BASIC INFORMATION

A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Project ID</th>
<th>Project Name</th>
<th>Parent Project ID (if any)</th>
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<tbody>
<tr>
<td>Madagascar</td>
<td>P166752</td>
<td>Fiscal Sustainability and Energy Development Policy Operation (P166752)</td>
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<thead>
<tr>
<th>Region</th>
<th>Estimated Board Date</th>
<th>Practice Area (Lead)</th>
<th>Financing Instrument</th>
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<tbody>
<tr>
<td>AFRICA</td>
<td>Aug 07, 2018</td>
<td>Macroeconomics, Trade and Investment</td>
<td>Development Policy Financing</td>
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<tr>
<th>Borrower(s)</th>
<th>Implementing Agency</th>
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<tr>
<td>Ministry of Finance and Budget</td>
<td>Ministry of Water, Energy and Hydrocarbons</td>
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Proposed Development Objective(s)

The program development objectives of this standalone operation are to:

(i) Strengthen fiscal reporting and transparency to improve decision-making and oversight of public investments, and
(ii) Improve the governance of the electricity sector

Financing (in US$, Millions)

**SUMMARY**

| Total Financing | 40.00 |

**DETAILS**

<table>
<thead>
<tr>
<th>Total World Bank Group Financing</th>
<th>40.00</th>
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<tbody>
<tr>
<td>World Bank Lending</td>
<td>40.00</td>
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Decision

The review did authorize the preparation to continue

B. Introduction and Context

Country Context

Madagascar’s economy has historically performed well during periods of political stability, where there has been a rebound in growth in recent years following the return to constitutional order. Since independence in 1960, there have
been four major political crises. Periods of strong economic growth have been followed by a political crisis, causing economic activities to contract and resulting in sporadic patterns of growth. Political instability, followed by insufficient infrastructure, including unreliable and costly electricity supply, have been cited as the most constraining factors for doing business by the private sector. During periods of political stability, key drivers of growth have included the mining industry, light manufacturing, and the services sector. Growth has started to pick up in recent years, with real GDP accelerating from 2.3 percent in 2013 to an estimated 4.2 percent in 2017, and is further projected at 5.0 percent in 2018.

**The government is seeking to implement an ambitious public investment program to address the significant infrastructure deficit.** Madagascar has one of the lowest levels of public infrastructure in Sub-Saharan Africa, and is the only country in the region with a declining electrification rate, which fell from 16 percent to 13 percent over the period 2008 to 2015, as electrification did not keep up with population growth. Seeking to remedy this situation, which was also discussed as a high priority in the Systematic Country Diagnostic and the Country Partnership Framework, the government has been actively raising financing to implement its public investment program.

**The external financing landscape is evolving, with more complex sources of financing being considered.** At the end of 2016, a successful Donors and Investors Conference was held where US$6.4 billion was pledged by Development Partners, and US$3.3 billion worth of investment projects were announced by the private sector over the period 2017 to 2022. This level of financing amounts to an average of 11 percent of GDP on an annual basis, assuming a steady scale-up. This level of planned scale-up of investment financing is similar to episodes of scaling-up investments in other countries, where average public investment levels exceeded 10 percent of GDP during 2011-2015 in 12 low income countries. In addition, increasingly complex types of financing are being considered, such as Public Private Partnerships (PPPs), on-lending arrangements to support investments made by State-Owned Enterprises (SOEs), guarantees to de-risk the operating environment, either from Development Finance Institutions (DFIs) or the government, as well as additional debt financing on both concessional and commercial terms.

**To improve the fiscal management of public investments, the government has outlined several reforms, which are supported in this proposed DPO.** The government recently prepared the prioritized list of reforms stemming from its Strategic Plan for the Modernization of Public Finances, which includes reforms to improve the comprehensiveness of reporting on external finances, strengthen the regulatory environment for SOEs, and report on direct and contingent liabilities. A Priority Action Plan for public investments was formally adopted by the government to improve institutional processes for managing public investments. Consequently, an inter-ministerial decree has been passed which establishes the coordination arrangements between all entities involved in managing external financing and public investments in December 2017.

