



The World Bank

Fiscal Sustainability and Energy Development Policy Operation (P166752)

Program Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 15-Mar-2019 | Report No: PIDA25241

**BASIC INFORMATION****A. Basic Project Data**

Country	Project ID	Project Name	Parent Project ID (if any)
Madagascar	P166752	Fiscal Sustainability and Energy Development Policy Operation (P166752)	
Region	Estimated Board Date	Practice Area (Lead)	Financing Instrument
AFRICA	30-Apr-2019	Macroeconomics, Trade and Investment	Development Policy Financing
Borrower(s)	Implementing Agency		
Republic of Madagascar	Ministry of Energy, Hydrocarbon, and Water, Ministry of Economy and Finances		

Proposed Development Objective(s)

The program development objectives of this standalone operation are to:

- (i) strengthen the quality and transparency of fiscal decision-making; and
- (ii) improve the governance of the electricity sector

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

Total Financing	100.00
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DETAILS

Total World Bank Group Financing	100.00
World Bank Lending	100.00

Decision

The review did authorize the team to appraise and negotiate



B. Introduction and Context

Country Context

Madagascar is on a positive trajectory with a rebound in growth over the last five years. Madagascar has one of the highest rates of poverty in the world, where since the country's independence in 1960, population growth has outstripped economic growth. The last five years have seen economic output progressively expand. Growth was estimated to be above 5 percent in 2017 and 2018; a trend which is projected to continue. There is a small but dynamic private sector active in industries such as agribusiness, mining, textiles, and more recently, business process outsourcing. Madagascar's trade in goods and services are performing well, with exports rising. However, one of the key impediments to growth remains poor infrastructure, including costly and unreliable energy supply.

The positive economic developments have been reinforced by enhanced investor confidence following the peaceful conclusion of the Presidential elections held at the end of 2018, early 2019. Madagascar has been characterized by political instability, where there have been four major political crises in the post-independence period. Historically, episodes of strong economic growth have been followed by a political crisis, causing economic activities to contract and resulting in sporadic patterns of growth. The elections mark the first peaceful transfer of presidential power between two opposing parties since Madagascar's independence. The peaceful conclusion of the elections bodes well for investor confidence, as the risk of political instability has reduced.

To further stimulate growth, the authorities have an ambitious development program, which emphasizes addressing the significant infrastructure deficit through the implementation of an ambitious public investment program. 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.

Leveraging the opportunities from access to new financing modalities for public investments will require strengthening the quality and transparency of fiscal decision-making. Different instruments are being utilized to finance the public investment program, including domestic resources, loans, grants, the mobilization of private sector support through public-private partnerships (PPPs) and projects supported by guarantees, consistent with the *Maximizing Financing for Development* approach. In key sectors such as energy, these financing modalities involve state-owned enterprises (SOEs) such as the electricity and water company, *Jiro sy Rano Malagasy* (JIRAMA), which is in financial distress. Promoting fiscal sustainability will require carefully monitoring and managing the risks associated with the accumulation of debt and other liabilities that are recorded both on and off the government's balance sheet, and strengthening the oversight of SOEs. The process through which liabilities are contracted will also need to be thoroughly assessed to ensure that risks are appropriately shared between the public and private sector guided by a transparent institutional framework.

Increasing access to affordable and reliable renewable energy is one of the key priorities of the government's public investment program. The New Energy Policy (NEP) spells out the goal to increase household electricity access to 70 percent by 2030,¹ and was recognized as a high priority in the Systematic Country Diagnostic (SCD) and the Country Partnership Framework (CPF). Investment needs in the power sector are substantial: estimated at US\$ 1.4 billion to meet

¹ The implementation of the NEP is being supported with a Bank IPF, "Least-Cost Electrification Development Project (LEAD)" (US\$150 million). LEAD will use geospatial analysis and government land-use planning to maximize the number of households provided with electricity services while fostering local development and foreign private investment at least cost.



demand from the existing consumer base between 2017-2035 and transition to cleaner sources of energy², plus an estimated US\$ 11 billion to achieve universal electricity access by 2030. Realizing these investment needs will involve carefully selecting projects using least-cost planning methodologies, which will realize economic, social and environmental benefits. In parallel, ongoing efforts are needed to improve JIRAMA's financial situation, which would help to reduce the financial drain the utility poses on the state's budget and lower risks for private investors. Reforms to improve corporate financial governance through the establishment of an auditing committee and lower commercial losses of JIRAMA through improved energy efficiency will be critical for achieving this goal.

