INTERNATIONAL DEVELOPMENT ASSOCIATION

PROGRAM DOCUMENT

FOR A PROPOSED GRANT

IN THE AMOUNT OF SDR 71.6 MILLION (US$100.0 MILLION EQUIVALENT)

TO THE REPUBLIC OF MADAGASCAR

FOR THE

FISCAL SUSTAINABILITY AND ENERGY DEVELOPMENT POLICY FINANCING

April 3, 2019

Macroeconomics, Trade and Investment Global Practice
Energy and Extractives Global Practice
Africa Region

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GOVERNMENT FISCAL YEAR
January 1 – December 31

CURRENCY EQUIVALENTS
(Exchange Rate Effective as of February 28, 2019)
Currency Unit = Malagasy Ariary
US$1 = 3,535.5 MGA
US$1 = 0.7153

ABBREVIATIONS AND ACRONYMS

AfDB  African Development Bank          MEF  Ministry of Economy and Finance
ASA  Advisory Services and Analytics     MFB  Ministry of Finance and Budget
CBM  Central Bank of Madagascar         MFD  Maximizing Financing for Development
CPF  Country Partnership Framework      MGA  Malagasy Ariary
CSO  Civil Society Organization         MW  Mega Watt
DeMPA  Debt Management Performance Assessment
DPF  Development Policy Financing        NDC  Nationally Determined Contribution
DSA  Debt Sustainability Analysis       NEO  National Environmental Office
ESIA  Environmental and Social Impact Assessment
ESMP  Environment and Social Management Plan
ECF  Extended Credit Facility           PDMC  Plan de Développement de l’Electricité au Moindre Coût (Electricity Least-Cost Development Plan)
ESMAP  Energy Sector Management Assistance Program
ESOGIP  Electricity Sector Operations and Governance Improvement Project
EU  European Union
FY  Fiscal Year
FDI  Foreign Direct Investment
GDP  Gross Domestic Product
GHG  Greenhouse Gas
GPS  General Policy of the State
GRS  Grievance Redress Service
ICR  Implementation Completion Reports
IDA  International Development Association
IMF  International Monetary Fund
IPF  Investment Policy Financing
IPP  Independent Power Purchase
JIRAMA  Jiro sy Rano Malagasy (State-Owned Electricity and Water Utility)
LEAD  Least-Cost Electrification Development Project
MEWH  Ministry of Energy, Water, and Hydrocarbons
MIS  Management Information System

PFSI  Public Finance Sustainability and Investment
PIMA  Public Investment Management
PEFA  Public Expenditure and Financial Accountability
PFM  Public Finance Management
RCF  Rapid Credit Facility
RPP  Revenue Protection Program
SDR  Special Drawing Rights
SCD  Systematic Country Diagnostic
SME  Small & Medium-sized Enterprise
SOE  State-Owned Enterprise
SSA  Sub-Saharan Africa
TA  Technical Assistance
TPP  Taxes on Petroleum Products
US$  United States Dollar
WBG  World Bank Group
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The proposed Development Policy Financing was prepared by an IDA team consisting of: Natasha Sharma (Senior Economist, GMTA4 and TTL), Faniry Razafimanantsoa (Economist, GMTA4 and co-TTL), and Jan Friedrich Kappen (Senior Energy Specialist, GEE01 and co-TTL). The team includes Lilia Razlog (Senior Debt Specialist, GMTMD), Heriniaina Mikaela Andrianasy (Public Sector Specialist, GGOAC), Vonjy Rakotondramanana (Senior Energy Specialist, GEE01), Massan Elise Akitani (Senior Energy Specialist, GEE07), Joern Huenteler (Energy Specialist, GEE05), Tom Bundervoet (Senior Economist, GPV01), Prisca Mamitiana (Economist Consultant), Emelyne Calimoutou (Associate Counsel, LEGAM), Siobhan McInerney-Lankford (Senior Counsel, LEGAM), Faly Diallo (Finance Officer, WFALA) and Rondro Rajaobelison (Program Assistant, AFMMG). The team benefited from the guidance of Mark R. Lundell (Country Director, AFCS2), Mathew A. Verghis (Practice Manager, GMTA4), Sudeshna Ghosh Banerjee (Practice Manager, GEE01), Coralie Gevers (Country Manager, AFMMG), Carolin Geginat (Program Leader, AFCS2), and Raymond Bordeaux (Program Leader, AFCS2). Valuable peer review comments and suggestions were provided by Ivailo V. Izvorski (Lead Economist, GMTDR), Sudarshan Gooptu (Lead Economist, GMTD4), and Vivien Foster (Lead Economist, GEEDR).
SUMMARY OF PROPOSED FINANCING AND PROGRAM

BASIC INFORMATION

<table>
<thead>
<tr>
<th>Project ID</th>
<th>Programmatic</th>
</tr>
</thead>
<tbody>
<tr>
<td>P166752</td>
<td>No</td>
</tr>
</tbody>
</table>

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

Organizations

Borrower: REPUBLIC OF MADAGASCAR
Implementing Agency: MINISTRY OF ENERGY, WATER, AND HYDROCARBON, MINISTRY OF ECONOMY AND FINANCES

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

| Total Financing | 100.00 |

DETAILS

| International Development Association (IDA) | 100.00 |
| IDA Grant | 100.00 |

INSTITUTIONAL DATA

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

Overall Risk Rating

Substantial
## Results

<table>
<thead>
<tr>
<th>Indicator Name</th>
<th>Baseline</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Results Indicator #1a</strong>: Percentage of government loan guarantees and on-lending agreements which are subject to a credit risk assessment and published</td>
<td>0 (2017)</td>
<td>100 percent (2020)</td>
</tr>
<tr>
<td><strong>Results Indicator #1b</strong>: Percentage of government loan guarantees and on-lending agreements which comply with the guarantee limit.</td>
<td>Not applicable (2017)</td>
<td>100 percent - guarantee limit complied with (2020)</td>
</tr>
<tr>
<td><strong>Results Indicator #2a</strong>: Consolidated SOE contingent liabilities register produced with inputs from the SOE oversight unit, the Department of Budget, the Public Debt Directorate and the PPP unit</td>
<td>Register does not exist (2017)</td>
<td>Register established and updated on an annual basis (2020)</td>
</tr>
<tr>
<td><strong>Results Indicator #2b</strong>: Level of the risk of debt distress</td>
<td>Moderate (2017)</td>
<td>Moderate (2020)</td>
</tr>
<tr>
<td><strong>Results Indicator #3</strong>: Improved fiscal reporting on contingent liabilities</td>
<td>No publication or assessment (2017)</td>
<td>Some significant contingent liabilities are quantified and published in a report (2020)</td>
</tr>
<tr>
<td><strong>Results Indicator #4</strong>: Improved corporate financial governance of JIRAMA.</td>
<td>The Recipient’s Government, JIRAMA’s Supervisory Board and the public have limited insight into the implementation of the utility’s fiduciary performance and financial recovery (2018)</td>
<td>A Financial Recovery Plan for JIRAMA has been approved by its Supervisory Board and JIRAMA’s financial statements are being independently audited and published with the auditor’s opinion (2020).</td>
</tr>
<tr>
<td><strong>Results Indicator #5</strong>: Institutionalized least-cost planning and competitive procurement of generation investments in the power sector.</td>
<td>Contracts are being awarded for concessions and power purchase agreements for private power generation with a capacity over 5 MW without adequate preparation and prioritization (2018)</td>
<td>Any projects awarded with concessions and power purchase agreements for private power generation with a capacity over 5 MW after July 2018 are part of the Master Plan for the Least-Cost Development of the Power Sector, competitively procured and ready for contract award¹ (2020)</td>
</tr>
<tr>
<td><strong>Results Indicator #6</strong>: Decline in total system losses (as a percentage of total electricity produced) through the reduction of non-technical losses.</td>
<td>Total system losses at 33 percent (2017)</td>
<td>Total system losses no higher than 29 percent (2020)</td>
</tr>
</tbody>
</table>

¹ In line with the underlying ministerial decree, ‘ready for contract award’ is defined as having completed (a) Feasibility and Detailed Design Studies, (b) Environmental and Social Impact Assessments, and (c) an analysis of the financial and budgetary sustainability as well as the risks and costs of the State’s commitments related to the project.
1. INTRODUCTION AND COUNTRY CONTEXT

1. This Program Document proposes a standalone transition Development Policy Financing (DPF) operation with the objectives of: (i) strengthening the quality and transparency of fiscal decision-making; and (ii) improving the governance of the electricity sector. This operation supports reforms that the government realized during the electoral period to continue and deepen the achievements in previous DPFs. It also ensures the transition for the engagement with the newly elected government, enabling continuity of the reform momentum and setting the foundation for an effective engagement on future policy reforms and investment projects.

2. Following the conclusion of the presidential elections in late 2018, the newly elected government has confirmed its commitment to the reform program supported by the proposed operation. In January 2019, President Rajoelina was declared the winner of the presidential elections, marking the first peaceful transfer of presidential power between two opposing parties since Madagascar’s independence. Preparation for the proposed operation started prior to the presidential electoral period and built on the longstanding strong economic program of the authorities that has been supported by an International Monetary Fund (IMF) three-year Extended Credit Facility (ECF) and several budget support operations. A strong economic dialogue was sustained throughout the electoral period and the government moved ahead with the implementation of the policy reforms. The new government has not only confirmed its commitment to the reform program supported by the proposed operation but has already initiated additional actions to improve operational results of Jirama in line with the objectives of this operation.

3. The government has expressed a strong willingness to advance reforms and investments to sustain an accelerated and more inclusive growth. Seeking to scale-up public infrastructure from a very low base, Malagasy authorities have placed an ambitious public investment program at the heart of their development agenda. The proposed DPF seeks to support the government in its endeavor to improve the management of public investments in a fiscally sustainable manner, with a focus on the energy sector. The reforms build on results achieved under previous DPFs (as detailed in Annex 5). They are well integrated with Investment Project Financing (IPFs) in the energy sector, and complementary to a programmatic DPF under preparation. The DPF is also aligned with the IMF-ECF. The proposed DPF will be in the amount of SDR 71.6 million (US$100 million equivalent) from IDA grant resources.

4. Increasing access to affordable and reliable renewable energy is one of the key priorities of the government’s public investment program. Madagascar 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 power supply did not keep up with population growth. In 2015, the government adopted the New Energy Policy (NEP) which spells out the goal to increase household electricity access to 70 percent by 2030, and was

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3 Actions include the audit of existing Independent Power Purchasing contracts to identify those which are detrimental to JIRAMA’s operational viability.

4 A programmatic DPF focused on Human Capital and Inclusive Growth is under preparation.

5 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
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 demand from the existing consumer base between 2017-2035 and transition to cleaner sources of energy\(^6\), 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, 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, lower commercial losses of Jiro sy Rano Malagasy (JIRAMA) and improve energy efficiency will be critical for achieving this goal.

Figure 1: Theory of Change of the DPF Linking Prior Actions, Program Development Objectives (PDO) and Higher-level Objectives

5. **Realizing the proposed reform program is critical for the country to achieve the twin goals by promoting inclusive growth as a sustainable pathway to poverty reduction.** Madagascar is among the poorest countries in the world, with 77.6 percent of the population living below the US$1.90 2011 Purchasing Power Parity international poverty line.\(^7\) Access to reliable and affordable electricity is a major constraint to doing business in Madagascar, particularly for Small and Medium-sized Enterprises (SME), while nearly half of large enterprises own or share a generator.\(^8\) Improving energy supply as well as other vital infrastructure is critical for stimulating private sector development and creating jobs, as a sustainable pathway for the country to make inroads in reducing unacceptably high levels of poverty. Poor electricity service and the low electrification rate also imply weak electricity support to vital basic services such as health care centers and hospitals in rural areas. Scaling-up public infrastructure in a fiscally sustainable

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\(^6\) 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.


\(^8\) The 2013 Enterprise Survey indicates that 34.3 percent of small firms, and 36.7 percent of medium-sized firms find access to electricity to be a major or severe obstacle, while 48.5 percent of large firms own or share a generator.
manner is critical for maintaining macroeconomic stability, and for being able to effectively crowd in the private sector.

2. MACROECONOMIC POLICY FRAMEWORK

2.1. RECENT ECONOMIC DEVELOPMENTS

6. Economic growth remained robust in 2018, with the economy progressively expanding since 2014. Growth has accelerated from an annual average of 0.6 percent over the 2009-2013 period, during the political crisis period, to 4.0 percent in 2014-2018. Growth in 2018 is estimated to have further accelerated to 5.2 percent, above the annual population growth rate of 2.7 percent. Manufacturing and services sectors are key growth drivers. External demand for Malagasy goods and services remains strong, with exports such as textiles, cash crops, extractives such as nickel, and business process outsourcing performing well. Reflecting growing demand in urban areas, the domestic food industry is also performing well. A small but dynamic private sector is responding to this increased economic activity with banking, logistics and services to support companies all under expansion. However, the performance of the agriculture sector which provides the main source of income for an estimated 80 percent of the population largely remains weather dependent.

7. Both public and private investments are expanding in support of increased economic activity and higher growth. Private investments are intensifying, where Foreign Direct Investment (FDI) is increasingly oriented towards the services sector, largely in support of telecommunications, utilities and financial services. Publicly financed investments are also under expansion, in line with the government’s plans to scale up infrastructure. While the scale-up of investments is being implemented at a slower pace than initially expected, capital expenditures have still significantly increased, from 3.9 percent of Gross Domestic Product (GDP) in 2014 to an estimated 5.8 percent of GDP in 2018.

8. Private financing, through instruments such as public private partnerships (PPP) and concession agreements, are increasingly being considered for energy projects and transport-related infrastructures. Year-on-year growth in the energy sector is estimated at 8.4 percent in 2018, following the operationalization of two new thermal power plants, and increased hydro-power production due to favorable rainfall. New concession agreements for hydropower projects utilizing least-cost development methodologies are also in the pipeline, in line with the reforms supported in this proposed operation. In the transport sector, the country’s main primary airport is being developed through a PPP agreement. As the private sector seeks to expand investments, requests for government guarantees are being presented to the government. The reforms supported in this proposed operation facilitates an objective assessment of requests for loan guarantees and on-lending arrangements.

9 Services to support companies include: legal, accounting, management, architectural, engineering, scientific research and development, and travel agencies, tour operators, reservation services and related activities.

10 Over the period 2008 to 2011 the share of greenfield FDI by sector was 87 percent in the extractives sector, compared with only 2 percent in the services sector. The period 2012 to 2016 saw a reverse in trend, with 86 percent of FDI targeted to services compared with 0 percent in the extractives sector since the main mining sites had been fully constructed. Source: Financial Times FDI Markets.

11 The thermal power stations are Symbion Power (capacity of 40 MW) and Aksaf Power (capacity of 60 MW).
9. **Inflation eased in 2018, averaging 7.3 percent compared with 8.3 percent in 2017.** Favorable weather conditions have facilitated improved agricultural production. Since food and beverages comprise nearly half of the consumption basket, the increased supply of domestic produce has supported a deceleration of inflationary trends. However, other drivers of inflation have followed an upward trend. The cost of public services such as education increased by 18.7 percent in 2018, disproportionately affecting lower income households who are the main beneficiaries of public education. In line with efforts to support the financial recovery of JIRAMA, revenues from electricity sales have risen by an estimated 10-14 percent per year in US$-terms during 2016-18, contributing to an increase in general price index for energy ranging from 4.3 percent in 2017 to 6 percent in 2018. Given that volatility in food prices have been the main driver of overall inflation, core inflation has been stable over the past two years: 6.3 percent in December 2017 and 6.4 percent in December 2018. Despite the recent easing of inflation, the central bank has remained prudent, limiting the fluctuation in banks’ excess reserves to favor a steady growth in credit and avoid inflationary pressures. The policy rate has been maintained at 9.5 percent since end-2017. As part of its regular monitoring, the next meeting of the monetary policy committee is scheduled in May 2019.

10. **The current account realized a surplus of 0.8 percent of GDP in 2018, reflecting increased access to external financing and continuing good performance of exports.** A rise in global oil prices and imports of equipment associated with a scale-up in investments have exerted pressure on the current account. However, such pressures have been offset by increased inflows of current public and private transfers (25 percent increase between 2017 and 2018) and strong performance of export receipts (24.7 percent of GDP in 2018). Reflecting seasonal fluctuations, there have been in-year changes to the external position. In the third quarter, the current account recorded a deficit of 1.4 percent of GDP, coinciding with the low-

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12 Net indirect taxes represent the value paid for by consumers to government which is added to the gross value added at basic price to compute GDP at market price.
season of vanilla exports before reverting to a positive balance in the last quarter. Higher external financing and export receipts have contributed to preserving the level of official reserves at an equivalent of 4 months of imports.

11. **Madagascar officially maintains a flexible exchange rate with limited central bank intervention.** The exchange rate is determined by the market. The central bank only intervenes to smooth episodes of high volatility and based on an automatic algorithm, which is applied on a limited scale. Since the beginning of 2018, the Ariary depreciated against the US dollar by 8.3 percent and the Euro by 1.9 percent, with some fluctuations within the year. Depreciation of the Ariary was most notable in low export season. Notwithstanding the fluctuations, the real effective exchange rate remained relatively stable, depreciating by 0.6 percent between December 2017 and 2018.

12. **The effectiveness of monetary policy has been reinforced through regulatory and institutional reforms.** The central bank act was updated in 2016 to enhance independence, and its implementation is showing progress. The central bank act stipulates a tighter limit on access to statutory advances for financing the deficit. Consequently, statutory advances have declined from 0.9 percent of GDP at end 2016 to 0.4 percent of GDP in December 2018. The central bank act also establishes a monetary policy committee to review monetary policy every six months to ensure consistency with the government’s macroeconomic targets and manage liquidity in the banking system. The monetary policy committee meets regularly as intended with the central bank regularly communicating the outcomes of the discussions, thereby improving predictability of the policy rate for the private sector.

13. **Madagascar’s banking sector exhibits strong financial fundamentals, although there are low levels of financial intermediation.** All banks fulfill the minimum capital adequacy requirement, with a capital to risk-weighted assets ratio of 13 percent on aggregate, well above the required minimum of 8 percent (December 2017). Subject to seasonal fluctuations, liquidity is ample in aggregate, with banks’ overall deposits exceeding loans. While banks are on average highly profitable, mostly due to high spreads between loan and deposit rates and a comfortable fee income, but there are large differences among the banks. Private credit-to-GDP increased from 12.9 percent in 2016 to 13.6 percent in December 2018. These levels are well below the regional average of 24.4 percent and signal a limited financial intermediation role played by banks.

