mutually reinforcing pillars and eight prior actions that were identified jointly with the GoSA and other development

partners as part of a participatory and coordinated process:

- **Pillar One:** Advance the restructuring of the power sector to promote long-term energy security by supporting the unbundling of Eskom, redirecting its resources toward new investments in transmission, while ensuring continued support for low-income households in a context of increasing electricity tariffs.
- **Pillar Two:** Support a low carbon transition by: (i) encouraging private investment in renewable generation capacity; and (ii) strengthening the use of carbon pricing instruments.

### E. Implementation

8. **The World Bank, National Treasury, and the National Energy Crisis Committee (NECOM), at the Presidency of the Republic of South Africa, have agreed to jointly monitor the result indicators of this operation.** The NECOM has already built a dashboard to monitor the implementation of the Energy Action Plan which can easily be adapted, with the support of the World Bank, to include selected indicators of the Government's response and support a platform for government to work with citizens, civil society, and business. In doing so, the World Bank builds on years of sharing international good practice in performance monitoring and evaluation.

### F. Poverty and Social Impacts, and Environmental, Forests, and Other Natural Resource Aspects

9. **This DPL supports the GoSA's goal to ensure the energy transition is just, critical in a country that remains one of the most unequal in the world.** This operation is expected to have the following positive impacts on poverty: (i) enhance economic activity and job creation from new investments in renewable energy generation; (ii) cushion poor households against projected increases in electricity tariffs required to align revenue with supply costs; (iii) support financially constrained household and businesses by facilitating access to credit by commercial banks for investment in solar technology (especially for women and black women-owned businesses); and (iv) contribute gradually to a reduction in water and air pollution as a result of changes in the energy mix, leading to substantial co-benefits on human capital and the quality of living conditions in the very long run.[6] Finally, this DPL is expected to be accompanied by a technical assistance program to assist the authorities to identify future reforms necessary to manage the social costs associated with the decommissioning of coal-fired power.
10. **This DPL is expected to have a positive or neutral impact on the environment, forests, and other natural resources**.[7] Pillar 2 directly promotes access to cleaner energy and reduces the demand on coal-fired electricity, while Pillar 1 supports the transformation of the electricity market toward a greater utilization of renewable energy. Removing the licensing thresholds for embedded generation projects and supporting private investment in rooftop solar photovoltaic will have a positive impact by promoting access to cleaner energy and reducing the demand on coal-fired power. A gradual increase in the carbon tax rate will have a positive impact by inducing behavior changes that lead to reduced energy consumption and pollutant emissions. Finally creating a Transmission System Operator and National Transmission Company, reducing Eskom's debt, and increasing the budget allocated to the Free Basic Electricity will have a neutral impact on the environment.

### G. Risks and Mitigation

11. **The overall risk to PDO achievement is assessed as high.** The operation responds to the energy crisis which has created a new opportunity for reforms as policymakers have become under additional pressure by frustrated citizen and businesses, but the sector remains beset by vested interests, financial distress, weak governance, a reform

[6] See CCDR, 2022 for a quantification of these effects in the medium and long-term.

[7] There are allegations of forced labor in the production of solar panels and components. This DPF focuses on policies and institutional reforms in South Africa. DPF proceeds are not earmarked to any specific purpose, including the manufacture or procurement of solar panels or components.

program that has not yet been unified in a single vision across government, and diluted responsibilities between several ministries, which affect policy implementation. State capture in the energy sector has received increasing public attention, including through parliamentary hearings, contributing to tensions in the policy dialogue and eroding trust in the government. The limited implementation capacity across key departments, Eskom, and the national energy regulator (NERSA), as well as in many municipalities, is also a source of concern. While the operation supports short-term reform priorities, the above risks are exacerbated by the fact that the agenda requires sustained measures over the medium term (5 to 7 years). Government reforms, including those supported by this operation, will help mitigate some of the above risks by supporting the first steps toward the restructuring of the power sector. The legal unbundling of Eskom (with a focus on transmission), the opening of an electricity market with transparent and non-discriminatory access to the grid, and the promotion of private investment in RE are all structural reforms that will help establish an initial platform for the much-needed transformation of the energy sector. These measures are expected to improve the economic outlook and reduce fiscal risks but, as recognized by the authorities, they will need to be deepened, and sustained by additional measures to make tangible progress in overcoming the ongoing energy crisis in the medium to long-term.

## CONTACT POINT

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## APPROVAL

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### Approved By

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|---|---|---|
| Country Director: | Asmeen M. Khan | 04-Oct-2023 |