Relationship to CPF

The proposed operation, is an integral part of the World Bank's CPF, discussed by the Board of Executive Directors in June 2017.³ 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**, and is supportive of the *Maximizing Financing for Development* approach.

Implementation of the energy reforms in the Policy and Results Matrix will be supported by a strong suite of investment and TA activities 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) supported the improvement of public investment management practices. The Madagascar Support to the Governance of SOE TA (P160306) has improved the management of SOEs and strengthened the capacity of the SOE Oversight Unit. The Energy Sector Operations and Governance Improvement project (ESOGIP) (P151785), approved in 2016, seeks to improve the utility's commercial, technical, and organizational performance, including through reforms to implement management information systems and revenue protection programs. Furthermore, over the past year, the WB 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:

² It is estimated that an additional capacity of 339 MW, generating about 1,649 GWh/year, will be needed by 2035 to balance the expected 2.5 times increase of the demand underpinned by the high rate of population growth (about 2.8 percent/year), public works, and industrial activities. Meeting the demand for clean energy in an affordable manner will require a transition from oil-fired power generation to low-cost renewable energy projects, and from bilaterally negotiated contracts to competitively procured generation capacity.

³ The CPF was approved by the Board on June 26th, 2017.



- (i) strengthen the quality and transparency of fiscal decision-making; and
- (ii) improve the governance of the electricity sector

Key Results

The first development objective contributes to the implementation of the government's new program through scaling-up investments in a fiscally sustainable manner, considering liabilities that are recorded both on and off budget. 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.

D. Project Description

The proposed DPO builds on reforms achieved through previous budget support operations and sets a solid foundation for the new government to realize its public investment and energy program. Initiated during the election period, the proposed DPO is being prepared as a standalone operation, with strong continuity of reforms achieved in previous DPOs since the country returned to constitutional order in 2014. Key results that demonstrate continuity include: (i) increasing fiscal space to secure financing for social priority spending and investment; (ii) strengthening debt and public investment management; (iii) improving transparency and efficiency in the management of PFM; (iv) improving the management of SOEs; (v) strengthening JIRAMA's operations; and (v) promoting a favorable environment for private sector investment. The details behind the reforms and the results are presented in Annex 5. In parallel, a complementary programmatic DPO is under preparation which focuses on reforms to strengthen human capital and inclusive growth, in line with the new government's program.

E. Implementation

Institutional and Implementation Arrangements

The proposed program will be jointly implemented by the Ministry of Economy and Finance and the Ministry of Energy, Hydrocarbons and Water. Progress on the results indicators will be monitored and evaluated jointly by the Recipient through the Economic Council team and the World Bank. The Economic Council consists of high level officials that are responsible for spearheading and implementing the reform agenda. This team is comprised of members from the MFB, the CBM, the Presidency and other relevant ministries, although the composition of senior officials may change after the elections. The Government's team is well-coordinated, and as the experience in implementing DPOs with the Bank deepens, they are increasingly well prepared to obtain and share data to monitor implementation against the agreed results indicators.

F. Poverty and Social Impacts and Environmental Aspects

Poverty and Social Impacts

Reforms supported by this operation are expected to contribute to poverty reduction in the longer run. Strengthened public investment and debt management are expected to facilitate economic growth in a fiscally responsible way, gradually freeing up public resources to increase social spending. Improved governance of JIRAMA, institutionalizing least-



cost investment planning, and reducing losses is expected to have positive distributional effects in the longer-run through two distinct channels. First, improving the financial health of JIRAMA is expected to gradually reduce the strain on the national budget, freeing up resources to invest in social spending. Second, better fiduciary management is expected to increase the financial room to invest in increasing access to electricity and bringing down tariffs, with potential positive effects on household welfare and job creation. While in the short-term the reforms are unlikely to have direct poverty reducing impacts, it is highly unlikely that any of the reforms would have adverse impacts on the distribution. This specifically applies to electricity tariff reforms. As the new government is committed to continue protecting lifeline tariffs from increases, and with access being concentrated among the well-off, least vulnerable households, the social impact of tariff adjustments is expected to remain negligible.