14. **The execution of the Finance Law 2018 shows on balance a positive trend, although progress was not achieved at the expected pace.** Preliminary budget execution data indicates that the tax-to-GDP ratio increased from 11.5 percent in 2017 to 11.8 percent in 2018. While tax revenue collection continued to improve, performance fell short of the expected target of 12.1 percent of GDP. Therefore, the pre-election period saw a slowing of momentum in tax collection efforts compared to the progress realized since 2015 where the tax-to-GDP ratio had increased by at least 0.5 percent on an annual basis. The execution of capital expenditures also fell below target, at an estimated 5.8 percent of GDP compared with a projected 7.3 percent of GDP (commitment basis). Current expenditures and the deficit were contained at respectively 10.8 percent of GDP (commitment basis) and 2.6 percent of GDP (cash basis), demonstrating a relatively prudent fiscal stance in the pre-election period. Nevertheless, the failure to fully pass through increases in global oil prices to end-users has resulted in liabilities accumulating to petroleum companies, at an estimated 0.3 percent of GDP by February 2019. The government is expected

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14 The high spread is partly explained by the transfer of credit risks to consumers, linked to challenges in the business environment.
to agree on a price smoothing plan with petroleum companies and gradually raise the retail price of fuel to avoid recourse to the fuel subsidy.

15. **Changes to taxes on petroleum products yielded higher revenue collection but progress in general tax administration was mixed.** As part of the government’s efforts to reform the fuel subsidy, a study on the reference price structure for determining fuel prices was undertaken by industry specialists.\(^\text{15}\) The study highlighted that the tax rate for petroleum products was relatively low in Madagascar compared with similar countries, while the margins maintained by petroleum companies were higher. The government subsequently negotiated a new reference price structure, which increased Taxes on Petroleum Products (TPP) and slightly reduced the margins of petroleum companies.\(^\text{16}\) This change has had successful impact on tax revenue collection as TPP increased by 71 percent compared to 2017. In combination with enhanced administration, the change to TPP resulted in the customs administration exceeding their annual target by 4.3 percent. In contrast, the performance of domestic taxation fell short of target by 8 percent mainly due to under-collection of value-added taxes and excise duties, underscoring the need to further tighten administration.

16. **Current expenditures execution was in line with previsions, contributing to the government’s objective of improving the composition of public expenditures.** To increase fiscal space for priority social and investment expenditures, current expenditures were reduced from 11.7 percent of GDP in 2017 to 10.8 percent of GDP in 2018, reflecting amongst other factors, a lower transfer to JIRAMA. The execution of current expenditures is in line with the Revised Finance Law 2018 and reflects fiscal restraint in the pre-election period. Expenditures on social priority areas was at an estimated 1 percent of GDP, slightly below the government’s target of 1.1 percent of GDP.\(^\text{17}\)

17. **Challenges in executing externally financed investments have contributed to slower than expected performance in scaling up public investments, but corrective measures are already being pursued.** Delays are mainly observed in implementing major roads projects which benefit from external financing.\(^\text{18}\) To address poor levels of absorptive capacity, the government has been taking steps to improve its public investment management processes. The mandate of the Organization for the Coordination and Monitoring of Investments and their Financing (OCSIF) established in 2017 includes following up on bottlenecks and taking corrective action as necessary. As a demonstrable sign of progress, in 2018 the government issued a circular requiring public institutions to budget for counterpart financing for externally financed projects, which should seek to address a key bottleneck.

18. **The fiscal deficit for the 2018 budget was contained at 2.6 percent of GDP (cash basis).** The deficit is mainly financed through external financing, which is largely on concessional terms in line with the government’s medium-term debt strategy. Slower execution of externally financed investment projects has contributed to containing the deficit. Domestic financing is through the issuance of government bonds subscribed to by commercial banks as well as limited central bank financing. Domestic borrowing has seen its share in the financing of fiscal deficit halved from 50 percent on average since 2014

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\(^{15}\) The government requested the World Bank to finance a study of the reference price structure used to determine fuel prices, as part of wider efforts to eliminate the fuel subsidy. The study was undertaken in 2016 and 2017, benefitting from financial support under the Energy Sector Management Assistance Program Trust Fund.

\(^{16}\) Taxes on petroleum products (per liter) increased from MGA 105 to MGA 213 for jet fuel, MGA 390 to MGA 503 for gasoline, MGA 120 to MGA 228 for diesel, and MGA 20 to MGA 128 for fuel oil.

\(^{17}\) Social priority expenditures are defined as spending on health, education, water and population sectors excluding salaries and externally financed investments.

\(^{18}\) The roads projects are financed by the African Development Bank (RNS), the European Investment Bank / European Union and the French Agency for Development.
to 27 percent in 2018, reflecting increased access to external borrowing and adherence to the limit set by the updated Central Bank statutes on statutory advances. Over time, it is expected that the domestic debt portfolio will shift from largely short-term to increasingly medium-term bonds, in line with the medium-term debt strategy.

19. **Nevertheless, fuel pricing continues to be challenging, with liabilities accumulating to petroleum companies.** While the government has committed to no longer subsidizing the price of fuel, the failure to pass-through changes to international fuel prices has led to liabilities accumulating to petroleum companies at an estimated tune of 0.3 percent of GDP by February 2019. To contain the liabilities, concessions have already been made, such as postponing the payment of TPP. Throughout 2018, the retail price of fuel was adjusted six times, leading to an increase of prices by 10 percent. These price adjustments reflect the government’s attempt to strike a balance between passing through changes in global oil prices to end users and maintaining social stability in the pre-election period.

20. **The new government has placed fuel pricing reforms at the top of its development agenda.** Consultations are currently ongoing between the government and major stakeholders, including petroleum companies and consumer groups. The ongoing reforms are most likely to result in a renegotiated reference price structure for calculating the end-user price of the pump, and the application of the automatic price adjustment with some elements of price smoothing. The recent fall in global oil prices is also expected to support to ease pressures whereby the price of fuel calculated through the reference price structure has aligned with the retail price of fuel in February 2019.¹⁹

21. **The Finance Law 2019 reflects a continuation of the government’s objectives to improve the composition of public expenditures.** The Finance Law 2019 presents a continuation in policy orientation. As with previous years, current expenditures are expected to decline, and social and investment-related expenditures are projected to increase. The budget was passed by Presidential Ordinance, as the two chambers of Parliament were not able to agree on the proposed amendments in line with the budget calendar.²⁰

### 2.2. MACROECONOMIC OUTLOOK

22. **The medium-term economic growth outlook is positive.** Growth is projected at 5.2 percent in 2019, a trend which is expected to continue over the medium-term. The peaceful environment in which the Presidential election and handover took place bodes well for investor confidence. Growth of manufacturing-related activities is expected to remain strong. Developments in the energy sector should support this growth outlook, with average y-o-y growth projected at 10.8 percent over the period 2019 to 2021, assuming that JIRAMA will continue to realize improvements. The services sector is expected to continue realizing strong performance. Construction-related activities are projected to intensify following the planned scale-up of public works. The primary sector is expected to moderately expand, including through the development of agribusinesses and cash crops, such as vanilla. The reforms in this proposed DPF are expected to be supportive of the medium-term growth forecast, through facilitating the scale-up of public investments in a fiscally sustainable way and supporting improvements in the energy sector.

23. **The pressure on the current account deficit is expected to gradually heighten over the medium-

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¹⁹ JIRAMA procures fuel directly from petroleum companies, where the price is determined through a competitive process, and not through the calculated reference prices.

²⁰ The Constitution states that when amendments are proposed to the Finance Law, changes to specific lines of revenues or expenditures can be made only if other comparable measures are introduced, so that fiscal aggregates are maintained. This provision was respected during the negotiations of amendments, but the final outcome could not be concluded in time.
term, reflecting the country’s significant external financing needs. The deficit is projected at 1 percent in 2019, and then average 3.2 percent of GDP over the period 2020 to 2022, as a scale-up in public and private investments should drive the demand for imports. The current account deficit will be offset by the related surpluses in the capital and financial accounts from public sector loans and FDI. The financing of the current account is consistent with preserving the moderate risk of debt distress.

24. Monetary policy is expected to maintain its focus on controlling inflation. Total inflation is estimated to hover around 6 percent over the 2019 to 2022 period. Assumptions are based on food inflation being contained, and moderate increases in energy prices. With Technical Assistance (TA) from the World Bank under the Electricity Sector Operations and Governance Improvement Project (ESOGIP-P151785), JIRAMA is preparing a tariff setting trajectory in line with its Business Plan, to progressively increase the cost of electricity, while taking measures to protect the poorest households through a lifeline tariff for small consumers. As Madagascar officially maintains a flexible exchange rate, the central bank’s intervention on the exchange rate market is limited to smoothing large fluctuations and meeting the target of foreign reserves.

25. Over the medium-term, public expenditures are expected to moderately rise, but with a changing composition toward lower current spending and higher capital expenditures. Public spending is projected to increase from 16.6 percent of GDP in 2018 to 17.4 percent of GDP in 2019, and then average 18.1 percent of GDP over the period 2020 to 2022. Current expenditures are projected to stabilize from 10.8 percent of GDP in 2018 to 10.7 percent of GDP in 2019. The fall in transfer to JIRAMA based on the assumption that the utility’s operational performance improves is compensated by an increase in current operation of the government. On the other hand, capital expenditures are projected to increase from an estimated 5.8 percent of GDP in 2018 to a projected 6.6 percent of GDP in 2019, largely due to an intended scale-up of already identified foreign financed public investment projects following the outcome of the Donors and Investors Conference in December 2016.21 PPP agreements are also expected in key sectors such as energy and ports, following the approval of the PPP law in 2016 (supported by the Public Finance Sustainability and Investment programmatic DPF – PFSI DPF - P160866 and P164137).

26. The level of external debt distress risk remains moderate. A Debt Sustainability Analysis (DSA) undertaken in June 2018 assesses Madagascar’s risk of external debt distress to be moderate, in line with the DSA undertaken in June 2017. The ratio of public debt to GDP fell from 38.4 percent of GDP in 2016 to 36 percent of GDP in 2017 and is estimated to further fall to 35.1 percent of GDP in 2018. These trends represent rising nominal GDP growth and an appreciating real effective exchange rate. Over the medium term, domestic and external public and publicly guaranteed debt is expected to rise to 42 percent of GDP, as the level of external financing increases. While the government has made good progress in strengthening the legal framework for debt management, there is a lack of information disclosed to parliament and civil society on public borrowing decisions. State-Owned Enterprise (SOE) debt is only partially considered in the DSA (for example only publicly guaranteed debt for JIRAMA is included) due to a lack of information.22 The reforms supported under this proposed DPF, including a detailed inventory of

21 US$6.4 billion was pledged by development partners for the 2017-2020 period, including US$2.1 billion of undisbursed commitments and US$4.3 billion of new commitments. Out of the new commitments, financing amounting to US$1.5 billion were signed in 2017. Reforms are ongoing to remedy the slow pace of project execution and ensure adequate monitoring of disbursements, including the adoption of the Investment Management Strategy in 2017 that clarifies the role of each stakeholders in PIM, the preparation of the PIM manual in 2018 that lays out each step of the PIM process, and the creation of the investments dashboard as a monitoring tool.

22 Only JIRAMA’s debt which is directly guaranteed by the government is included in the DSA. If JIRAMA’s known liabilities are included in the DSA the risk of debt distress would remain moderate.
JIRAMA’s debt are expected to improve the assessment of SOE debt, including informing the preparation of the forthcoming DSA in line with the new framework for low-income countries.

27. **Debt thresholds are breached only under stress scenarios.** The government is expected to be able to service current and future debt. As the sources of already identified financing are largely on concessional terms, the pressure on debt sustainability is expected to remain under control. Debt sustainability remains vulnerable to shocks, particularly slower GDP growth. The most extreme shock—a one standard deviation reduction in GDP growth relative to its historical average in 2019-2020—would breach the present value of debt-to-GDP threshold (38 percent) during 2024 and keep rising to 59 percent in 2038, if no corrective measures are taken. Policies to stimulate economic growth, as well as improvements to revenue generation are essential for maintaining long-term debt sustainability.

![Figure 4: Debt Sustainability Assessment](image)

Debt Sustainability Assessment, June 2018

28. **The macroeconomic policy framework is considered adequate.** The return to constitutional order in 2014 has seen important reforms being implemented to reverse the poor public expenditure management decisions implemented during the political crisis period. Notably, there has been a renewed focus on increasing public investments and improving access to energy, including through strengthening JIRAMA. These reforms have been supported by development partners including four World Bank DPF operations and IMF facilities. The central bank has continued to implement reforms to contain inflation and maintain adequate levels of reserves, while advancing legislation to enhance governance arrangements. Expenditure and public debt levels are on a sustainable path. The reform momentum has been sustained and macroeconomic stability prevailed during the election period in late 2018, early 2019. With the exception of fuel pricing, which the new government has committed to continue reforming, slippages have been limited. The economic recovery has continued with inflation contained and robust fiscal and external positions. The World Bank and the IMF are closely collaborating on the economic policy dialogue to ensure the reform momentum remains on track.

29. **Risks related to energy sector management and the realization of contingent liabilities could weaken growth prospects.** Slower than currently-planned implementation of public and private investments, including those in the energy sector could further constrain private sector development and result in lower than projected GDP growth. As the government continues to leverage different sources of financing to support the scale-up in public investments, it will be critical to monitor any associated fiscal
risks and plan mitigating measures as necessary. Vested interests could also compromise JIRAMA’s reforms efforts, for example, by not following competitive tendering procedures which could raise the cost of energy generation, and present additional financing needs from the central government over the medium-term. Delays in improving transparency measures could further constrain effective fiscal decision-making. The reforms in this DPF aim to address the heightened risks associated with energy projects being agreed on non-transparent and uncompetitive terms. The proposed reforms directly support the government’s economic agenda and are broadly supported by other development partners.

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23 The PFSI DPFs have supported reforms to enhance the selection process of public investments and to put in place the regulatory framework for PPP projects.
Table 1: Madagascar: Selected economic and financial indicators: 2016-2022

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<tr>
<td>GDP (billion of ariary)</td>
<td>31,634</td>
<td>35,729</td>
<td>40,344</td>
<td>45,247</td>
<td>50,628</td>
<td>56,295</td>
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<td>4.3</td>
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<td>5.2</td>
<td>5.3</td>
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<td>2.7</td>
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<td>GDP per capita (current US$)</td>
<td>400</td>
<td>448</td>
<td>461</td>
<td>496</td>
<td>521</td>
<td>544</td>
<td>563</td>
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<td>Real GDP per capita (annual % change)</td>
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<td>GDP deflator (annual % change)</td>
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<td>Inflation, consumer prices (annual %, end of year)</td>
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<td>9.0</td>
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<td>6.0</td>
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<td><strong>Public Finance (%GDP)</strong></td>
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<td></td>
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<tr>
<td>Total revenue and grants</td>
<td>14.8</td>
<td>14.8</td>
<td>14.6</td>
<td>15.5</td>
<td>15.0</td>
<td>14.7</td>
<td>14.7</td>
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<tr>
<td>o/w: Tax Revenues</td>
<td>11.0</td>
<td>11.5</td>
<td>11.8</td>
<td>12.2</td>
<td>12.5</td>
<td>12.7</td>
<td>12.8</td>
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<tr>
<td>Total spending (commitment basis)</td>
<td>16.1</td>
<td>17.2</td>
<td>16.6</td>
<td>17.4</td>
<td>17.9</td>
<td>18.0</td>
<td>18.4</td>
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<td>o/w: Capital spending</td>
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<td>5.5</td>
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<td>6.6</td>
<td>7.8</td>
<td>8.1</td>
<td>8.3</td>
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<td>Overall balance (commitment basis)</td>
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<td>-2.4</td>
<td>-2.0</td>
<td>-1.9</td>
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<td>o/w: External</td>
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<td>25.3</td>
<td>25.5</td>
<td>27.8</td>
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<td><strong>Monetary accounts (annual % change)</strong></td>
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<td>Money Supply (M2)</td>
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<td>19.3</td>
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<td>17.1</td>
<td>13.3</td>
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<td>15.0</td>
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<td>Net Foreign Assets</td>
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<td>23.1</td>
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<td>10.9</td>
<td>15.2</td>
<td>16.3</td>
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<td>Net Domestic Assets</td>
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<td>20.6</td>
<td>8.6</td>
<td>10.9</td>
<td>13.5</td>
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<td>of which: Credit to the Private Sector</td>
<td>8.2</td>
<td>18.4</td>
<td>16.4</td>
<td>17.8</td>
<td>11.5</td>
<td>11.0</td>
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<td><strong>External sector (%GDP)</strong></td>
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<td>Exports of goods, f.o.b.</td>
<td>21.7</td>
<td>24.4</td>
<td>24.7</td>
<td>23.1</td>
<td>22.6</td>
<td>21.9</td>
<td>21.4</td>
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<td>Imports of goods c.i.f</td>
<td>28.7</td>
<td>31.5</td>
<td>32.7</td>
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<td>32.0</td>
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<td>32.1</td>
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<td>Current account balance</td>
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<td>-0.5</td>
<td>0.8</td>
<td>-1.0</td>
<td>-2.6</td>
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<td>Foreign Direct Investment</td>
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<td>3.1</td>
<td>3.9</td>
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<td>Foreign Reserves (months of imports)</td>
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<td>Terms of Trade (percent change)</td>
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<td>3.4</td>
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<td>Exchange Rate LCU/US$ (average)</td>
<td>3,176.5</td>
<td>3,116.1</td>
<td>3,333.6</td>
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Source: Malagasy authorities, IMF and World Bank staff calculations, March 2019
Table 2: Balance of Payments financing requirements and sources (% GDP)

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<td><strong>Total financing requirements</strong></td>
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<td>Current account deficit</td>
<td>9.1</td>
<td>8.4</td>
<td>7.9</td>
<td>7.3</td>
<td>7.7</td>
<td>7.6</td>
<td>7.8</td>
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<tr>
<td>Net repayment of private sector debt</td>
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<td>0.5</td>
<td>-0.8</td>
<td>1.0</td>
<td>2.6</td>
<td>3.2</td>
<td>3.7</td>
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<td>Repayment of government debt</td>
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<td>2.2</td>
<td>1.8</td>
<td>0.8</td>
<td>0.7</td>
<td>0.4</td>
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<td>Gross reserves accumulation (+)</td>
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<td>0.7</td>
<td>0.6</td>
<td>0.5</td>
<td>0.6</td>
<td>0.6</td>
<td>0.7</td>
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<tr>
<td>IMF repayments</td>
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<td>3.1</td>
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<td>1.2</td>
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<td>0.8</td>
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<tr>
<td>Other (inc. unrepatriated export revenues)</td>
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<td>0.1</td>
<td>0.1</td>
<td>0.0</td>
<td>0.1</td>
<td>0.1</td>
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<tr>
<td>Available financing</td>
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<td>7.9</td>
<td>7.3</td>
<td>7.7</td>
<td>7.6</td>
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<tr>
<td>Foreign direct and portfolio investment</td>
<td>4.5</td>
<td>3.1</td>
<td>3.9</td>
<td>2.4</td>
<td>2.7</td>
<td>2.8</td>
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<tr>
<td>Budgetary support loans</td>
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<td>Project support</td>
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<td>3.9</td>
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<td>4.9</td>
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<tr>
<td>IMF: RCF and ECF arrangement</td>
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<td>1.1</td>
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<td>1.0</td>
<td>0.0</td>
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Table 3: Fiscal Operations of the Central Government (% GDP)24