**A program of energy reforms has been initiated in 2015 to improve JIRAMA’s performance.** The GoM laid out a new approach to electricity sector governance in its 2015 New Energy Policy and subsequent policy documents. The policy aims to put the sector on track by implementing measures on tariffs, utility management and corporate governance. These reforms have started to bring positive results, including reduction in system losses to an average of 32 percent over 2016-17 compared to 34 percent in 2015, and improvement in operating margin from -59 percent in 2015 to -33 percent in 2017. To complement these reforms, the Government has committed to address the root causes of JIRAMA’s high cost of service and improve the management of its short-term liabilities through reforms supported by this operation.

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1 Countries such as Congo, Ethiopia, LAO PDR, Sierra Leone and Bangladesh had levels of public investment scale-up similar to Madagascar, IMF Selected Issues Paper, July 2017
Relationship to CPF

The proposed operation, is an integral part of the World Bank’s new CPF, discussed by the Board of Executive Directors in June 2017. The CPF aims to build on the current relative political stability to build resilience, and build sustainable human and economic development in Madagascar. The CPF has two Focus Areas: (i) increase resilience and reduce fragility; and (ii) promote inclusive growth. Engagement in the two Focus Areas is guided by 8 objectives. The prior actions under this DPO are directly contributing to these objectives as follows:

- Improving fiscal transparency and Parliamentary oversight of the public investment program directly contributes to **objective 4** which is to enhance transparency and accountability;
- Reducing fiscal transfers on JIRAMA will contribute to **objective 5** on increasing fiscal capacity to finance priority social and infrastructure spending;
- Strengthening JIRAMA’s financial position and sector expansion planning will help improve access to energy, as stated in **objective 8**.

The proposed operation is designed to complement the investment and TA projects that are ongoing or under preparation. The DPO is highly complementary to the Bank’s current portfolio and pipeline. The Donor Coordination for Results ASA (P164136) seeks to improve reporting and transparency of all external resource flows. The Energy Sector Operations and Governance Improvement project (P151785), approved in 2016, seeks to improve the utility’s commercial, technical, and organizational performance, including through a management improvement plan to implement management information systems and revenue protection programs. Furthermore, over the past year, the Bank has been in the process of steadily broadening its portfolio in the energy sector to include renewable energy development (Scaling Solar Madagascar, P166925; and Support to Hydropower IPP Development, (P153220) and Electricity Access (LEAD, P163870). As the success of these new activities will hinge on the improvement of JIRAMA’s liquidity and solvency, the proposed operation is considered a cornerstone underpinning the sustainability of the Bank’s portfolio in the Malagasy power sector.

C. Proposed Development Objective(s)

The program development objectives of this standalone operation are to:

(i) Strengthen fiscal reporting and transparency to improve decision-making and oversight of public investments, and

(ii) Improve the governance of the electricity sector

Key Results

The program development objectives of this standalone operation are to: (i) **Strengthen fiscal reporting and transparency to improve decision-making and oversight of public investments**, and (ii) **Improve the governance of the electricity sector**. The first development objective contributes to the government’s overall goal of implementing the NDP through scaling-up carefully selected investments to develop much needed human and physical capital as a way of stimulating growth and reducing poverty. The second development objective supports the implementation of JIRAMA’s Business Plan and is a necessary building block for increasing access to reliable and affordable energy.

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2 The CPF was approved by the Board on June 26th, 2017
D. Concept Description

The reforms supported by this DPO are arranged under two pillars in line with the two development objectives of the operation. The reforms under pillar 1 related to public investment financing includes: (i) Improving Transparency of Externally Financed Public Investments, (ii) Improving Transparency of SOE Financial Operations, and (iii) Improving Transparency of Debt Reporting.

The second pillar supports JIRAMA’s reforms in three areas: (i) improving corporate financial governance; (ii) institutionalizing least-cost investment planning and competitive generation procurement; and (iii) reducing commercial losses.

E. Poverty and Social Impacts and Environmental Aspects

Poverty and Social Impacts

Indirect positive impacts are expected on the long term. The SCD identifies the lack of affordable and reliable energy supply as a binding constraint to growth, particularly in sectors such as fisheries, agro-industries and tourism, which can offer substantial opportunities for job creation. By improving human and physical capital, Madagascar will come closer to realizing its growth potential, which is essential for reducing poverty and improving living conditions.