In the medium term, the reforms to the electricity sector are expected to expand access to affordable energy. Access to electricity is hindered by (i) the lack of capacity to plan in the energy sector that lead to suboptimal choice and high cost of supply, (ii) poor performance of JIRAMA with high non-technical losses, including unbilled electricity consumption, and (iii) poor management with the inadequacy of the institutional setting to monitoring financial performance. 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). The reforms supported by this operations address those hindrances. The adoption of a process of least-cost generation planning and competitive procurement (PA#5), is a critical step to prioritize low-cost energy projects, secure value-for-money, and achieve convergence of cost and affordable tariffs in the long term. The adoption of regular metering audits (PA#6), the establishment of Audit committee and accessibility to information on financial performance and liabilities (PA#4) are required to tackle performance issue.

Reforms to strengthen public investment and debt management are expected to stimulate growth in a fiscally sustainable manner, which is key for sustainably reducing poverty. The reforms to the public debt framework supported by the WB DPO in 2014 has strengthened the country's capacity to prudently manage debt. This capacity has been instrumental in attracting external financing to deliver to strengthen human and physical capital. The reforms on guarantee and on-lending framework (PA#1) and on DSA (PA#2) deepens the previous reforms and contributes to maintaining the country's access to financing for projects in support of growth and poverty reduction. The reforms also aim to minimize fiscal vulnerabilities. Experience from peer countries in sub-Saharan Africa has shown that efforts to scale-up public investments have been associated with rising and unmanageable debt burdens, which compromises the fiscal stance.

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 unforeseen adverse environmental effects related to investments (whether domestically financed or through PPPs) is modest. Madagascar has put in place adequate environmental legislation and controls, including the Environment Charter⁴ and a wide range of sectoral regulatory frameworks.⁵ The national framework requires the preparation of an Environmental and Social Impact Assessment (ESIA) and the production of an Environment and Social Management Plan (ESMP) for all investment projects. To support the implementation of the country's environmental regulatory framework, an operational environmental unit has been established within each sector Ministry, which is responsible for integrating environmental dimensions in each project or program as relevant. The National Environment Office (NEO) oversees the implementation of the ESMP. Development partners, including the World Bank, support the application of national environmental frameworks through TA and the staffing of environmental focal points in each project, leading to an incremental increase in local expertise.

⁴ Law No. 90-033 of 21 December 1990 modified by Law No. 97-012 of 6 June 1997 and Law No. 2004-015 of 19 August 2004.

⁵ The regulatory frameworks are listed on the NEO: website: <https://www.pnae.mg/cadre-reglementaire-2>



Therefore, there are established processes and adequate capacity for assessing and mitigating environmental and social risks through the required ESIA.

This DPO is expected to support climate co-benefits in the amount of US\$ 7 million or 17 percent. Moving the energy sector toward using more sustainable energy sources 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 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 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, including 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.

G. Risks and Mitigation

The overall risk rating for the operation is substantial, with six main sources of risk that are inter-connected and that could potentially jeopardize the expected outcomes and benefits of this operation. The risks are (i) political and governance; (ii) macroeconomic; (iii) sector strategies and policies; (iv) institutional capacity for implementation and sustainability; (v) fiduciary; and (vi) stakeholders. Measures to mitigate these risks include coordinated policy discussion among the government and development partners, integrated support with partners technical assistance and World Bank investment projects, enhanced program supervision, and communication outreach activities to all stakeholders. The potential benefits of the proposed operation outweigh the residual risks and warrant IDA's assistance.

**CONTACT POINT****World Bank**

Natasha Sharma, Faniry Nantenaina Razafimanantsoa Harivelox, Jan Friedrich Kappen
Senior Economist

Borrower/Client/Recipient

Republic of Madagascar
Richard Randriamandranto
Mr
secretariat.mfb@gmail.com

Implementing Agencies

Ministry of Energy, Hydrocarbon, and Water
Vonjy Andriamanga
Mr
vonjy.andriamanga@gmail.com

Ministry of Economy and Finances

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>

APPROVAL

Task Team Leader(s):	Natasha Sharma, Faniry Nantenaina Razafimanantsoa Harivelox, Jan Friedrich Kappen	
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Approved By

Country Director:	Mark R. Lundell	06-Jul-2018
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