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</thead>
<tbody>
<tr>
<td><strong>Total revenues and grants</strong></td>
<td>14.8</td>
<td>14.8</td>
<td>14.6</td>
<td>15.5</td>
<td>15.0</td>
<td>14.7</td>
<td>14.7</td>
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<tr>
<td><strong>Tax revenues</strong></td>
<td>11.0</td>
<td>11.5</td>
<td>11.8</td>
<td>12.2</td>
<td>12.5</td>
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<td>12.8</td>
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<tr>
<td><strong>Non-tax revenues</strong></td>
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<td>0.3</td>
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<td>0.2</td>
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<tr>
<td><strong>Grants</strong></td>
<td>3.5</td>
<td>2.9</td>
<td>2.5</td>
<td>3.1</td>
<td>2.3</td>
<td>1.8</td>
<td>1.7</td>
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<tr>
<td><strong>Total expenditure</strong></td>
<td>16.1</td>
<td>17.2</td>
<td>16.6</td>
<td>17.4</td>
<td>17.9</td>
<td>18.0</td>
<td>18.4</td>
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<td><strong>o/w: social priority spending</strong></td>
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<td>1.0</td>
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<td><strong>Current expenditure o/w</strong></td>
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<td>11.7</td>
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<td><strong>Goods and Services</strong></td>
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<td><strong>Transfers and Subsidies</strong></td>
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<td>2.5</td>
<td>2.2</td>
<td>2.1</td>
<td>2.0</td>
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<td><strong>o/w: Transfers to JIRAMA</strong></td>
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<td>0.8</td>
<td>0.6</td>
<td>0.2</td>
<td>0.1</td>
<td>0.0</td>
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<td>0.9</td>
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<td><strong>Capital expenditures</strong></td>
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<td>8.3</td>
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<td><strong>Domestically financed</strong></td>
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<td>3.4</td>
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<td><strong>Externally financed</strong></td>
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<td>3.5</td>
<td>3.9</td>
<td>4.7</td>
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<td>4.9</td>
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<td><strong>Domestic Primary balance</strong></td>
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<td><strong>Overall balance (commit. Basis)</strong></td>
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<td>-2.4</td>
<td>-2.0</td>
<td>-1.9</td>
<td>-2.8</td>
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<td>-3.7</td>
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<td>-0.6</td>
<td>-0.1</td>
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<td><strong>Overall balance (cash basis)</strong></td>
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<td>-2.3</td>
<td>-2.6</td>
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<td>-2.9</td>
<td>-3.3</td>
<td>-3.8</td>
</tr>
<tr>
<td><strong>Central government financing</strong></td>
<td>2.0</td>
<td>2.3</td>
<td>2.6</td>
<td>2.5</td>
<td>2.9</td>
<td>3.3</td>
<td>3.8</td>
</tr>
<tr>
<td><strong>External (net)</strong></td>
<td>0.7</td>
<td>1.4</td>
<td>1.9</td>
<td>2.3</td>
<td>2.8</td>
<td>3.0</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Domestic (net)</strong></td>
<td>1.4</td>
<td>0.9</td>
<td>0.7</td>
<td>0.2</td>
<td>0.1</td>
<td>0.3</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Sources of Table 2 and 3: Malagasy authorities, IMF and World Bank staff calculations, March 2019

*Social priority expenditures are defined as spending on health, education, water and population sectors excluding salaries and externally financed investments.

24 Current expenditures do not include Autres Operations Net du Trésor (Other Treasury Operations) which refer to: (i) advance payments made by the state to entities with budget autonomy, such as public establishments; (ii) debt repayments; (iii) dues related to Madagascar’s participation in international organizations; and (iv) payments to commercial accounts. These treasury operations will be regularized as 2018 actuals are finalized.
2.3. RELATIONS WITH THE IMF

30. In July 2016, the IMF Board approved a three-year Extended Credit Facility agreement for Madagascar for an amount of special drawing rights (SDR) 220 million (equivalent to about US$295 million), increased to SDR 250.5 million in June 2017 in the context of the first review. This approval followed satisfactory progress under two rapid credit facility programs in 2014 and 2016 respectively and a six-month IMF Staff Monitored Program between September 2015 and end-March 2016. The arrangement under the ECF supports the government’s program to reinforce macroeconomic stability and promote sustainable and inclusive growth. The program focuses on (i) boosting prospects for inclusive growth through scaling-up of investment and improving access to education, health care, and social protection; (ii) creating fiscal space through improved revenue generation and spending prioritization; (iii) reinforcing economic governance by strengthening public financial management and intensifying anti-corruption measures; and (iv) strengthening macroeconomic stability by bolstering central bank operations and financial supervision. The first four reviews were all successfully concluded. The IMF Executive Board has completed the fourth review in March 2019, on the back of a generally sound performance of the country under the program. While the program has remained broadly on track, additional efforts are required regarding the outstanding issues related to fuel pricing and JIRAMA’s tariffs. The World Bank maintains a close working relationship with the IMF, with regular collaboration across policy issues between the two institutions.

3. GOVERNMENT PROGRAM

31. The program of the new government is outlined in the General Policy of the State (GPS), which was presented in January 2019. The program is ambitious and aims to transform Madagascar into an emerging country in a five-year timeframe. The program is based around 13 priorities, with clear continuation of the objectives that the country has been pursuing over the previous five years (i.e. since the return to constitutional order), including (i) the development of the energy sector for universal access; (ii) access to education and health involving the standardization of infrastructures for quality service provision; (iii) governance reforms covering justice and the fight against corruption underpinned by the promotion of e-governance and the use of new technologies; and (iv) effective decentralization. Over the coming months, the government will refine those 13 priorities into a formal national Plan Emergence 2019-2023.

32. The government’s fiscal reforms are presented in the Strategic Plan for the Modernization of Public Finances prepared at the end of 2016 and updated in March 2018, which is considered as both substantive and comprehensive in content. Following several months of consultations with decision-makers, government agencies, and development partners, the reforms were prioritized according to their pertinence for achieving the objectives in the country’s development program. The prioritized list of reforms includes: (i) strengthening the regulatory environment for public enterprises; (ii) reporting on projects that are financed by development partners; (iii) undertaking a comprehensive assessment of all contingent liabilities; (iv) implementing the public debt strategy; and (v) implementing JIRAMA’s Business Plan to improve operational performance. These reforms are directly supported by this proposed DPF.

33. The Strategy for the Management of Public Investments was formally adopted by the government in 2018. Following the joint World Bank-IMF Public Investment Management Assessment (PIMA) conducted in 2016, a strategy was adopted to improve the selection, budgeting and monitoring of
public investments. Complementary World Bank TA has been provided to develop a Public Investment Management (PIM) manual to support improved management practices. Institutional processes for PIM are being enhanced where a decree has been passed outlining the working arrangements between the Ministry of Finance and Budget (MFB), the Ministry of Economy and Plan (the two ministries have been merged into the Ministry of Economy and Finance [MEF] since January 2019), and the OCSIF26 to ensure coordination amongst all entities involved in public investments. The government has taken further steps to enhance transparency of public investments by publishing all loans and the projects they support with medium-term financing projections since the Finance Law 2018. Furthermore, to guide the preparation of the Finance Law 2019, the MEF has issued a budget circular requiring line ministries to adequately budget for all counterpart financing requirements. As the new government prepares for the implementation of its ambitious investment plan, the MEF conducted a self-assessment based on the PIMA methodology in January 2019, to identify the remaining bottlenecks to public investment execution.

34. To develop much-needed infrastructure, the government is seeking to actively crowd-in private sector investment, particularly in the energy sector. The government’s strategy includes awarding concessions and power purchase agreements for investments in power generation capacity, which may involve the use of guarantees to help de-risk the operating environment, consistent with the World Bank Group’s (WBG) Maximizing Finance for Development (MFD) approach. By improving the financial viability of JIRAMA, and therefore moving it in the direction of a more attractive and creditworthy off-taker, the reforms in this proposed DPF will directly contribute to developing an MFD enabling environment in the power sector. The reforms are expected to enhance competition in the energy sector in line with the PPP law approved in 2016 to create a more level playing field for private investors – therefore further improving the MFD enabling environment – and ensure that power purchase agreements are awarded only if proceeded by detailed feasibility studies, including environmental, social and financial assessments. These reforms are expected to address binding constraints identified in both the SCD and the CPF.

35. Madagascar’s electricity sector policy is guided by the NEP, which sets the long-term target of 70 percent electrify access by 2030 and calls for the development and implementation of a recovery plan for JIRAMA. The recovery plan is focused at the reduction of technical, non-technical and financial losses as well as the rehabilitation of inefficient thermal power stations. The NEP also sets the objectives of increasing access to electricity from 14 percent in 2010 to 70 percent by 2030, which would entail providing electricity service to over 2.5 million new households. To realize these ambitious targets, the NEP lays out an action plan for investment in renewable energy as well as reforms to sector planning, governance, and financial management, while the National Electrification Strategy will establish the technical, financial, and institutional pathways to realizing the access vision.

36. The energy component of the GPS is based on the recently completed Least Cost Development Plan (PDMC) to more fully take advantage of Madagascar’s renewable energy potential. While considering a shadow price of carbon, the PDMC prioritizes hydroelectric development to replace carbon-intensive thermal generation and reduce JIRAMA’s cost of generation in the long-term and calls for the fast-tracking of solar plus battery storage investments to already achieve some improvements in the short to medium term. The PDMC emphasizes the importance of battery storage for meeting daily peak demand while also ensuring grid stability and quality of service. Moreover, the government’s new program prioritizes the creation of a robust institutional and fiscal environment. Furthermore, the new government’s strategy underscores the reinforcement of competitive processes and enhanced use of

25 The adoption of this strategy was a structural benchmark in the IMF’s ECF program.
26 The mandate of OCSIF is to follow-up on financing pledged during the Donors and Investors Conference, as well as ensuring effective project execution.
public-private partnerships for the development and transition of the Malagasy energy supply infrastructure.

37. **Strengthening the operational and financial performance of JIRAMA is critical for scaling up electrification and enabling private investments as a reliable off-taker.** JIRAMA’s contribution to the NEP is laid out in its Business Plan 2017-2020, approved in April 2017. The Business Plan includes tariff increases and operationalizes sector governance reforms, including the organizational restructuring of the company and appointment of top managers through competitive processes, the incorporation of an integrated management information system (MIS) to support efficient, transparent and accountable development of operations in key business areas, and the implementation of a Revenue Protection Program (RPP) to reduce non-technical losses. At present most of the Directors in the new organizational structure of JIRAMA have been appointed, and the process to select managers at lower levels is progressing satisfactorily. These internal efficiency improvements supported via the World Bank’s ESOGIP and ESOGIP Additional Financing, are vital to containing JIRAMA’s fiscal burden on the economy. The reforms under the DPF support the establishment of institutional measures for the realization of improvements to JIRAMA’s operational performance as envisaged under the ESOGIP project.

38. **Adequate management of electricity investments and improvements in JIRAMA’s financial and operational performance are critical for overall improvements in public finance and the investment climate in Madagascar, and vice versa.** JIRAMA is of macroeconomic significance, with accumulated liabilities of 4.7 percent of GDP and an annual quasi-fiscal deficit of 2.15 percent of GDP (see Annex 5 for details). Improving service quality of JIRAMA will also give a boost to Madagascar’s business environment and stimulate SME activity; Madagascar currently ranks 185th out of 190 in the world in the category ‘Getting Electricity’ in the World Bank’s ‘Doing Business’ ranking and electricity was the second-highest ranked obstacle for private business in the World Bank’s latest Enterprise Survey. Likewise, improving the management of investment projects in the power sector will bring the government closer to improving overall public investment management processes.

### 4. PROPOSED OPERATION

#### 4.1. LINK TO GOVERNMENT PROGRAM AND OPERATION DESCRIPTION

39. **The PDO of this standalone transition operation are to: (i) strengthen the quality and transparency of fiscal decision-making; and (ii) improve the governance of the electricity sector.** This operation supports reforms that are critical in achieving certain of the government’s priorities outlined in the GPS. The new government’s program involves a continuation of the scaling-up public of investments to catch up with the gap in the provision of infrastructures in education, health, road, energy and agriculture sectors. The first development objective of this operation contributes to ensuring the implementation of the planned investments in a fiscally sustainable manner, considering liabilities that are recorded both on and off budget. The specific policy actions outlined in the proposed DPF are closely aligned with the priority reforms indicated in the Public Finance Management (PFM) Modernization Strategy and the Priority Action Plan for PIM which remain relevant in regard to the GPS. 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. The reforms under this pillar directly supports the GPS ‘ambitious objective of universal access to energy with energy production expected to

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double in 5 years. The proposed DPF supports JIRAMA’s reforms by improving corporate financial governance, institutionalizing least-cost investment planning and competitive generation procurement, and reducing commercial losses. Improving the governance of the electricity sector is likely to signal an improvement in the business environment to investors and make JIRAMA more financially attractive as an off-taker, a key prerequisite to attract private sector involvement in generation.

40. **The two development objectives are closely interlinked.** As the government seeks to scale-up investments, it is important to ensure that the costs and benefits of large infrastructure projects are adequately assessed, and that the risks to the fiscal stance are minimized through using the most appropriate financing modality. Undertaking an adequate credit risk assessment for loans and guarantees is essential, as well as having the tools in place to assess both direct and contingent liabilities. Energy is one of the government’s priority sectors for infrastructure development. Projects in the energy sector are likely to be implemented by Independent Power Providers who have agreed concession contracts with the Ministry of Energy, Water, and Hydrocarbons (MEWH), and where energy will be sold to JIRAMA. Similarly, these projects should also be subject to transparent and competitive procurement processes, which are selected on a least-cost basis. In parallel, it is critical to closely monitor the financial situation of SOEs that are engaging in public investments, which includes JIRAMA amongst others through enhancing transparency and ensuring financial viability.

41. **The proposed DPF 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 DPF is being prepared as a standalone transition operation, with strong continuity of reforms achieved in previous DPFs since the country returned to constitutional order in 2014 (as detailed in Annex 5). 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. In parallel, a complementary programmatic DPF is under preparation which focuses on reforms to strengthen human capital and inclusive growth, in line with the new government’s program. The transition nature of this DPF has enabled the reform momentum to continue and sets a solid foundation for the new government to continue scaling-up public investments in a fiscally sustainable manner and improve the governance of the electricity sector.

42. **The DPF is complementary to the ongoing investment program and the recent budget support operation supported by the World Bank.** This approach reflects lessons learned from Implementation Completion Reports (ICR) for the Reengagement and Resilience DPFs that continuity in the policy dialogue can be promoted when the reforms are closely integrated with IPFs. Several of the reforms supported in this DPF are linked to financing and TA provided under the World Bank’s investment projects, including the Integrated Growth Pole Project and Corridor 2 (P113971), which assists relevant government agencies (including the PPP Unit) in capacity building to manage PPPs and provides advisory support on PPPs; the ESGIP (approved in FY2016, with additional financing in FY2018), which provides support to JIRAMA’s investment program; the Least-Cost Electricity Access Project (P163870), which provides investment support to the country’s electrification program; and future Partial Risk Guarantees which will aim to provide risk mitigation for renewable energy PPPs. These IPFs support improved governance procedures of JIRAMA, including the utilization of least-cost planning methodologies. The Inclusive and Resilient Growth programmatic DPF, of which the second and last operation (P166425) was approved in August 2018, supports reforms to promote rural electrification.
4.2. PRIOR ACTIONS, RESULTS AND ANALYTICAL UNDERPINNINGS

Pillar A: Strengthen the quality and transparency of fiscal decision-making

Risk-based assessment for new financing modalities

43. **Rationale:** To finance the scale-up of public investments, the government is considering awarding direct loan guarantees, and increasing on-lending arrangements with SOEs. However, the mechanisms are not in place to systematically assess credit risks supported by a transparent institutional framework. This weakness can result in the inefficient allocation of resources where projects with limited socio-economic benefits are able to gain access to financing supported by guarantees, which may present a fiscal risk to the state.

44. **Reforms:** Two application decrees to the 2014 Public Debt Law have been passed, providing the institutional basis for assessing and awarding guarantees. The first decree, *fixant les modalités et procédures d’octroi de garantie sur emprunt du Gouvernement Central* details step by step requirements to apply for government guarantees. An in-depth credit risk analysis of guarantee proposals is required. A government guarantee is capped at 75 percent of the loan, and the guarantee limit is expected to be specified in the Finance Law. The government is required to levy a guarantee fee to incentivize the lender and borrower to only put forward projects that are viable. The second decree, *portant sur les modalités et conditions d’octrois de prêts directs et de prêts rétrocédés par le Gouvernement Central* elaborates the requirements for granting government loans and on-lent external loans to local economic entities, including SOEs, public institutions, commercial entities with public participation and decentralized governments. Detailed steps for decision-making are introduced in the decree including the selection and recovery processes in case of default. The decrees were elaborated with TA from the World Bank, where expertise was provided to quality assure the content of the decree in line with international practices and conformity with the Public Debt Law.

**Prior Action #1:** The Recipient has through its Ministry of Economy and Finance, issued: (a) Décret n°2018- 589 fixant les modalités et procédures d’octroi de garantie sur emprunt du Gouvernement Central, and (b) Décret n°2018-590 portant sur les modalités et conditions d’octrois de prêts directs et de prêts rétrocédés par le Gouvernement Central, said decrees establishing the institutional basis for assessing and awarding guarantees, and requiring that all requests for government loans, guarantees and on-lending arrangements are objectively analyzed through a credit risk-based assessment.

45. **Results:** The expected result is that all requests for government loans, guarantees and on-lending arrangements are objectively analyzed through a credit risk assessment. The target is for the government to publish a report outlining existing and newly contracted loans, guarantees and on-lending arrangements, with an assessment of the exposure to risk. The publication of this report is expected to inform parliament, citizens, the international community and potential investors of the government’s approach to risk assessment. Overall, these reforms are expected to ensure that riskier financing modalities are only awarded for viable projects, through improved decision-making which reduces exposure to fiscal risks. To complement these reforms, the government has been strengthening its public investment management capacity with TA support from the World Bank and the IMF. The credit risk assessment methodology has also benefited from World Bank TA. Guarantees will be monitored in the

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28 This weakness was identified in the DeMPA assessment, December 2017.
29 Decree setting the modalities for awarding guarantees for central government loans.
30 Decree setting the modalities for awarding direct loans and on-lending arrangements by the central government.
contingent liabilities register, which is supported in PA#2.

**Assessment of public and publicly guaranteed debt and contingent liabilities**

46. **Rationale:** There is no centralized system for analyzing and monitoring contingent liabilities. Central government debt management framework has seen considerable improvement since 2014 with (i) the enactment of the legal and regulatory framework for public and publicly-guaranteed debt management; (ii) the regular production of the Medium-Term Debt Management Strategy that sets the debt ceiling, analyze debt composition and associated risks; and (iii) the strengthening of central government debt reporting. However, the management of contingent liabilities which are one of the main sources of risk on the existing debt portfolio is inadequate. Since the scale-up in public investments involves different financing modalities, including debt, PPPs, and on-lending arrangements to SOEs, different entities in the central government collect information. However, there is no consolidated nor a reliable and up-to date information on the contingent liabilities associated with those different financing modalities, which limits a consolidated assessment of public sector liabilities. As a result, the government’s capacity to assess fiscal risks and the implications for debt sustainability is limited (cf. para 26).