Lowering the cost of electricity supply through least-cost planning and competitive procurement is critical for making electricity affordable for households while maintaining the financial viability of JIRAMA. Already before the recent round of increases, electricity tariffs in Madagascar were among the least affordable in Sub-Saharan Africa. The main reason are the high cost of supply. A recent comparison among Sub-Saharan African countries ranked Madagascar’s cost of supply 26th out of 39 assessed countries, at an average of US$0.32 per kWh billed, compared to a regional average of US$0.14/kWh (median US$0.21/kWh). As Madagascar’s electrification program reaches poorer households, JIRAMA should be able to reduce the cost of supply to ensure electricity provision remains affordable for households and the Government. Prior Action 7, through which the government adopts a process of least-cost generation planning and competitive procurement, is a critical step to prioritize low-cost energy projects and achieve convergence of cost and affordable tariffs in the long term.

Environmental Impacts

The specific policies supported by the DPO series are not expected to have significant negative effects on Madagascar’s environment, forests, water resources, habitats, or other natural resources. The risk of unanticipated adverse effects to the environment from public and PPP investments enabled through the DPO is modest. Madagascar has put in place adequate environmental controls and legislations, providing support to line ministries including MEEH in incorporating environmental guidelines in the operational manual for its programs. These comprise the Environment Charter and a wide range of sectoral regulatory frameworks. The legislation requires that all investment projects private or public, that

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3 Kojima et al. (2016) surveyed 22 countries in Sub-Saharan Africa and analyzed the cost of 1 kWh per day as a percentage of total household expenditure. They found electricity in Madagascar to be the least affordable; 1 kWh per day cost 9.6 percent of total household expenditure, compared to a median of 2.2 percent.
5 Some of these regulatory frameworks are listed in the World Bank (2003) Country Environmental Analysis.
are likely to have an environmental impact and require administrative approval, prepare an Environmental and Social Impact Assessment (ESIA). Each ESIA must be approved by the Ministry of Environment, and thereafter published in the project area and the National Environment Office (NEO). The environmental impact assessment might require the elaboration of a Project Environmental Management Plan, the execution of which is monitored by the NEO.

This DPO is expected to support climate co-benefits, as the greening the energy sector is a core element of Madagascar’s NDC under the Paris Agreement, and the DPO supports three of the NDC’s priority mitigation actions in the power sector. Madagascar’s NDC prioritizes six following measures in the energy sector: (a) Facilitate access to energy by strengthening existing systems and by promoting renewable and alternative energies; (b) Rehabilitating the grid and power plants; (c) Promoting renewable energy (hydropower and solar); (d) improving energy efficiency; (e) Rural electrification; and (f) disseminating improved improved stoves. Strengthening JIRAMA’s finances (Prior Actions #5 and #7 will enable mitigation actions (a), (b); (c) and (e). Adopting least-cost principles in the expansion of energy supply will directly contribute to mitigation actions (a) and (c). Reducing commercial losses will increase effective tariffs and thereby incentivize energy efficiency (mitigation action (d)).

Most importantly, the proposed reforms to the Government’s decision-making on new power supply options will directly contribute to increasing the share of renewable energy in the power generation mix. First, adopting carbon pricing in the strategic evaluation of power plants will benefit low-carbon options. Second, because competitively procured hydropower and solar power are much less expensive than Madagascar’s current generation mix, adopting least-cost principles and procurement through tenders will lead to an increase in the share of these technologies relative to a business-as-usual scenario and thus enable Madagascar to accelerate the transition to a low carbon energy mix. As such, Prior Action #6 and the DPO overall are expected to yield climate mitigation co-benefits.

Further, a financially stronger JIRAMA, to which the DPO will contribute, is critical for attracting investment in renewable energy. The authorities are seeking to develop small solar and hydro projects. The environmental impact of this policy is expected to be positive due to the displacement of fossil fuels and the decentralized nature of small solar and run-of-river hydro sites, closely located to demand, which further reduces any potential negative impacts on the environment compared from larger facilities. A precondition for investment in such projects is a financially sound off-taker, in this case JIRAMA, supported by the DPO Prior Actions 5 and 7.

Lastly, the World Bank’s investment lending in the energy sector includes complementary measures to strengthen the Government’s capacity to conduct social and environmental assessments. Support is focused on the areas of preparing, reviewing, implementing and monitoring social and environmental assessment, management documents and resettlement plans and linking these documents with bidding and contract documents.

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Senior Economist

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**APPROVAL**

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<table>
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<th>Country Director:</th>
<th>Carolin Geginat</th>
<th>28-May-2018</th>
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