47. **Reforms:** A decree has been passed requiring the consolidation of information on public sector liabilities in one registry, and the government has also published its own DSA. The reform establishes the institutional basis for collecting and recording information on state majority-owned SOEs, through the publication of a ministerial decree. Given available resources and capacity, the register focuses on state majority-owned SOEs and will be updated on an annual basis to inform the contingent liability supplement of the DSA. The capacity of the SOE Oversight Unit is being progressively strengthened. With support from the World Bank, an initial register has been developed containing information on SOE liabilities to the government including tax, customs, pensions and outstanding payments for on-lending agreements, which was used to inform the June 2018 DSA undertaken by the World Bank and the IMF. The next stage is to incorporate liabilities at the company level, SOE obligations in PPP agreements and concession contracts; reforms which are supported in this DPF. The Public Debt Directorate has for the first time prepared its DSA assessment, as required in Arrêté n. 17975/2018 MFB Fixant la description des attributions et l’organisation des Services rattachés aux Départements du Ministère des Finances et du Budget, supported in PA#2. World Bank TA was provided to support the preparation of the DSA, and further TA is in the pipeline to continue providing training in line with the new DSA Low Income Countries framework.\(^{31}\)

**Prior Action #2:** The Recipient has through its Ministry of Economy and Finance: (a) issued an Arrêté n°17975/2018 MFB fixant la description des attributions et l’organisation des Services rattachés aux Départements du Ministere des Finances et du Budget an Arrêté that establishes a register to consolidate information on state majority-owned State-Owned Enterprises (SOE) liabilities, including debt, guarantees, and obligations for Public Private Partnership (PPP)projects and; (b) published on the website of the Ministry of Economy and Finance a debt sustainability analysis for the Fiscal Year (FY) 2018, all to support improved decision-making processes on the management of debt and public sector liabilities.

48. **Results:** This reform is expected to result in an SOE register being updated on an annual basis and the preparation of the DSA supporting a prudent management and preservation of the level of debt

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\(^{31}\) The DSA assessment undertaken by the government currently follows the 2005 Low Income Country Debt Sustainability Assessment. Migrating to the Debt Sustainability Framework presented to the Board in 2017 will require additional capacity building which is being programmed.
distress. The Budget Directorate is expected to be the end user of the information on SOE register, where the data collected will be used to produce a fiscal risks statement, building on the TA provided by the IMF in 2017 on fiscal risks management. By preparing its own DSA the government will be developing its analytical capacity and integrating debt sustainability analysis in its medium-term expenditure forecasting. Undertaking the DSA would help the government to have a good sense of the source of risks to debt distress and take appropriate decision. The level of debt distress was low until 2015 but increased to moderate from 2016. The rising level of debt distress was due to a sharp depreciation of the nominal exchange rate\(^{32}\) and increased access to external financing following a shoring up of relations with the international community after the return to constitutional order in 2014. As the government continues to gain access to external financing to support the scale-up of investment, the reform is expected to improve the government’s fiscal decision-making to avoid a deterioration of debt sustainability. To support the government’s capacity in undertaking DSA, TA is being provided by the World Bank, with financing support from other partners.

**Improving Transparency of SOE Financial Operations**

49. **Rationale:** Majority-owned SOEs do not systematically publish their financial statements, as there is no legal requirement for doing so, and an analysis of SOE performance is not undertaken by the Treasury, the main shareholder. SOEs are governed by the Commercial Law, which requires independently audited financial statements to be produced six months after the close of the financial year, but not published. There are several majority-owned SOEs that have never been able to produce their accounts and to have these audited. If these SOEs undertake public investments, the government may be presented with significant liabilities, which have not been monitored or reported. At present, there is no systematic assessment of SOEs financial performance by the government, even for majority-owned SOEs that do produce audited accounts.

50. **Reforms:** The reform requires the government to publish the financial statements of all majority-owned SOEs for the first time, and to publish a report on their performance. The reform has resulted in all 23 majority-owned SOEs publishing their audited financial statements for fiscal year 2017.\(^{33}\) In some cases, it is the first-time majority-owned SOEs are preparing their accounts. In other cases, such as a large mining SOE, financial statements have been available, but the information had never been published before. The reforms are expected to improve the timeliness of the publication of SOE financial statements, to a 6-month delay after the end of the financial year. Except for Air Madagascar which is changing its financial year to April 1\(^{st}\) to March 31\(^{st}\), all other majority-owned SOEs follow a calendar year cycle.\(^{34}\) The assessment of SOE performance and support to the SOE oversight unit has been supported by a two-year advisory World Bank project (P160306). TA from the IMF has also supported the publication of the first fiscal risks statement which was appended to the 2018 Finance Law, with a follow-up mission planned in March 2019.

**Prior Action\#3:** The Recipient has through its Ministry of Economy and Finance: (a) published on the website of the Ministry of Economy and Finance the audited financial statements for all state majority-owned SOEs; and (b) issued Décret n°2018-689 portant obligation de publicité des comptes annuels des sociétés commerciales à participation majoritaire publique requiring all state majority-owned SOEs to

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\(^{32}\) The one-shot depreciation in 2015 was associated with reforming the Central Bank’s intervention on the exchange rate market so that the official exchange rate converges toward the market exchange rate.

\(^{33}\) At this stage, the reform focuses on the publication of the audited financial statements. The improvements to JIRAMA’s financial practices, as supported in PA#4, do support the publication of the auditor’s opinion, which is important given the poor quality of existing FM practices.

\(^{34}\) Air Madagascar is proposing to change its financial year to be in line with the International Air Transport Association calendar.
publish independently audited financial statements within six (6) months of the end of each FY, commencing in FY 2019, all to increase transparency on the financial statements and performance of all state majority-owned SOEs.

51. **Results:** As the information on financial performance of major SOEs become regularly available, the MEF will be in a stronger position to assess fiscal risks associated with those companies and Parliament and civil society to play their challenge function. Enhancing fiscal reporting on contingent liabilities including those pertaining to state majority-owned SOEs is particularly pertinent given that large SOEs such as JIRAMA continue to implement key investments in the energy sector, including through PPPs and concession agreements. Other SOEs, such as Air Madagascar have in the past benefited from significant financial resources from the government to shore up performance, where for example, in 2017 the government paid liabilities amounting to US$89 million as part of a restructuring deal of the airline. Access to information and analysis on the performance of majority-owned SOEs is expected to enhance decision-making and allow for the state to plan for mitigating measures as necessary. The information would also be used to prepare the register on contingent liabilities as supported under PA#2.

**Pillar B: Improving the Governance of the Electricity Sector**

**Improving Corporate Financial Governance of JIRAMA**

52. **Rationale:** JIRAMA’s corporate financial governance needs to be urgently strengthened. A series of reforms initiated including adjusting tariff rates and completing the hiring of new senior management in 2017 have contributed to halting the downward trend of the utility’s financial performance (see Annex 6). However, JIRAMA continues to face a significant cash deficit as it struggles to balance excessive costs for oil-based rental power with its low-cost recovery and bill collection rates. The stock of unpaid bills from suppliers reached an estimated 3.1 percent of GDP at the end of 2017 (319 days’ worth of bills) while unpaid bills from JIRAMA’s customers reached 1.05 percent of GDP (242 days’ worth of bills). Recent projections of JIRAMA’s financials indicate a cash shortfall of over 2 percent of GDP for 2018. Even as new solar and hydro capacity is expected to come online over the next 3-5 years, JIRAMA’s solvency is likely to remain precarious in the interim. The lack of publicly available, independently audited financial statements limits the oversight role of the Board and the ability to take informed decisions on the utility’s financial recovery.

53. **Reforms:** To improve the utility’s corporate financial governance, the Supervisory Board of JIRAMA has published the results of JIRAMA’s audit exercise and mandated the establishment of an Audit Committee. As a first step toward promoting financing recovery, JIRAMA has for the first time undertaken an independent audit exercise including a detailed breakdown of its liabilities. The results have been published on both JIRAMA’s website and the Treasury’s website, marking an important step in improving transparency. Given JIRAMA’s poor corporate governance practices, the independent auditors were not able to form an opinion on the accounts. This result was to be expected, but in itself marks an important step in terms of taking stock of JIRAMA’s financial performance, in order to support the recovery of the utility. Furthermore, the Supervisory Board of JIRAMA has mandated the establishment of an Audit Committee to provide fiduciary oversight and regular reporting to the Board on the preparation and implementation of the utility’s financial recovery plan. The Audit Committee will help the

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35 Such report is coherent with the PEFA methodology.
36 The restructuring deal involved a strategic partnership with Air Austral, an airline based in the region. The clearance of Air Madagascar’s liabilities was a condition of this deal. As part of the re-organization efforts, Air Madagascar is changing its financial systems, which has led to a slight delay in the approval of its annual accounts. Air Madagascar has made a formal request to the central government for an extension to complete its accounting procedures.
Board in improving its oversight of JIRAMA’s financial management the preparation of a Financial Recovery Plan (see below). The terms of reference of the Audit Committee have been approved and it is expected that the members will be appointed in the first semester of 2019. At the request of the government, the World Bank has recruited an independent firm to provide TA to support the implementation of JIRAMA’s financial recovery plan.

Prior Action #4: The Recipient has through the supervisory board of *Jiro sy Rano Malagasy* (JIRAMA): (a) issued Resolution n°. 23/2018 portant sur l’approbation des Termes de Référence concernant la mise en place du Comité d’Audit de la Société au sein de son Conseil d’administration, said resolution approving the establishment of an audit committee to provide fiduciary oversight and regularly report to the board on the JIRAMA’s financial recovery; and (b) institutionalized the semi-annual publication of a detailed breakdown of the JIRAMA’s liabilities.

54. **Expected Results (including Climate Co-Benefits):** The expected result is improved corporate financial governance of JIRAMA and, in the medium term, reduced fiscal burden and increased private sector investment in renewable power production. Currently, the Recipient’s Government, JIRAMA’s Supervisory Board and the public have limited insight into the implementation of the utility’s fiduciary performance and financial recovery. As a result of the improved oversight, independently audited financial statements (including the auditor’s opinion and the detailed notes to the statements) would be issued within 6 months after the end of each financial year, and a detailed Financial Recovery Plan informed by the Audit Committee would have been approved by JIRAMA’s Supervisory Board and is under implementation. Furthermore, this information would be used to enhance the analysis of debt sustainability, and thereby improve the assessment of the government’s fiscal stance. By accelerating JIRAMA’s financial recovery and making the utility a more credible off-taker, this prior action will contribute to reducing JIRAMA’s fiscal drain to the budget and to the development of privately-owned energy, power generation and the MFD agenda. Since all major new power generation investments are expected to be from renewable sources the creation of a more favorable investment climate will also help displace oil-based power generation and help implement Madagascar’s Nationally Determined Contribution (NDC) under the Paris Agreement.

**Institutionalizing Least-cost Investment Planning and Competitive Procurement**

55. **Rationale:** Madagascar’s current energy mix could be optimized to make electricity supply more affordable. Madagascar possesses significant potential for renewable energy supply, including an estimated 8,400 MW of hydropower and excellent solar potential, which could meet the demand for affordable electricity supply many times over. However, despite this large hydro potential, the Malagasy power sector’s energy mix has changed from almost 70 percent hydropower dominated generation infrastructure in 2001 to a predominantly thermal-powered generation park today. Investments of more than US$ 1.5 billion will be needed to reverse this trend. However, the MEWH and JIRAMA have in the past struggled to prioritize among different renewable generation options. The adoption and institutionalization of a modern planning methodology for the assessment of power generation needs would allow JIRAMA to improve power supply in the country at least cost, while reducing carbon emissions. In addition to Least-Cost Planning, switching to competitive procurement would further allow

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37 The investment would support new hydro generation capacity between now and 2025, with around US$ 400 million going to in related energy transmission infrastructure.
the utility to secure value-for-money and implement projects in a cost-effective way.\textsuperscript{38}

Prior Action #5: The Recipient has through its Ministry of Energy, Water, and Hydrocarbons, issued Décret n°2018-692 Portant modalités de passation de contrats pour les investissements dans la production d’énergie électrique supérieure à 5MW, a decree to restrict the award of concessions and power purchase agreements for private power generation with a capacity over 5 MW to projects that are ready for contract award and that are part of the Recipient’s “Master Plan for the Least-Cost Development of the Power Sector”.\textsuperscript{39}

56. **Reforms:** The MEWH is institutionalizing least-cost investment planning and the use of transparent and competitive international tenders for priority pilot projects in line with international best practices. A ministerial decree has been passed that (i) adopts the use of least-cost planning principles for the assessment of power generation needs while taking into account the external cost of carbon emissions; (ii) adopts a process of annual updates of the assessment and stakeholder consultations to validate these updates; and (iii) restricts public procurement of generation assets and PPPs in power generation to priority projects identified though these assessments.

57. **Expected Results (including Climate Co-Benefits):** The expected result is for the Government to have institutionalized least-cost planning and competitive procurement of generation investments in the power sector, which is expected to secure value-for-money and have significant climate benefits. In the past, contracts were awarded for concessions and power purchase agreements for private power generation without adequate preparation and prioritization. From July 2018 onwards, any projects awarded with concessions and power purchase agreements for private power generation with a capacity over 5 MW after July 2018 would be part of the Master Plan for the Least-Cost Development of the Power Sector, competitively procured and ready for contract award.\textsuperscript{40} In the medium-term, adopting and implementing least-cost planning and competitive procurement according to international best practices is expected to reduce the cost of production (before accounting for transmission and distribution cost and system losses) from US$c 13 per kWh by almost 40 percent to around 9 US$c per kWh by 2025, mainly though the shift from thermal to renewable energy resources, thus also reducing greenhouse gas emissions from power generation in the process.

*Reducing Commercial Losses of JIRAMA and Incentivizing Energy Efficiency*

58. **Rationale:** At 33 percent in 2017, JIRAMA’s total system losses—the sum of technical and commercial losses—are high by international standards. Commercial losses represent a significant share of the total. Reducing commercial losses and incentivizing efficient use of energy by large consumers are therefore critical measures for JIRAMA’s financial recovery and improved environmental performance of the power sector. However, JIRAMA currently has no procedures in place to systematically audit consumers’ meters to detect fraud and incoherent billing. Systematic audits of High Voltage and Medium

\textsuperscript{38} Successful implementation of such tenders will require technical de-risking though the completion of pre-feasibility studies and environmental and social (E&S) assessments prior to international competitive bidding.

\textsuperscript{39} The decree requires specifically that the conclusion of concessions and power purchase agreements for said investments be preceded by the completion of (a) Feasibility and Detailed Design Studies; (b) Environmental and Social Impact Assessments; and (c) an analysis of the financial and budgetary sustainability as well as the risks and costs of the State’s commitments related to the project.

\textsuperscript{40} In line with the underlying ministerial decree, ‘ready for contract award’ is defined as having completed (a) Feasibility and Detailed Design Studies; (b) Environmental and Social Impact Assessments; and (c) an analysis of the financial and budgetary sustainability as well as the risks and costs of the State’s commitments related to the project.
Voltage, which represent 0.2 percent of customers but 39 percent of sales, are expected to significantly reduce commercial losses.

59. **Reforms:** To reduce commercial losses and incentivize energy efficiency, JIRAMA has started to regularly implement targeted metering audits of key customers. This measure is complementary to the parallel rollout of advanced meters supported by the World Bank-financed ESOGIP project. Regular meter audits represent an important measure in the interim before all critical consumers have advanced meters, and even after advanced meters are installed there will be a need to do regular audits to avoid tampering. In 2018, a total of over 16,486 customers were audited 13 per cent of which had tampered or otherwise irregular connections. The regularization of improper connections helped reduce the system loss rate by an estimated 3.4 per cent compared to 2017. The target for 2019 is to complete another 16 thousand audits.” Furthermore, the Supervisory Board of JIRAMA has mandated the utility to include targets for commercial loss reduction in performance contracts for regional directors. This measure will create stronger incentives for JIRAMA’s regional offices, which are best positioned to pursue commercial losses, to act and reduce theft.

60. **Expected Results (including Climate Co-Benefits):** The expected result is a decline in total system losses (as a percentage of total electricity produced) through the reduction of non-technical losses. The expected outcome is a three percent reduction in commercial losses, bringing total losses down from 33 percent in 2017 to 30 percent in 2019. This is to be achieved through annual meter audits for high and medium voltage customers accounting for a total consumption equivalent to at least 20 percent of the company’s gross sales from 2019 onward. This is expected to yield financial and economic benefits for JIRAMA and compliant industrial/commercial ratepayers by reducing non-technical losses from meter fraud and incoherent billing, reducing peak load, grid congestion and related investment needs. For non-compliant industrial/commercial consumers, this measure is expected to incentivize energy efficiency. Energy efficiency will contribute to meeting Madagascar’s objectives under its NDC to the Paris Agreement.

### Table 4: DPF Prior Actions and Analytical Underpinnings

<table>
<thead>
<tr>
<th>Prior Actions</th>
<th>Analytical Underpinnings</th>
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<tr>
<td><strong>Pillar A --- Strengthening Fiscal Reporting and Transparency of Public Investments</strong></td>
<td></td>
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<tr>
<td><strong>Prior Action #1:</strong> The Recipient has through its Ministry of Economy and Finance, issued: (a) Décret n°2018- 589 fixant les modalités et procédures d’octroi de garantie sur emprunt du Gouvernement Central, and (b) Décret n°2018-590 portant sur les modalités et conditions d’octrois de prêts directs et de prêts rétrocédés par le Gouvernement Central, said decrees establishing the institutional basis for assessing and awarding guarantees, and requiring</td>
<td>The Debt Management Performance Assessment (DeMPA) completed in December 2017 shows that the management of guarantees is weak with no objective criteria for assessment.</td>
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that all requests for government loans, guarantees and on-lending arrangements are objectively analyzed through a credit risk-based assessment.

**Prior Action #2:** The Recipient has through its Ministry of Economy and Finance: (a) issued an *Arrêté n°17975/2018 MFB fixant la description des attributions et l’organisation des Services rattachés aux Départements du Ministere des Finances et du Budget* an Arrêté that establishes a register to consolidate information on state majority-owned State-Owned Enterprises (SOE) liabilities, including debt, guarantees, and obligations for Public Private Partnership (PPP) projects and; (b) published on the website of the Ministry of Economy and Finance a debt sustainability analysis for the Fiscal Year (FY) 2018, all to support improved decision-making processes on the management of debt and public sector liabilities.

The DeMPA revealed limited disclosure of debt reporting to parliament and a lack of consolidated information on risks related to SOEs. This finding was reinforced in the Public Expenditure and Financial Accountability (PEFA) self-evaluation undertaken in March 2018.

**Prior Action #3:** The Recipient has through its Ministry of Economy and Finance: (a) published on the website of the Ministry of Economy and Finance the audited financial statements for all state majority-owned SOEs; and (b) issued *Décret n°2018-689 portant obligation de publicité des comptes annuels des sociétés commerciales à participation majoritaire publique* requiring all state majority-owned SOEs to publish independently audited financial statements within six (6) months of the end of each FY, commencing in FY 2019, all to increase transparency on the financial statements and performance of all state majority-owned SOEs.

The Advisory Services and Analytics (ASA) on the Management of SOEs in Madagascar and the PEFA self-evaluation report that there the lack of disclosure of financial statements is a limitation to effective SOE corporate governance.

**Pillar B --- Improving the Governance of the Electricity Sector**

**Prior Action #4:** The Recipient has through the supervisory board of *Jiro sy Rano Malagasy* (JIRAMA): (a) issued *Resolution n°. 23/2018 portant sur l’approbation des Termes de Référence concernant la mise en place du Comité d’Audit de la Société au sein de son Conseil d’administration,* said resolution approving the establishment of an audit committee to provide fiduciary oversight and regularly report to the board on the JIRAMA’s financial recovery; and (b) institutionalized the design of this prior action is informed by the ongoing TA under the *ESOGIP* project and data provided by JIRAMA, including JIRAMA’s Financial Statements; JIRAMA Annual Reports. The financial analysis based on these reports illustrate financial difficulties of the utility, including large arrears to suppliers and insufficient financial transparency. Key insights are captured in the policy note *La Situation Economique et Financière du Secteur Electrique du Madagascar: Eléments Clé d’une*
semi-annual publication of a detailed breakdown of the JIRAMA’s liabilities.

Prior Action #5: The Recipient has through its Ministry of Energy, Water, and Hydrocarbons, issued Décret n°2018-692 Portant modalités de passation de contrats pour les investissements dans la production d’énergie électrique supérieure à 5MW, a decree to restrict the award of concessions and power purchase agreements for private power generation with a capacity over 5 MW to projects that are ready for contract award and that are part of the Recipient’s “Master Plan for the Least-Cost Development of the Power Sector”.

Prior Action #6: The Recipient has through the supervisory board and the Chief Executive Officer of JIRAMA respectively, issued two letters n°002/PCA/18 and n°23/DG/2019 to institutionalize regular targeted metering audits of key customers, and has mandated JIRAMA to include targets for commercial loss reduction in performance contracts for its regional director, in order to reduce commercial losses and incentivize energy efficiency.

Data provided by JIRAMA suggests large commercial losses. The design of this prior actions is based on international best practices of reducing commercial loses and incentivizing energy efficiency.

4.3. LINK TO CPF, OTHER WORLD BANK OPERATIONS AND WBG STRATEGY

61. The proposed operation, is an integral part of the WBG CPF, discussed by the Board of Executive Directors in June 2017.⁴¹ 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 DPF 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 MFD approach.

62. 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 DPF is highly complementary to the World 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

⁴¹ The CPF (Report No.114744-MG) was discussed by the Board on June 26th, 2017.
the capacity of the SOE Oversight Unit. The ESOGIP, approved in 2016, seeks to improve the utility's commercial, technical, and organizational performance, including through reforms to implement MIS and RPP. Furthermore, over the past year, the World Bank has been in the process of steadily broadening its portfolio in the energy sector to include renewable energy development (Scaling Solar Madagascar [P166925]; 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 World Bank’s portfolio in the Malagasy power sector.

Figure 5: The proposed DPF within the World Bank’s Power Sector Project Portfolio

4.4. CONSULTATIONS AND COLLABORATION WITH DEVELOPMENT PARTNERS

63. This operation supports the implementation of the Government’s national and sectoral strategies, which were prepared through extensive consultative processes. The sectoral strategies that this operation supports were developed through wide consultative processes, including civil society, academia, private sector representatives as well as development partners. Further details on consultative arrangements are provided below:

Pillar A: Strengthening Fiscal Reporting and Transparency of Public Investments

- The PFM Modernization strategy was developed through close collaboration between the MEF and sectoral ministries, with development partners also consulted throughout the process.
- The Strategy for the Management of Public Investments, which followed on from the PIMA, incorporated inputs from different ministries in Government involved in public investments, as well as SOEs that benefit from substantial state financing and the private sector.

Pillar B: Improving the Governance of the Electricity Sector

- The EGOSIP-supported development of the least-cost planning methodology and the first Least-Cost Power Development Plan was subject to a comprehensive consultation process with key sector stakeholders during preparation, including a two-day workshop in April 2018 with development partners and the developers, to ensure that prioritization of investment projects and their sequencing is relevant with regard to ongoing efforts, planned activities and investors’
potential for financing.

- Extensive consultations with the IMF were held to revise the Business Plan of JIRAMA initially approved in April 2017, to adopt realistic assumptions for projecting the pace of public subsidy phase-out, based on the utility's ability to implement reforms. Because of this joint work, it has been agreed that a financial recovery plan for JIRAMA will be developed with support of Energy Sector Management Assistance Program (ESMAP). The TA will support the government in defining an energy subsidy reduction trajectory and policy actions to improve the financial viability of the power sector.

64. **The proposed operation is part of a program of a coordinated reform dialogue with other institutions engaged in budget support.** The Cadre de Partenariat, co-chaired by the MEF and the European Union (EU), provides a forum for collaboration among development partners. Partners providing budget support include the World Bank, the EU, the African Development Bank (AfDB), and the French Agency for Development. There is common agreement amongst partners over the criticality of reforms, which is reflected in supporting common actions on improved fiscal transparency and strengthening the governance of JIRAMA. A joint dialogue is held between the budget support partners and the government on a quarterly basis to discuss progress in implementing reforms. Other partners such as the IMF, the United Nations Development Program and United States Agency for International Development also participate in the dialogue. The Government’s commitment to reforms is further emphasized under the IMF ECF arrangement, which also supports improved governance of JIRAMA, and strengthened institutional processes for public investment management.

5. **OTHER DESIGN AND APPRAISAL ISSUES**

5.1 **POVERTY AND SOCIAL IMPACT**

65. **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.

66. **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.

67. **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 World Bank DPF 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.

### 5.2. ENVIRONMENTAL ASPECTS

68. **The specific policies supported by the DPF 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 Charter and a wide range of sectoral regulatory frameworks.

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

69. **This DPF 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 DPF 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

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43 The regulatory frameworks are listed on the NEO website: [https://www.pnae.mg/cadre-reglementaire-2](https://www.pnae.mg/cadre-reglementaire-2)
energy efficiency (mitigation action (d)).

70. **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 DPF overall are expected to yield climate mitigation co-benefits.

71. **Further, a financially stronger JIRAMA, to which the DPF 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 DPF Prior Actions 5 and 7.

72. **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.

### 5.3. PFM, DISBURSEMENT AND AUDITING ASPECTS

73. **The latest PEFA self-assessment conducted in 2018 indicates scope for significantly improving the PFM system, while noting that significant progress had been made in selected areas.** The 2018 PEFA, covering the calendar years 2014 to 2016, allocated a score D to 61 percent of the indicators, meaning the performance is below the basic level, while no indicators were allocated a score A. The PEFA identifies the lack of budget credibility as the main weakness of the Malagasy PFM due to an overestimation of public resources that does not considers fiscal risks, and the feeble strategic and financial supervision of SOEs. The report underlines the need to strengthen the audit and control functions and anti-corruption measures to overcome these weaknesses. On the positive side, the assessment recognizes the results from reforms in debt management, budgetary process, multi-year budget programing, access to information by the legislature and the public, some of which benefitted from World Bank support.45

74. **Since the previous PEFA (2014), the legal and regulatory framework for several areas of PFM has been updated and budget transparency improved.** The update of the legal framework relates to public debt (2014), PPP (2016), corruption (2016), public procurements (2017), and public investment

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44 The differences between projection and actual collection includes lower that projected external grants disbursement, delay in recovery of tax arrears, and overestimation of tax revenues.

45 The Reengagement DPF (P150153) supported the adoption of the law on public debt and guaranties that has set up the layer for the institutional framework of debt management; the Resilience DPF (P153084) supported the enhancement of budgetary information transparency, including the timely publication of audited financial accounts. These operations were complemented by TA.
(2017 and 2018). The law on debt and PPPs, and the texts on public investment are being fully implemented. The reform of the legal framework for corruption has empowered the anti-corruption agency which has been more active since 2017, and cases of diversion of public funds by high officials have been subject to investigation and punished. According to the 2018 PEFA, the new Public Procurement Code still leaves a large margin for less competitive procurement practices. Since 2017, consultations for budget formulation have been extended to Civil Society and private sector association. The budget law is published on the Ministry of Economy and Finance website in a timely manner, and the Citizen’s Budget and Citizen’s Budget Execution reports are published. The Resilience DPF (P153084) supported the timely publication of Quarterly Budget Execution Reports and the annual consolidated accounts. The Supreme Audit Institution (Cour des Comptes) published its first report covering the year 2014 in May 2016, a progress renewed in 2018 with content extended to include Jirama. Since 2017, the audited final accounts are validated by Parliament within the timeframe allowed by the law.

75. **The Government’s PFM reform program is elaborated in the ten-year PFM Modernization Reform Strategy adopted in December 2016.** The strategy builds on several diagnostics of PFM aspects including the Tax Administration Diagnostic Assessment Tool, the PIMA, DeMPA and has been updated in 2018 to take into account the findings of the 2018 PEFA. The strategy comprehensively covers all aspects of PFM and all institutions managing and controlling the use of public funds, ranging from the central government operations, to decentralized government, and all public entities. The implementation of the strategy is split into three phases of reforms. The first phase goes from 2017 to 2019 and aims to restore budgetary discipline and the supply of basic public services. Implementation is led by the MEF. A review of the first-year implementation, completed in March 2018, concludes a satisfactory progress toward the achievement of the objectives. The institutional coordination has been adjusted following this review to involve broader stakeholders, including line ministries, partners and civil society. Provided that the government continues to commit to the reforms, the PFM is adequate to support the operation.

76. **Progress has been made in strengthening the safeguards framework at the Central Bank of Madagascar (CBM).** The central bank’s autonomy have been strengthened through the new Central Bank Act effective since 2016. The CBM has also reinforced its audit oversight and control environment including through the establishment of an audit committee, timely publication of the institution’s audited financial statements, and capacity building in internal audit and reserves management under IMF TA. Moreover, the functioning of the foreign exchange market has improved since the CBM discontinued buy-back operations in September 2016. In addition, the procurement practices related to currency operations are being strengthened. The CBM is committed to undertake the necessary steps to implement International Financial Reporting Standards for the 2020 accounts.

77. **The World Bank is working with other partners to provide coordinated TA.** The Public-Sector Performance Project (P150116) will help advance improvements in revenue management, improved controls by the Court of account and at the local level, and performance monitoring. In collaboration with the AfDB and the EU, the supports to build capacity at the Court of Account focus on strengthening financial audits methodology to conform with International Standards of Supreme Audit Institutions,

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46 Law n°2014-012 on public and publicly-guaranteed debt, law n° 2016-020 on the fight against corruption and law n°2016-021 on anti-corruption centers, law n°2015-039 on PPPs; law n°2016-055 on public procurements; decree n°2017-094 establishing the Organisme de Coordination et de suivi des Investissements et de leurs Financements (OSCIF); Order gestion des investissements publics.

47 As part of broader efforts to increase budgetary transparency, this document recounts, in a simplified manner, the recent developments and the economic and fiscal outlook, new fiscal and customs measures, the reorientation of public spending, and the level of indebtedness.
performance audits, and forensic investigation. The IMF’s TA Center for Southern Africa has a substantial TA program covering PIM (through coordinated support with the World Bank), fiscal risks management, and cash and arrears management. The United States Treasury has seconded an advisor to support Treasury Single Account reforms. The AfDB and the EU are supporting civil service reforms. The EU and the IMF are also engaged in medium-term budget reforms.

78. **The proposed grant will be disbursed following the standard IDA procedures for DPFs.** A grant in the amount of SDR 71.6 million (US$100.0 million equivalent) will be made available upon effectiveness and, provided IDA is satisfied with the implementation of the development policy financing program and the appropriateness of the Recipient’s macroeconomic policy framework, disbursed as a single tranche following the submission of an acceptable withdrawal application by the government. IDA will disburse the proceeds into the treasury account US dollar-denominated account designated by the Recipient that is part of the country’s foreign exchange reserves account at the Central Bank of Madagascar. The dedicated account will be used exclusively for the proceeds of the DPF grant. The Recipient shall ensure that upon the deposit of the grant proceeds into said account, an equivalent amount is credited in the Recipient’s budget management system, in a manner acceptable to IDA. The Recipient will report to IDA on the amounts deposited in the foreign-currency account and credited to the budget-management system within 30 days of the disbursement.

79. **The financial support provided under this operation is not intended to finance goods or services on the standard negative list.** If the proceeds of the grant are used for ineligible purposes as defined in the Financing Agreement, IDA will require the Recipient, promptly upon notice from IDA, to refund an amount equal to the ineligible expenditure. Amounts refunded to IDA upon such request shall be cancelled. At the request of the Association, an audit of the dedicated account could be carried out by the Recipient and the result of such audit will be furnished to the Association within four months of the request. Considering the limited capacity of the Supreme Audit Institution (Cour des Comptes), a legally registered, private and independent audit company meeting appropriate international standards will be contracted to perform the audit, in accordance with the Terms of Reference agreed upon with the Association. All audit costs will be borne by the Government of Madagascar.

5.4. **MONITORING, EVALUATION AND ACCOUNTABILITY**

80. **Progress on the results indicators will be monitored and evaluated jointly by the Recipient and the World Bank.** The Government has established an Economic Council team, which consists of high level officials that are responsible for spearheading and implementing the reform agenda. The new government has committed to maintaining the Economic Council, where the new members are in the process of being appointed. It is expected that the World Bank will continue to obtain and share data to monitor implementation against the agreed results indicators. The reforms supported under the first pillar on fiscal transparency will be reported by the government on a semi-annual basis as part of a PFM monitoring report. The systematic publication of information supported by the reforms under this operation eases the monitoring of the result indicators. Monitoring also benefits from the reporting procedures in place for the ongoing IPF with JIRAMA (ESOGIP). The World Bank closely follows this progress through supervision activities, and where relevant, joint monitoring activities are carried out with partners in the Cadre de Partenariat.

81. **Grievance Redress.** Communities and individuals who believe that they are adversely affected by specific country policies supported as prior actions or tranche release conditions under a World Bank Development Policy Operation may submit complaints to the responsible country authorities, appropriate
local/national grievance redress mechanisms, or the World Bank’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address pertinent concerns. Affected communities and individuals may submit their complaint to the World Bank’s independent Inspection Panel which determines whether harm occurred, or could occur, as a result of World Bank non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank’s attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank’s corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

6. SUMMARY OF RISKS AND MITIGATION

82. 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 are outlined below. The potential benefits of the proposed operation outweigh the residual risks and warrant IDA’s assistance.

83. The democratically held Presidential elections indicate that political risks are abating but governance risks remain substantial. The conclusion of the elections—which were recognized by national as well as international observers as fair and transparent – marks the first time in the country’s history that a period of economic growth has not been thwarted by a political crisis. The incoming government has signaled its commitment to maintaining the reform momentum, and investor confidence is on the upside. Nevertheless, governance challenges related to the drivers of Madagascar’s fragility remain substantial, whereby vested interests may be susceptible to leveraging public office for private gain. The proposed DPF seeks to strengthen the institutional environment, through targeted reforms that should support the scale-up of viable public investment projects without compromising the fiscal stance. In particular, the reforms related to approving energy projects only if selected on a least-cost basis as well as the new policy framework to guide the award of guarantees, has helped to safeguard both the energy sector and the fiscal stance from projects that lack viability and may have long-term adverse financial implications. Moreover, the preparation of this proposed DPF during the election period has helped to ensure continuity in the policy dialogue at both the political and technical levels, keeping the reform momentum on track. This continuity has been enhanced through effective coordination with partners, particularly the IMF, reflecting close collaboration between the two institutions.

84. Macroeconomic risks are substantial and are closely related to the management of fiscal risks and the scale-up of public investments. Public expenditures in the pre-election period were generally characterized by prudence whereby current spending and the deficit were contained. The slower than expected scale-up of the government’s public investment program may pose risks to the growth outlook and highlights the need for regular monitoring, which the government intends to continue through the establishment of OCSIF. The failure to adopt the automatic price adjustment mechanism has resulted in liabilities accumulating to petroleum companies, which risks a return of the fuel subsidy. To mitigate the risk of the fuel subsidy, it is expected that the government will renegotiate the reference price structure for determining fuel prices in the favor of consumers, which should be used as the basis for automatic fuel pricing. The World Bank is coordinating closely with the IMF to accelerate the policy dialogue on fuel pricing.
85. The risks related to sector strategies and policies relate mainly to the weak performance of JIRAMA. While the overall policy direction for the electricity sector is clear, some areas of the multi-year business plan of JIRAMA (2018-2020) may be overly optimistic including the pace of the reduction on operational losses and of the progress in energy mix, which are critical for the sustainability of investments in the sector. In addition, oil prices remain a major risk and the current tariff policy of JIRAMA which is not financially sustainable, if not adequately adjusted to account for deviations from the business plan. These risks are partially mitigated through integrated support with World Bank IFs, ASA support on JIRAMA’s Financial Recovery Plan and reform communication, and enhanced supervision activities.

86. Institutional capacity for implementation and sustainability is high risk, given that many of the reforms require the implementation of new practices. The reforms in pillar one requires the government to strengthen its organizational and analytical capacity to: (i) assess the viability of requests for guarantees; (ii) assess the performance of majority-owned SOEs and the implications for budget risks; (iii) to undertake a DSA; and (iv) to prepare audited financial statements on time. To mitigate these risks, substantial technical and advisory support has been provided to the government, such as training on credit risk assessment, two years of advisory support to the SOE department followed by complementary TA from the IMF on fiscal risks management, and training on the preparation of DSAs. The reforms in pillar two are being supported by the ESMAP-funded “Power Sector Financial Sustainability ASA” (P168776), where a firm has been competitively hired to support both JIRAMA and the Government of Madagascar in the development and implementation of the utility’s financial recovery plan.

87. Fiduciary risks remain substantial despite the ongoing implementation of PFM reforms. While there has been progress in implementing PFM reforms, the remaining fiduciary weaknesses are significant. Particularly, the most prominent risks are related to procurement, audit, and improper management of the budget dedicated for investment projects, which could undermine their value for money and financial sustainability of the investments. The reforms under this operation contribute in mitigating these risks by encouraging transparency measures and are complemented by coordinated advisory support with other partners and targeted TA in PFM and public administration reforms, including the World Bank Public Sector Performance Project (P150116).

88. The resistance from vested interests constitutes the main stakeholder risks associated with this operation. The reforms to strengthen governance supported under this operation could encounter resistance, particularly as the program seeks to use competitive and fair procurement processes, which will lead some well-connected individuals to lose out. This risk will be mitigated through stakeholder consultations backed with communication outreach activities.

89. Madagascar’s vulnerability to natural disasters and to weather-related shocks represents a moderate risk to this operation. Madagascar ranks among the countries most exposed to droughts, floods and cyclones. Severe natural hazards present threats to energy supply, public health, food security, and the government’s poverty reduction goals. However, both parts of the PDO reflect institutional outcomes rather than financial or fiscal outcomes. Therefore, despite Madagascar’s high vulnerability to natural disasters and weather-related shocks, climate and disaster risks represent only a Moderate risk to the outcomes of this operation. The main risk is that implementation of the DPF-supported reforms, especially in the form of drought-resilient energy supply planning, that will reduce the Government's financial exposure to natural disasters, will get delayed due to unanticipated shocks to energy supply. To mitigate some of these risks, World Bank and other partners are providing supports to the government and dialogue is ongoing to identify options to enhance the resilience to natural disasters. For example, the World Bank is currently supporting the rehabilitation of cyclone and flood early warning systems and hydro meteorological station nationwide.
### Table 5: Summary Risk Ratings

<table>
<thead>
<tr>
<th>Risk Categories</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Political and Governance</td>
<td>Substantial</td>
</tr>
<tr>
<td>2. Macroeconomic</td>
<td>Substantial</td>
</tr>
<tr>
<td>3. Sector Strategies and Policies</td>
<td>High</td>
</tr>
<tr>
<td>4. Technical Design of Project or Program</td>
<td>Moderate</td>
</tr>
<tr>
<td>5. Institutional Capacity for Implementation and Sustainability</td>
<td>High</td>
</tr>
<tr>
<td>6. Fiduciary</td>
<td>Substantial</td>
</tr>
<tr>
<td>7. Environment and Social</td>
<td>Moderate</td>
</tr>
<tr>
<td>8. Stakeholders</td>
<td>Substantial</td>
</tr>
<tr>
<td>9. Other</td>
<td>Moderate</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>Substantial</td>
</tr>
</tbody>
</table>
### ANNEX 1: POLICY AND RESULTS MATRIX

<table>
<thead>
<tr>
<th>Prior actions</th>
<th>Indicator Name</th>
<th>Baseline</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prior Actions under DPF 1</strong></td>
<td><strong>Strengthen the quality and transparency of fiscal decision-making</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prior Action #1:</strong> The Recipient has through its Ministry of Economy and Finance, issued: (a) Décret n°2018-589 fixant les modalités et procédures d’octroi de garantie sur emprunt du Gouvernement Central, and (b) Décret n°2018-590 portant sur les modalités et conditions d’octrois de prêts directs et de prêts rétrocédés par le Gouvernement Central, said decrees establishing the institutional basis for assessing and awarding guarantees, and requiring that all requests for government loans, guarantees and on-lending arrangements are objectively analyzed through a credit risk-based assessment.</td>
<td><strong>Results Indicator #1:</strong> Percentage of government loan guarantees and on-lending agreements which are: (i) subject to a credit risk assessment and published; and (ii) comply with the guarantee limit</td>
<td>(i) 0 (2017) Not applicable (2017)</td>
<td>(i) 100 percent (2020); 100 percent - guarantee limit complied with (2020)</td>
</tr>
<tr>
<td><strong>Prior Action #2:</strong> The Recipient has through its Ministry of Economy and Finance: (a) issued an Arrêté n°17975/2018 MFB fixant la description des attributions et l’organisation des Services rattachés aux Départements du Ministere des Finances et du Budget an Arrêté that establishes a register to consolidate information on state majority-owned State-Owned Enterprises (SOE) liabilities, including debt, guarantees, and</td>
<td><strong>Results Indicator #2:</strong> Consolidated SOE contingent liabilities register produced with inputs from the SOE oversight unit, the Department of Budget, the Public</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(i) Register does not exist (2017) Moderate (2017)</td>
<td>(i)</td>
<td>Register established and updated on an annual basis; Moderate (2020)</td>
</tr>
<tr>
<td></td>
<td>(ii)</td>
<td>(ii)</td>
<td></td>
</tr>
</tbody>
</table>

48 As assessed by the DSA prepared by the IMF and the World Bank.
<table>
<thead>
<tr>
<th>Prior actions</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>obligations for Public Private Partnership (PPP) projects and; (b) published on the website of the Ministry of Economy and Finance a debt sustainability analysis for the Fiscal Year (FY) 2018, all to support improved decision-making processes on the management of debt and public sector liabilities.</td>
<td>(ii) Debt Directorate and the PPP unit Level of the risk of debt distress</td>
</tr>
<tr>
<td><strong>Prior Action #3:</strong> The Recipient has through its Ministry of Economy and Finance: (a) published on the website of the Ministry of Economy and Finance the audited financial statements for all state majority-owned SOEs; and (b) issued Décret n°2018-689 portant obligation de publicité des comptes annuels des sociétés commerciales à participation majoritaire publique requiring all state majority-owned SOEs to publish independently audited financial statements within six (6) months of the end of each FY, commencing in FY 2019, all to increase transparency on the financial statements and performance of all state majority-owned SOEs.</td>
<td><strong>Results Indicator #3:</strong> Improved fiscal reporting on contingent liabilities</td>
</tr>
</tbody>
</table>

**Pillar B – Improve the governance of the electricity sector**
<table>
<thead>
<tr>
<th>Prior actions</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prior Action #4:</strong> The Recipient has through the supervisory board of Jiro sy Rano Malagasy (JIRAMA): (a) issued Resolution n°. 23/2018 portant sur l’approbation des Termes de Référence concernant la mise en place du Comité d’Audit de la Société au sein de son Conseil d’administration, said resolution approving the establishment of an audit committee to provide fiduciary oversight and regularly report to the board on the JIRAMA’s financial recovery; and (b) institutionalized the semi-annual publication of a detailed breakdown of the JIRAMA’s liabilities.</td>
<td><strong>Results Indicator #4:</strong> Improved corporate financial governance of JIRAMA.</td>
</tr>
<tr>
<td><strong>Prior Action #5:</strong> The Recipient has through its Ministry of Energy, Water, and Hydrocarbons, issued Décret n°2018-692 Portant modalités de passation de contrats pour les investissements dans la production d’énergie électrique supérieure à 5MW, a decree to restrict the award of concessions and power purchase agreements for private power generation with a capacity over 5 MW to projects that are ready for contract award and that are part of the Recipient’s “Master Plan for the Least-Cost Development of the Power Sector”.</td>
<td><strong>Results Indicator #5:</strong> Institutionalized least-cost planning and competitive procurement of generation investments in the power sector.</td>
</tr>
</tbody>
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49 The decree requires specifically that the conclusion of concessions and power purchase agreements for said investments be preceded by the completion of (a) Feasibility and Detailed Design Studies, (b) Environmental and Social Impact Assessments, and (c) an analysis of the financial and budgetary sustainability as well as the risks and costs of the State’s commitments related to the project.

50 In line with the underlying ministerial decree, ‘ready for contract award’ is defined as having completed (a) Feasibility and Detailed Design Studies; (b) Environmental and Social Impact Assessments; and (c) an analysis of the financial and budgetary sustainability as well as the risks and costs of the State’s commitments related to the project.
<table>
<thead>
<tr>
<th>Prior actions</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prior Action #6:</strong> The Recipient has through the supervisory board and the Chief Executive Officer of JIRAMA respectively, issued two letters n°002/PCA/18 and n°23/DG/2019 to institutionalize regular targeted metering audits of key customers, and has mandated JIRAMA to include targets for commercial loss reduction in performance contracts for its regional director, in order to reduce commercial losses and incentivize energy efficiency.</td>
<td><strong>Results Indicator #6:</strong> Decline in total system losses (as a percentage of total electricity produced) through the reduction of non-technical losses.</td>
</tr>
<tr>
<td></td>
<td>Total system losses at 33 percent (2017)</td>
</tr>
<tr>
<td></td>
<td>Total system losses no higher than 29 percent (2020)</td>
</tr>
</tbody>
</table>
Translated from the French version

MINISTRY OF ECONOMY
AND FINANCE  Antananarivo, March 25, 2019

The Minister

Ms. Kristalina Georgieva,
Acting President

The World Bank Group
1818 H Street NW, Washington DC

Dear Madam,

The presidential elections that took place in Madagascar in 2018 under transparent and democratic conditions were hailed by the international community. The newly elected President presented the State's General Policy (SGP) document, with the main objective of catching up with the country's development gap accumulated for more than 50 years, and of establishing the foundations toward economic emergence. The document serves as reference framework for the implementation of the velirano – pledges - and defines 13 priority strategic areas along which public programs are to be implemented. The later should contribute to the improvement of the well-being of the population and boost the economy through the execution of structuring investment projects in social sectors, infrastructures, and energy.

The new Government is determined to meet the challenges of sustained economic development for Madagascar. This Development Policy Letter is a reflection of this determination. Through its action plan, the Government plans to improve energy production as a cornerstone of the country's emergence, strengthen large-scale projects to ensure sustainable growth, and to ensure that the gains from the growth achieved benefits the entire population.

Madagascar's economic growth remains robust with an estimated growth rate of 5.2 percent
in 2018. This performance is driven in particular by the secondary sector that recorded a growth rate of 5.4 percent during the period. The growth of manufacturing industries and the recovery of the mining sector are key sources of growth. The tertiary sector, a main driver of growth, recorded a growth of 5.2 percent with the completion of the various infrastructure projects included in the public investment program. These investments are further strengthened as funding announced by partners at the Conference of Donors and Investors (CDI) in December 2016 are becoming effective. The primary sector has seen a recovery in growth at 4.8 percent mainly from the agriculture sector that benefited from more favorable climate conditions.

Year-on-year inflation is contained at 6.1 percent, thanks to the implementation of a conservative monetary policy and fairly stable world oil and commodities prices.

In terms of public finance, the Government is pursuing its efforts to mobilize revenue and strengthen expenditure management. In 2018, the tax burden rate was estimated at 11.7 percent, its highest level since 2008. Our goal is to increase this rate by 0.5 points per year. On the expenditure side, public investment on domestic funding and spending in social sectors improved, accounting for 2.3 percent and 1.1 percent of GDP, respectively.

As regards revenue, the implementation of action plans for the tax and customs administrations will improve revenue collection. The plans include streamlining procedures, strengthening control, and fighting against tax fraud and evasion. In addition, the mainstreaming of performance-based contracts at the Directorate General of Taxes and the Directorate General of Customs, as well as the monitoring and control of tax expenditures, will be continued.

With regard to expenditure, the objective is to improve the quality of expenditure and contain lower priority expenditure. With the support of technical and financial partners (TFPs), an important step forward is taken with the development of multi-year budget management frameworks (medium term macro fiscal framework, medium term fiscal framework, medium term expenditure framework). In addition, the implementation of public investment and external investment management reforms will be strengthened, in line with the public investment management strategy adopted in December 2017. As regards Public-Private Partnership projects, the PPP Law 2015-039 and its implementing decrees will set out legal and regulatory frameworks that the Government will continue to apply. In addition, efforts are being made to progressively reduce transfers to State-owned enterprises to increase our fiscal space in view of increasing social expenditures. Similarly, we pledge to take steps to reduce transfers to the civilian and military pension fund. For 2018, transfers to JIRAMA and the pension fund are estimated respectively at 0.8 percent and 0.6 of GDP.

The reforms committed to in this operation relates to public finances and energy sector, on which the Government has always been committed in the framework of the World Bank budget supports since 2014. The selected reforms under this operation sustains and reinforce the reforms initiated under previous operations, namely those in the domain of debt management and energy sector. Those reforms particularly aim an enhanced consideration of contingent liabilities in the decision-making process for the budget, and the improvement of governance in the energy sector. In addition, Madagascar continues to implement its macroeconomic reform program, supported by the IMF's Extended Credit Facility (ECF). The Government plans to strengthen this program
and to pursue the reforms already undertaken while aiming for inclusive and sustainable growth, and abiding by the commitments set out in the SGP.

The Government faces several risks that could affect fiscal credibility. The most significant risks are related to the energy sector in particular (with JIRAMA's fragile financial situation being at the forefront), the occurrence of natural disasters, and changes in the world oil prices. With the support of TFPs, the Government is determined to strengthen its financial resilience in the face of various climatic hazards. This will help limit the reallocation of budget lines to damages and losses caused by disasters. For JIRAMA, the Government is committed to strengthening its corporate economic and financial governance by further enhancing transparency in the awarding of power purchase agreements in line with its Least Cost Development Plan (PDMC). To this end, and in support of JIRAMA's fiscal sustainability reforms, the Government undertakes to negotiate power purchase agreements with suppliers who present excessive costs in an objective and transparent manner, through an interministerial committee including the Ministry of Economy and Finance and the Ministry of Energy. In face of the changes in oil prices, negotiations will be held with oil distributors to revise the fuel pricing mechanism to avoid any fiscal impact.

The country has been able to maintain its debt distress risk at a moderate level. The debt ratio is estimated at 36.8 percent of GDP at the end of 2018, which is low compared to other low-income countries. This performance is due in particular to the strengthening debt management capacity and limitation of access to financing in periods of crisis. Nevertheless, this debt ratio does not yet take into account the quasi-fiscal risks that should be comprehensively listed.

The December 2017 Debt Management Performance Assessment (DEMPA) pointed out that the monitoring of financial commitments in the form of direct or indirect guarantees issued by the Government is not clearly defined through a legal or regulatory framework. Further efforts are needed for prudent management of the public asset portfolio, such as on-lending and direct loans to state-owned enterprises.

Thus, in order to better manage the financial and fiscal risks associated with contingent liabilities, two decrees were adopted, namely, Decree No. 2018-589 dated June 27, 2018 laying down the terms and procedures for the granting of loan guarantee by the Central Government and Decree No. 2018-590 dated June 27, 2018 laying down the terms and conditions for the granting of direct loans and on-lending by the Central Government. The adoption of the decrees allows for establishing analytical criteria for a more in-depth and objective review of applications for all Central Government loan guarantee, direct loan and on-lending.

In addition, the publication of Debt Sustainability Analysis (DSA) by the country sends a strong signal to donors. Indeed, it is important that decisions made by the Government are based
on the findings of its own DSA. Thus, the first report on the DSA was published on July 06, 2018. By principle of accountability, the second report is annexed to the 2019 Finance Law. In continuity with the decrees adopted to address the granting of guarantees, on-lending and direct loans by the Central Government loan as mentioned above, a contingent liabilities register will be set up. The goal is to maintain a tool that consolidates Government contingent liabilities in order to be able to assess related risks on debt and fiscal sustainability. The Ministry of Economy and Finance needs to have a register of contingent liabilities to allow for their management and monitoring.

The Government is committed to implementing reform actions to further consolidate the performance of State-owned enterprises, and to strengthen their contribution to the country's development. The first step is to make available timely information needed for properly managing the associated fiscal risks and for proper decision-making. In addition, to enhance transparency, the audited financial statements of State majority-owned enterprises will have to be published. This action has been reinforced by the adoption of Decree No. 2018-689 imposing an obligation to disclose the annual accounts of State majority-owned commercial companies within six months following the end of the fiscal year. Currently, all State-owned enterprises have published their financial statements for 2017.

The Government is determined to make further efforts to improve the business environment, make the economy more competitive, and better attract investment. Improved governance of the energy sector and provision of electricity services are among the conditions required to achieve these objectives.

In 2015, the Government adopted the 2015-2030 New Energy Policy (NPE) to respond to the country's economic, social and environmental emergency challenges. This policy recommends a process to develop an energy mix combining renewable energies, hydrocarbons and other thermal resources. The aim is to clean up the energy scene and provide a favorable environment for investment in the sector, especially by taking advantage of new technologies. By 2030, 70 percent of households would have sustainable access to electricity while increasing the share of renewable energy to 85 percent in the energy mix. In order to accelerate the electrification process, the Electricity Code in Madagascar has been revised according to Law n. 2017-020.

However, the energy sector, which constitutes one of the pillars of Madagascar's emergence, is not yet playing the role of economic activity facilitator. This poor performance is due in large part to poor governance and the deterioration of JIRAMA's financial situation. Nevertheless, the utility is determined to be in charge of its recovery and has adopted its business plan in June 2017. The plan aims to implement governance reforms and improve financial performance, and provides measures to ensure the utility's financial recovery, to fight theft of electricity, and to resort exclusively to competitive processes for procurement.

The establishment of an Audit committee by JIRAMA's Supervision Board forms part of the reforms. The Committee will exercise fiduciary control and will report regularly to the Board on the progress on the financial recovery process. In order to improve the transparency of
JIRAMA’s financial and fiduciary practices, the notes to the audited financial statements are disclosed in an independent way, providing detailed information on the financial statements, the specific accounting rules applied as well as a detailed breakdown of the current liabilities. All these reform actions carried out at JIRAMA and other State-owned enterprises will support the Government in the provision of complete information on budget risks and the monitoring State majority-owned enterprises’ performance.

The Ministry of Energy initiated a study of all investment projects in electricity production above 5 MW, and the Least-Cost Development was finalized upon completion of this study. The plan, updated semi-annually, allows for identifying projects at lower cost. The Government thus has a tool for prioritizing and sequencing investments according to the energy policy agenda and regional development. The awarding of concessions and power purchase agreements for investments in electricity generation with a capacity of more than 5 MW will thus be limited to the projects identified in the LCDP. No contracts will be signed until completion of the detailed design, environmental and social impact assessments, debt sustainability analysis and budget risk analysis for all Government project-related commitments.

JIRAMA’s technical and non-technical losses are very high, currently estimated at 33 percent. Measures have already been taken by the utility to reduce non-technical losses but results are not yet tangible. JIRAMA has institutionalized the regular and targeted audit of the facilities and meter readings of its large high and medium voltage clients as part of the effort to reduce non-technical losses. Loss reduction targets are included in the performance contracts of JIRAMA’s Regional Directors. The goal is to achieve a reduction to 29 percent in 2020.

The implementation of all these actions will enable the Government to reach its objectives of emergence in order to build a strong, prosperous and cohesive Nation so as to rebuild the pride and the well-being of Malagasies. However, as its resources are limited, the Government seeks financial support from the World Bank through budget support.
MINISTÈRE DE L’ÉCONOMIE ET DES FINANCES

Le Ministre

Antananarivo, le 25 mars 2019

Madame Kristalina Georgieva,
Président par intérim
Groupe de la Banque mondiale
1818 H Street NW, Washington DC

Madame la Présidente,


Le nouveau Gouvernement en place est déterminé à relever les défis pour le développement économique soutenu de Madagascar. La présente lettre de politique de développement témoigne de cette volonté. À travers son plan d’action, le gouvernement prévoit d’améliorer la production énergétique qui est un socle de l’émergence du pays, de renforcer les projets d’envergure en vue d’assurer une croissance durable, et de faire bénéficier les gains de cette croissance à l’ensemble de la population.

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La croissance économique de Madagascar reste robuste avec un taux de croissance estimé à 5,2% en 2018. Cette performance est tirée notamment du secteur secondaire qui enregistre un taux de croissance de 5,4% pendant la période. L’essor des industries manufacturières et le ralentissement du secteur minier en sont essentiellement les sources.
secteur tertiaire, principal moteur de la croissance, enregistre une croissance de 5,2% résultant de la réalisation des divers projets d’infrastructures entrant dans le cadre de la mise en œuvre des projets du programme d’investissements publics. L’effectivité des financements annoncés par les partenaires lors de la Conférence des Bailleurs et Investisseurs (CIB) en décembre 2016 renforce ces investissements. Au niveau du secteur primaire, on enregistre une reprise de la croissance (4,8%) provenant essentiellement de la branche agriculture ayant bénéficié d’une condition climatique plus favorable.

L’inflation en glissement annuel est contenue à 6,1%, grâce à la mise en œuvre d’une politique monétaire prudente et à une stabilité relative des cours mondiaux du pétrole et des produits de base.

Au niveau des finances publiques, le gouvernement poursuit ses efforts de mobilisation des recettes et de renforcement de la gestion des dépenses. En 2018, le taux de pression fiscale est estimé à 11,7%, son niveau le plus élevé depuis 2008. Notre objectif étant d’augmenter de 0,5 point par an ce taux. Du côté des dépenses, les investissements publics sur financement interne et les dépenses dans les secteurs sociaux se sont améliorés, et représentent respectivement 2,3% et 1,1% du PIB.

En matière de recettes, la mise en œuvre des plans d’action pour les administrations fiscales et douanières améliorera l’aperception des recettes. Il s’agit notamment de la simplification et de l’allègement des procédures, du renforcement du contrôle, ainsi que de la lutte contre la fraude et l’évasion fiscale. De plus, l’extension et la généralisation des contrats de performance au niveau de la DGI et de la DGD, ainsi que le suivi et le contrôle des dépenses fiscales seront poursuivis.

Concernant les dépenses, l’objectif consiste à améliorer la qualité des dépenses et maitriser les dépenses moins prioritaires. Avec l’appui des partenaires techniques et financiers (PTT), l’élaboration des cadres pluriannuels de gestion budgétaire (CMBMT, CBMT et CDMT) constitue une avancée importante. En outre, la mise en œuvre des réformes de la gestion des investissements publics tant sur financement interne qu’externe sera renforcée, conformément à la stratégie de gestion des investissements publics adoptée en décembre 2017. Pour ce qui est des projets à réaliser sous forme de contrat PPP, la Loi 2015-039 sur les PPP, ainsi que ses décrets d’application constitueront les cadres de référence juridique et réglementaire que le gouvernement continuera d’appliquer. Par ailleurs, des efforts sont entrepris pour réduire progressivement les transferts aux entreprises publiques afin d’accroître notre marge de manœuvre budgétaire pour permettre d’augmenter les dépenses à caractère social. De même, nous nous engageons à prendre des mesures pour réduire les transferts en faveur de la caisse de retraite civile et militaire. Pour 2018, le transfert vers la JIRAMA est estimé à 0,8% du PIB, et celui en faveur de la caisse de retraite à 0,6 % du PIB.

Les réformes qui sont engagées dans la présente opération portent sur les secteurs des finances publiques et de l’énergie, dans lesquels le gouvernement a toujours été engagé dans le cadre des appuis budgétaires de la Banque mondiale depuis 2014. Les réformes sélectionnées dans cette opération continuent et renforcent les réformes entamées lors des précédentes opérations, notamment celles dans le domaine de la gestion de la dette et du secteur énergie. Ces réformes visent notamment une prise en compte renforcée des passifs contingents dans le processus de prise de décision sur le budget, ainsi que l’amélioration de la gouvernance du secteur de l’énergie. Par ailleurs, Madagascar continue de mettre en œuvre son programme de réforme macroéconomique, appuyé par la Facilité d’Elargissement de Crédit (FEC) du FMI. Le Gouvernement prévoit de renforcer ce programme, et de poursuivre les réformes déjà engagées tout en visant la croissance inclusive et durable, et respectant les engagements définis dans la PGE.
Le gouvernement est confronté à plusieurs risques susceptibles d’altérer la crédibilité budgétaire. Les risques les plus significatifs sont particulièrement liés au secteur de l’énergie (plus particulièrement à la fragilité de la situation financière de la JIRAMA), à la survenance des catastrophes naturelles, et à la variation du prix international du pétrole. Avec l’appui des PTF, l’Etat est déterminé à renforcer sa résilience financière face aux différents aléas climatiques. Cela permettra de limiter la réallocation des budgets en faveur des dommages et pertes dus aux catastrophes. Pour la JIRAMA, le gouvernement s’est engagé à renforcer la gouvernance économique et financière au niveau de la société, en renforçant davantage la transparence dans l’attribution des marchés pour les achats d’énergie, conformément au Plan de Développement à Moindre Coût (PDMC). A cet effet, et pour soutenir les reformes de viabilité fiscale de la JIRAMA, le gouvernement s’engage à négocier les contrats d’achats d’énergie avec les fournisseurs qui ont des coûts excessifs de manière objective et transparente, par un comité interministériel incluant le Ministère de l’Economie et des Finances et le Ministère en charge de l’Énergie. Face à la variation des cours du pétrole, des négociations seront menées avec les distributeurs pétroliers afin de réviser le mécanisme de tarification des carburants afin d’éviter tout impact budgétaire.

Le pays a pu maintenir son risque de surendettement à un niveau modéré. Le ratio d’endettement est estimé à 36,8% du PIB à fin 2018, ce qui est faible par rapport à ceux des pays à faible revenu. Cette performance est due notamment au renforcement de la capacité de la gestion de la dette et à la limitation d’accès aux financements durant les périodes de crise. Néanmoins, ce ratio d’endettement ne tient pas encore compte des risques quasi-budgétaires qui devraient faire l’objet d’un inventaire exhaustif.

Suite à l’évaluation de la performance du gouvernement en matière de gestion de la dette (DEMPA) menée en décembre 2017, il a été soulévé que le suivi des engagements financiers sous la forme de garanties directes ou indirectes émises par le gouvernement n’est pas clairement défini dans un cadre légal ou réglementaire. Des efforts supplémentaires sont nécessaires pour une gestion prudente du portefeuille d’actifs publics, tels que les rétrocessions et les prêts directs aux entreprises publiques.


Par ailleurs, la publication d’une Analyse de Viabilité de la Dette (AVD) effectuée par le pays constitue un signal fort pour les bailleurs de fonds. En effet, il est important que les décisions prises par le Gouvernement soient basées sur les résultats de sa propre AVD. Ainsi, le premier rapport sur l’AVD a été publié le 06 juillet 2018. Par principe de redevabilité, le second rapport est annexé à la Loi de Finances 2019. En continuité avec les décrets adoptés en matière d’octroi de garantie sur emprunt du Gouvernement Central, de rétrocession et de prêts directs cités plus haut, un registre de passifs conditionnels sera mis en place. Le but étant de détenir un outil consolidant les passifs conditionnels de l’Etat en vue de pouvoir évaluer les
risques y afférents sur la viabilité de la dette et la soutenabilité budgétaire. Il s’avère ainsi essentiel pour le Ministère de l’Économie et des Finances de disposer d’un registre des passifs conditionnels pour en assurer la gestion et le suivi.

Le gouvernement s’est engagé à mettre en œuvre des actions de réformes pour consolider davantage les performances des entreprises publiques, et de renforcer leur contribution au développement du pays. La première étape était d’aboutir à la mise à disposition de toutes les informations nécessaires et en temps opportun pour gérer adéquatement les risques budgétaires y afférents et permettre une prise de décision. En outre, afin de renforcer la transparence, les états financiers audités des entreprises à participation majoritaire de l’État devront être publiés. Cette action a été renforcée par l’adoption du Décret n° 2018-689 portant obligation de publicité des comptes annuels des sociétés commerciales à participation majoritaire publique, dans les six mois qui suivent la clôture de l’année fiscale. Actuellement, toutes les entreprises à participation majoritaire de l’État ont publié leurs états financiers de l’exercice 2017.

Le Gouvernement est déterminé à consentir davantage d’efforts pour améliorer l’environnement des affaires, rendre l’économie plus compétitive, et mieux attirer les investissements. L’amélioration de la gouvernance du secteur de l’énergie et celle de la fourniture des services en électricité sont parmi les conditions nécessaires pour l’atteinte de ces objectifs.


Toutefois, ce secteur qui constitue l’un des piliers de l’émergence de Madagascar, n’a pas encore rempli sa fonction de facilitateur des activités économiques. Cette faible performance est due en grande partie à une mauvaise gouvernance et à la dégradation de la situation financière de la JIRAMA. Néanmoins, cette dernière est déterminée à prendre en main son redressement en adoptant son plan d’affaires en juin 2017. Ce plan vise à mettre en œuvre les réformes de la gouvernance et l’amélioration de sa performance financière, et prévoit des mesures pour le redressement financier de la société, la lutte contre le vol d’électricité, les recours exclusifs aux appels d’offres compétitifs.

L’établissement d’un comité d’audit par le Conseil d’Administration (CA) de la JIRAMA s’inscrit dans ces réformes. Ce comité assurera le contrôle budgétaire et rendra régulièrement compte au CA de l’état d’avancement du redressement financier. Afin d’améliorer la transparence des pratiques financières et budgétaires de la JIRAMA, les notes aux états financiers audités qui présentent des informations détaillées sur les états financiers, sur les règles comptables particulières appliquées et qui fournissent une ventilation détaillée des passifs à court terme sont publiées de manière indépendante. Toutes ces actions de réformes mises au niveau de la JIRAMA et des autres entreprises publiques vont appuyer l’État dans la disposition d’informations complètes sur les risques budgétaires et le suivi de la performance des entreprises à participation majoritaire de l’État.
Le Ministère en charge de l’Énergie a initié une étude de tous les projets d’investissements dans la production électrique supérieure à 5 MW, à l’issue de laquelle le PDMC de l’électricité a été finalisé. Ce plan, mis à jour semi annuellement, permet d’identifier des projets à moindre coût. Le Gouvernement dispose ainsi d’un outil permettant une priorisation et un séquencage de ces investissements suivant l’agenda de politique énergétique et le développement régional. L’attribution des concessions et des conventions d’achat d’électricité pour des investissements dans la production d’électricité d’une capacité de plus de 5 MW sera ainsi limitée aux projets identifiés dans le PDMC. Aucun contrat ne sera signé avant l’achèvement des études d’avant-projet détaillé, d’impact environnemental et social, d’une analyse de soutenabilité de la dette et de risques budgétaires de tous les engagements de l’État liés aux projets.

Les pertes techniques et non techniques de la JIRAMA sont fort élevées, évaluées actuellement à hauteur de 33%. Des mesures ont déjà été prises par cette dernière pour réduire les pertes non techniques mais le résultat n’est pas encore visible. La Jirama a institutionnalisé l’audit régulier et ciblé de l’installation et des relevés de compteurs des principaux clients de haute et moyenne tension afin de réduire les pertes non techniques. Les objectifs de réduction de ces pertes sont inclus dans les contrats de performance des Directeurs Régionaux de la JIRAMA. Le but étant d’arriver à réduire jusqu’à 29% en 2020.

La mise en œuvre de toutes ces actions permettra au Gouvernement d’atteindre ses objectifs d’émergence afin de bâtir une nation forte prospère et solidaire pour la fierté et le bien-être des Malagasy. Toutefois, la limitation des ressources conduit le Gouvernement à solliciter l’appui financier de la Banque Mondiale à travers un appui budgétaire.
ANNEX 3: IMF RELATIONS ANNEX
IMF Executive Board Completes Fourth Review of Extended Credit Facility Arrangement for Madagascar

March 22, 2019

- Executive Board decision enables the disbursement of about US$43.9 million to Madagascar.
- Extended Credit Facility supported program aims to support country’s efforts to reinforce macroeconomic stability and boost growth.
- More robust reforms needed to maintain the momentum of the program.

On March 22, 2019, the Executive Board of the International Monetary Fund (IMF) completed the fourth review under the Extended Credit Facility (ECF) [1] Arrangement for Madagascar. The completion of this review enables the disbursement of SDR 31.43 million (about US$43.9 million), bringing total disbursements under the arrangement to SDR 187.69 million (about US$261.9 million).

Madagascar’s 40-month arrangement for SDR 220 million (about US$305 million, or 90 percent of Madagascar’s quota) was approved on July 27, 2016 (see Press Release No.16/370). Additional access of 12.5 percent of Madagascar’s quota was approved by the Executive Board in June 28, 2017, bringing Madagascar’s access under the ECF arrangement to SDR 250.55 million (about US$347.1 million) at that time. This arrangement aims to support the country’s efforts to reinforce macroeconomic stability and boost sustained and inclusive growth.

Following the Executive Board discussion, Mr. Mitsuhiro Furusawa, Deputy Managing Director and Acting Chair, made the following statement:

“Madagascar’s performance under its economic program supported by the Fund’s Extended Credit Facility arrangement has remained generally strong. In the midst of the presidential election, the program is estimated to have remained broadly on track through end-2018. The structural agenda is also advancing. Recent economic developments also remain generally favorable, with solid economic growth, single-digit inflation, generally good fiscal performance, and foreign exchange reserves at historic highs.

“The newly elected president and the government are committed to pursuing the program’s strategy of inclusive growth through increased investment and social spending. Boosting revenue mobilization is central to this strategy and warrants renewed vigilance, given the small revenue shortfall in the second half of 2018. In particular, it is important to avoid tax base erosion when implementing new tax incentives for investment. The efforts underway to reduce transfers to the public utility JIRAMA and to limit fiscal risks related to fuel pricing are essential to creating fiscal space for high-priority investment and social spending. Intensified reform efforts will be necessary to maintain the momentum of the program.

“Efforts to enhance governance and fight corruption—central to the success of the authorities’ program—advanced with the recent approval of a new law on AML/CFT. Enacting the draft law on asset recovery submitted to parliament over a year ago is essential to complete the modernization of the legal framework. Continued development of institutions to fight corruption is also crucial for effective enforcement.”

[1] The ECF is a lending arrangement that provides sustained program engagement over the medium to long term in case of protracted balance of payments problems.
### ANNEX 4: ENVIRONMENT AND POVERTY/SOCIAL ANALYSIS TABLE

<table>
<thead>
<tr>
<th>Prior Actions</th>
<th>Significant positive or negative environment effects</th>
<th>Significant poverty, social or distributional effects positive or negative</th>
</tr>
</thead>
</table>

**Pillar A --- Strengthening Fiscal Reporting and Transparency of Public Investments**

**Prior Action #1:** The Recipient has through its Ministry of Economy and Finance, issued: (a) *Décret n°2018- 589 fixant les modalités et procédures d’octroi de garantie sur emprunt du Gouvernement Central*, and (b) *Décret n°2018-590 portant sur les modalités et conditions d’octrois de prêts directs et de prêts rétrocédés par le Gouvernement Central*, said decrees establishing the institutional basis for assessing and awarding guarantees, and requiring that all requests for government loans, guarantees and on-lending arrangements are objectively analyzed through a credit risk-based assessment.

- No negative or positive impact.
- Yes, positive.

**Prior Action #2:** The Recipient has through its Ministry of Economy and Finance: (a) issued an *Arrêté n°17975/2018 MFB fixant la description des attributions et l’organisation des Services rattachés aux Départements du Ministere des Finances et du Budget* an Arrêté that establishes a register to consolidate information on state majority-owned State-Owned Enterprises (SOE) liabilities, including debt, guarantees, and obligations for Public Private Partnership (PPP)projects and; (b) published on the website of the Ministry of Economy and Finance a debt sustainability analysis for the Fiscal Year (FY) 2018, all to support improved decision-making processes on the management of debt and public sector liabilities.

- No negative or positive impact.
- Yes, positive.

**Prior Action #3:** The Recipient has through its Ministry of Economy and Finance: (a) published on the website of the Ministry of Economy and Finance the audited financial statements for all state majority-owned SOEs; and (b) issued *Décret n°2018-689 portant obligation de publicité des comptes annuels des sociétés commerciales à participation majoritaire publique* requiring all state majority-owned SOEs to publish independently audited financial statements within six (6) months of the end of each FY, commencing in FY 2019, all to increase transparency on the financial statements and performance of all state majority-owned

- No negative or positive impact.
- Yes, positive.
SOEs.

**Pillar B --- Improving the Governance of the Electricity Sector**

**Prior Action #4:** The Recipient has through the supervisory board of *Jiro sy Rano Malagasy* (JIRAMA): (a) issued *Resolution n°. 23/2018 portant sur l’approbation des Termes de Référence concernant la mise en place du Comité d’Audit de la Société au sein de son Conseil d’administration, said resolution* approving the establishment of an audit committee to provide fiduciary oversight and regularly report to the board on the JIRAMA’s financial recovery; and (b) institutionalized the semi-annual publication of a detailed breakdown of the JIRAMA’s liabilities.

No positive or negative effects.  
No positive or negative effects.

**Prior Action #5:** The Recipient has through its Ministry of Energy, Water, and Hydrocarbons, issued *Décret n°2018-692 Portant modalités de passation de contrats pour les investissements dans la production d’énergie électrique supérieure à 5MW*, a decree to restrict the award of concessions and power purchase agreements for private power generation with a capacity over 5 MW to projects that are ready for contract award and that are part of the Recipient’s “Master Plan for the Least-Cost Development of the Power Sector”.

Yes, positive.  
Yes, positive in the long term.

**Prior Action #6:** The Recipient has through the supervisory board and the Chief Executive Officer of JIRAMA respectively, issued two letters n°002/PCA/18 and n°23/DG/2019 to institutionalize regular targeted metering audits of key customers, and has mandated JIRAMA to include targets for commercial loss reduction in performance contracts for its regional director, in order to reduce commercial losses and incentivize energy efficiency.

Yes, positive.  
No positive or negative effects.

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51 The decree requires specifically that the conclusion of concessions and power purchase agreements for said investments be preceded by the completion of (a) Feasibility and Detailed Design Studies; (b) Environmental and Social Impact Assessments; and (c) an analysis of the financial and budgetary sustainability as well as the risks and costs of the State’s commitments related to the project.
The proposed operation, while a standalone transition DPF, represents a strong continuation of reforms supported in previous operations, such as improving the management of public investments, debt, large SOEs (including JIRAMA and Air Madagascar). The reforms supported in these previous DPFs demonstrate the achievement of tangible results, which this DPF seeks to continue and deepen. The table below summarizes key reforms supported under previous DPFs and selected tangible results. The reforms previously supported are being progressively built upon in this proposed DPF. The reforms and results below draw from the Reengagement DPF in 2014 (P150503), Resilience DPF in 2015 (P153084), and the Public Finance Sustainability and Investment programmatic DPF series in 2016 (P160866) and 2017 (P164137).

Table 4: Reform Achievements under Previous DPFs

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Reforms</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing fiscal space to secure financing for social priority spending and investment</td>
<td>Cleaning-up of the payroll roster of civil servants and pension beneficiaries (P153084 in 2015; P160866 in 2016; and P164137 in 2017); Restriction and transparency on tax expenditures (P153084 in 2015; P160866 in 2016; and P164137 in 2017); Risk-based control of taxpayers (P160866 in 2016 and P164137 in 2017); elimination of fuel subsidies (P160866 in 2016 and P164137 in 2017)</td>
<td>Ratio of fiscal revenue to GDP increased from 9.9 to 11.5 percent of GDP from 2014 to 2017; Domestically-financed investment increased from 1.2 to 2 percent of GDP from 2014 to 2017; Fuel subsidy eliminated from 0.9 percent of GDP in 2014 to 0 from 2016. Higher global oil prices have resulted in the accumulation of liabilities to petroleum companies at an estimated 0.3 percent of GDP, to be addressed through a price-smoothing plan in 2019; Up to 9000 unduly registered pension beneficiaries have been identified and removed from the pension roster; In March 2018, 1800 “ghost” public servants have been identified and their salary payment suspended.</td>
</tr>
<tr>
<td>Strengthening debt and PIM management</td>
<td>New law on public debt (P150503 in 2014) and its implementation decree (P153084 in 2015); implementation decree for the PPP law (P164137 in 2017); improvement in the selection of Public Investment Plan (PIP) (P164137 in 2017)</td>
<td>Strategy focused on maximizing concessional financing: public debt equivalent to 36 percent of GDP at end 2017; Risk of external debt distress maintained at moderate notwithstanding the ongoing scaling-up of public investment; the first list of eligible PPP agreements</td>
</tr>
<tr>
<td>Improving transparency and efficiency in the management of PFM</td>
<td>Asset declarations by high officials and transparency in rosewood stockpile management (P150503 in 2014); timely publication of monthly in-year budget execution report and audited financial accounts of the State Budget (P153084 in 2015)</td>
<td>Increased access to budget documents has encouraged Civil Society Organizations (CSO) to start independently publishing budget analysis. CSOs are now consulted by MEF during budget preparation; Improvements in the timeliness of publishing budget execution documents: from non-publication to 8 weeks following end of month covered for in-year monthly budget execution and within 18 months following the end of the year for audited financial accounts covering 2015– complying with the PFM law for the first time; Improvement reflected in the Country Policies and Institutional Assessment score: quality of budget and financial management increased from a score of 2 in the 2014 assessment to 3 in 2018.</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>Improving the management of SOEs</td>
<td>Appointment of a new general manager for Air Madagascar through a competitive process and publication of audited financial accounts for the 2010 to 2013 calendar year (P153084 in 2015)</td>
<td>Strategic partnership agreed with a regional airline and implementation of the Open Skies Policy</td>
</tr>
<tr>
<td>Improving the management of JIRAMA’s operation</td>
<td>Control of leakages of diesel as input of JIRAMA (P150503 in 2014 and P153084 in 2015)</td>
<td>More efficient use of diesel with reduction in the consumption per unit of electricity generated: 0.16 L/kwh in 2015 to 0.13 in 2017 thanks to replacement of diesel based-generators with less costly fuel oil-based generator</td>
</tr>
<tr>
<td>Promoting an environment favorable for private investment</td>
<td>Agreement for a progressive clearance of arrears to private companies (P150503 in 2014); improved management of Air Madagascar (P153084 in 2015); update of the legislative framework for commercial justice and for microfinance (P160866 in 2016 and P164137 in 2017)</td>
<td>Reduction in the delay to resolve commercial conflicts from 871 days in 2015 to 407 days in 2018</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Promote access to rural energy</td>
<td>Reform the legal, regulatory and institutional framework for private sector investment in rural electrification (P162279 in 2017 and P166425 in 2018)</td>
<td>In part as a result of the reform, new installed generation capacity in rural areas reached 2,470kw in 2018 compared to an average of 662 kW in 2015-2017</td>
</tr>
</tbody>
</table>

Source: ICRs, ISRs, and World Bank staff compilation.
ANNEX 6: OPERATIONAL AND FINANCIAL DEVELOPMENT OF MADAGASCAR’S POWER SECTOR

91. Between 2008 and 2015, the performance of Madagascar’s power sector deteriorated, imposing a burden on the country’s scarce public resources. As a key adverse effect of the political crises of 2002 and 2009, the utility is still tied to a large number of costly rental and Independent Power Purchase (IPP) contracts, mainly those that were awarded on political grounds with little planning and few competitive tendering procedures. Moreover, due to an overall neglect of maintenance and rehabilitation investment, system losses climbed from 23 percent to 34 percent, tariffs fell from US$0.20 per kWh to US$0.12 per kWh in nominal terms, bill collection fell from an average of 95 percent in 2007–2009 to 79 percent in 2014–2016, and the financial cost of service increased from US$0.20 per kWh to US$0.22 per kWh, despite falling global oil prices. As a result, the cost recovery rate of JIRAMA (based on cash collected) fell from 84 percent in 2008 to 47 percent in 2015, and its operating margin declined from 13 percent to −59 percent. JIRAMA’s financial situation presents a considerable fiscal burden for the state, with the utility’s liabilities reaching 5.6 percent of GDP in 2015, up from 1.3 percent in 2008, including US$470 million of accumulated trade and other payables, much of it to fuel and power suppliers. From 2014 to 2017, fiscal resources equivalent to an estimated 4.4 percent of GDP have been transferred from the Government budget to JIRAMA to compensate for the financial hemorrhage. JIRAMA’s estimated annual quasi-fiscal deficit reached 2.15 percent of GDP in 2016.

Table 5: Historical Financial Performance of JIRAMA

<table>
<thead>
<tr>
<th>Income Statement</th>
<th>Unit</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating revenue</td>
<td>MGA Billion</td>
<td>449</td>
<td>466</td>
<td>556</td>
<td>650</td>
</tr>
<tr>
<td>Government subsidy</td>
<td>MGA Billion</td>
<td>0</td>
<td>0</td>
<td>233</td>
<td>447</td>
</tr>
<tr>
<td>Revenue</td>
<td>MGA Billion</td>
<td>449</td>
<td>466</td>
<td>789</td>
<td>1,097</td>
</tr>
<tr>
<td>Power cost</td>
<td>MGA Billion</td>
<td>−65</td>
<td>−78</td>
<td>−95</td>
<td>−104</td>
</tr>
<tr>
<td>Non-power cost</td>
<td>MGA Billion</td>
<td>449</td>
<td>466</td>
<td>556</td>
<td>650</td>
</tr>
<tr>
<td>Gross profit</td>
<td>MGA Billion</td>
<td>−201</td>
<td>−217</td>
<td>−157</td>
<td>−28</td>
</tr>
<tr>
<td>Other operating revenues</td>
<td>MGA Billion</td>
<td>18</td>
<td>17</td>
<td>20</td>
<td>26</td>
</tr>
<tr>
<td>Other operating charges</td>
<td>MGA Billion</td>
<td>−3</td>
<td>−7</td>
<td>−1</td>
<td>−8</td>
</tr>
<tr>
<td>Reversal of impairment loss</td>
<td>MGA Billion</td>
<td>25</td>
<td>40</td>
<td>42</td>
<td>30</td>
</tr>
<tr>
<td>Depreciation &amp; amortization</td>
<td>MGA Billion</td>
<td>−94</td>
<td>−107</td>
<td>−102</td>
<td>−97</td>
</tr>
<tr>
<td>Operating earnings</td>
<td>MGA Billion</td>
<td>−255</td>
<td>−274</td>
<td>−198</td>
<td>−78</td>
</tr>
<tr>
<td>Finance income</td>
<td>MGA Billion</td>
<td>0.1</td>
<td>0.2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Finance cost</td>
<td>MGA Billion</td>
<td>−39</td>
<td>−22</td>
<td>−14</td>
<td>−7</td>
</tr>
<tr>
<td>Profit before income tax</td>
<td>MGA Billion</td>
<td>−294</td>
<td>−296</td>
<td>−209</td>
<td>−81</td>
</tr>
<tr>
<td>Income tax (expense)/credit</td>
<td>MGA Billion</td>
<td>−2</td>
<td>−2</td>
<td>−6</td>
<td>−4</td>
</tr>
<tr>
<td>Profit for the year</td>
<td>MGA Billion</td>
<td>−296</td>
<td>−298</td>
<td>−215</td>
<td>−85</td>
</tr>
</tbody>
</table>

Balance Sheet

<table>
<thead>
<tr>
<th>Unit</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td>MGA Billion</td>
<td>505</td>
<td>586</td>
<td>730</td>
</tr>
<tr>
<td>Non-current assets</td>
<td>MGA Billion</td>
<td>1,198</td>
<td>1,537</td>
<td>775</td>
</tr>
<tr>
<td>Total non-current liabilities</td>
<td>MGA Billion</td>
<td>1,369</td>
<td>1,758</td>
<td>1,017</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>MGA Billion</td>
<td>1,134</td>
<td>1,477</td>
<td>1,213</td>
</tr>
</tbody>
</table>

Cash Flow Statement

<table>
<thead>
<tr>
<th>Unit</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash from operating activities</td>
<td>MGA Billion</td>
<td>151</td>
<td>216</td>
<td>527</td>
</tr>
<tr>
<td>Cash from investing activities</td>
<td>MGA Billion</td>
<td>−184</td>
<td>−220</td>
<td>−430</td>
</tr>
<tr>
<td>Cash flow from financing activities</td>
<td>MGA Million</td>
<td>6</td>
<td>0</td>
<td>−3</td>
</tr>
<tr>
<td>Net increase (decrease) in cash</td>
<td>MGA Billion</td>
<td>−27</td>
<td>−4</td>
<td>94</td>
</tr>
<tr>
<td>Cash balance at end of year</td>
<td>MGA Billion</td>
<td>24</td>
<td>25</td>
<td>32</td>
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</tbody>
</table>


92. A program of challenging energy reforms initiated in 2015, including major tariff reforms, has

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52 Accumulated trade and other payables refer to outstanding and overdue bills.
halted the downward trend of JIRAMA’s performance and is starting to show results. The GoM laid out a new approach to electricity sector governance in its 2015 NEP and subsequent policy documents, which aims to put the sector on track to raise electrification to 70 percent by 2030 through implementing difficult measures on tariffs, utility management, and corporate governance. These measures were also seen as critical in the SCD and the CPF. JIRAMA has increased its average tariff rates five times since mid-2016 and twice since July 2017. Seasonally adjusted revenues in the first two months of 2018 were 46 percent above the level of 2015 and 23 percent above the level of 2016. The Government scaled up its budget transfers from 0.9 percent of GDP in 2015 to 1.2 percent of GDP in 2017 to cover the utilities’ cash deficit and slow down the accumulation of arrears to suppliers. As a result, JIRAMA’s earnings before interest and taxes margin improved from −59 percent in 2015 to −12 percent in 2017. System losses started reversing a decade-long downward trend, reaching an average of 32 percent over 2016–2017 compared to 34 percent in 2015. The GoM also restructured JIRAMA and completed the competitive hiring of new senior management in 2017.

Figure 6: Impact of reform measures and external trends on JIRAMA’s deficit since 2015

Source: JIRAMA; ADER; Government; World Bank staff estimates.

93. Even then, the Government urgently needs to address the root causes of JIRAMA’s high cost of service which have further escalated sharply since 2015, outweighing the positive impacts of reform measures taken over the past three years (see Figure 6). JIRAMA’s costs have continued to rise as a result of increasing reliance on rented power generator (reaching 48 percent of total power generation in 2017) and higher oil prices, reaching US$0.32/kWh in 2017 (see Figure 6). The utilities’ unpaid bills from suppliers are estimated at 3.1 percent of GDP at the end of 2017; a liability that may fall upon public finances. The two challenges are interlinked, as reducing the cost of high service provision will require large-scale investment in renewable energy, especially hydropower, which in turn requires a credible off-taker and adequate management of utility finances in the energy sector. The World Bank is supporting a Government program to address JIRAMA’s financial and technical challenges through this DPF and through a parallel Power Sector Financial Sustainability ASA.

94. Table 6 presents high-level financial projections for JIRAMA for 2018 through 2024. The projections assume an acceleration of grid connections and a significant reduction in transmission and distribution losses, consistent with the GoM’s plan to increase the electrification rate and improve power supply. Under the projection assumptions, JIRAMA is expected to invest US$325 million in transmission and distribution infrastructure by 2024. An additional US$210 million is expected to be invested in
 backbone transmission and distribution infrastructure and grid rehabilitation. As a result, JIRAMA’s total losses are expected to decline to 28 percent by 2022, consistent with the targets set as part of the World Bank’s ESOGIP, and JIRAMA will reach cost recovery for the first time in 2023. These developments are reflected in the projections as positive gross and operating profits from 2023 onward, as well as a reversal in declining cash balances. As is also shown in Table 6, however, JIRAMA will continue to require significant financial support in the interim.

95. **The power supply mix and electricity demand levels were projected based on the PDMC base-case scenario.** To address Madagascar’s current and projected power supply deficit, the PDMC calls for the rollout of new hydro projects as soon as possible, as well as continued addition of hydro capacity in subsequent years. Following these recommendations, the supply mix assumed for the projections in Table 6 is based on an ongoing shift from thermal power to hydropower. The proportion of power supplied to JIRAMA through IPPs and rental power arrangements is expected to remain relatively constant throughout. Given the continued importance of thermal power in Madagascar’s energy mix, JIRAMA’s financial situation is particularly vulnerable to oil price fluctuations. JIRAMA’s costs have continued to rise as a result of increasing reliance on rental power (reaching 48 percent in 2017) and higher oil prices, reaching US$0.32 per kWh in 2017. Fuel and power purchase cost will continue to account for over 80 percent of the generation costs during the forecast period.

![Figure 7: Historical and Future Cost of Service](http://pubdocs.worldbank.org/en/823461540394173663/CMO-October-2018-Forecasts.pdf)

**Source:** JIRAMA; ADER; Government; World Bank staff estimates.

96. **Electricity tariffs increased by an average of 5 percent per year between 2006 and 2017, but nonetheless consistently remained below the cost of service.** Given oil price forecasts, if JIRAMA continues to increase its tariff by an average of 5 percent while serving the PDMC base-case energy demand, JIRAMA will incur a negative growth though improving gross margin over the next five years. By 2022, JIRAMA’s operating revenue is expected to be US$0.22 per kWh, increasingly approaching the

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US$0.24 per kWh cost of service. If the additional hydropower capacity envisaged in the PDMC successfully comes online, JIRAMA will eventually achieve cost recovery in 2023.

Table 6: JIRAMA Projections a,b

<table>
<thead>
<tr>
<th>Income Statement</th>
<th>Unit</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>MGA Billion</td>
<td>632</td>
<td>724</td>
<td>830</td>
<td>1,042</td>
<td>1,194</td>
<td>1,367</td>
<td>1,478</td>
</tr>
<tr>
<td>Power cost</td>
<td>MGA Billion</td>
<td>−1,092</td>
<td>−1,108</td>
<td>−1,074</td>
<td>−1,078</td>
<td>−1,077</td>
<td>−1,079</td>
<td>−1,104</td>
</tr>
<tr>
<td>Non-power cost</td>
<td>MGA Billion</td>
<td>−91</td>
<td>−92</td>
<td>−94</td>
<td>−96</td>
<td>−95</td>
<td>−94</td>
<td>−94</td>
</tr>
<tr>
<td>Gross profit</td>
<td>MGA Billion</td>
<td>−552</td>
<td>−476</td>
<td>−338</td>
<td>−132</td>
<td>22</td>
<td>194</td>
<td>280</td>
</tr>
<tr>
<td>Other operating revenues</td>
<td>MGA Billion</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Other operating charges</td>
<td>MGA Billion</td>
<td>−5</td>
<td>−5</td>
<td>−5</td>
<td>−5</td>
<td>−5</td>
<td>−5</td>
<td>−5</td>
</tr>
<tr>
<td>Depreciation and amortization</td>
<td>MGA Billion</td>
<td>−74</td>
<td>−82</td>
<td>−83</td>
<td>−85</td>
<td>−86</td>
<td>−83</td>
<td>−84</td>
</tr>
<tr>
<td>Operating earnings</td>
<td>MGA Billion</td>
<td>−609</td>
<td>−541</td>
<td>−405</td>
<td>−201</td>
<td>−48</td>
<td>128</td>
<td>213</td>
</tr>
<tr>
<td>Finance income</td>
<td>MGA Billion</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Finance costs</td>
<td>MGA Billion</td>
<td>−3</td>
<td>−3</td>
<td>−4</td>
<td>−4</td>
<td>−4</td>
<td>−4</td>
<td>−4</td>
</tr>
<tr>
<td>Profit before income tax</td>
<td>MGA Billion</td>
<td>−611</td>
<td>−543</td>
<td>−407</td>
<td>−203</td>
<td>−51</td>
<td>126</td>
<td>210</td>
</tr>
<tr>
<td>Income tax (expense)/credit</td>
<td>MGA Billion</td>
<td>−4</td>
<td>−4</td>
<td>−4</td>
<td>−4</td>
<td>−4</td>
<td>−4</td>
<td>−4</td>
</tr>
<tr>
<td>Profit for the year</td>
<td>MGA Billion</td>
<td>−614</td>
<td>−547</td>
<td>−411</td>
<td>−206</td>
<td>−54</td>
<td>122</td>
<td>206</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Balance Sheet</th>
<th>Unit</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td>MGA Billion</td>
<td>359</td>
<td>−112</td>
<td>−496</td>
<td>−490</td>
<td>−246</td>
<td>132</td>
<td>530</td>
</tr>
<tr>
<td>Non-current assets</td>
<td>MGA Billion</td>
<td>844</td>
<td>864</td>
<td>883</td>
<td>900</td>
<td>915</td>
<td>934</td>
<td>952</td>
</tr>
<tr>
<td>Total non-current liabilities</td>
<td>MGA Billion</td>
<td>1,757</td>
<td>1,764</td>
<td>1,700</td>
<td>1,718</td>
<td>1,879</td>
<td>1,981</td>
<td>2,083</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>MGA Billion</td>
<td>1,114</td>
<td>1,135</td>
<td>1,109</td>
<td>1,116</td>
<td>1,116</td>
<td>1,113</td>
<td>1,137</td>
</tr>
<tr>
<td>Net increase (decrease) in cash</td>
<td>MGA Billion</td>
<td>−733</td>
<td>−636</td>
<td>−548</td>
<td>−331</td>
<td>−182</td>
<td>−6</td>
<td>127</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates.

Note:
a. JIRAMA’s original balance sheet is unbalanced in 2017. To forecast JIRAMA’s performance, an adjustment was made to balance 2017 numbers by adding the excess in assets to the grant liability, assuming additional funding was needed to build these assets. The forecast is then based on these adjusted numbers.

b. Unlike JIRAMA’s historical financials, projections do not include a Government subsidy revenue account, accounting for the large drop in revenue, profits, and cash flows compared to 2017 numbers.
ANNEX 7: CLIMATE MITIGATION AND THE LEAST-COST POWER SECTOR DEVELOPMENT PLAN (PDMC)

97. Greening the energy sector is a core element of Madagascar’s NDC under the Paris Agreement, and the DPF 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)).

98. 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. The adoption of least-cost planning and the first iteration of the PDMC benefits renewable energy development in two main ways. 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, the adoption of 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 #5 and the DPF overall are expected to yield substantial climate mitigation co-benefits.

Figure 5: Future development of generation capacity mix in the most economical PDMC scenario in the interconnected system


99. The main conclusions and recommendations are of the PDMC are as follows (results for the main interconnected system only):

- Large-scale hydropower is the least-cost generation expansion option and the development of Madagascar’s abundant resources could substantially reduce the cost of electricity service.
- Thermal power can be largely phased out in the medium term after the commissioning of major hydropower plants. The phase-out of thermal power and its replacement with hydropower will be the main lever to reduce the cost of production.
- Solar power with battery storage is an economical option to replace thermal power for the evening
peak if it can be procured at a Power Purchase Agreement tariff below 15.1 c€/kWh. This would allow to completely phase out thermal power from the system.

100. **Under the most economical PDMC scenario, the share of renewable energy increases sharply to over 90 percent from 70 percent today. See Figure 5 for the projected generation mix in the most economical PDMC scenario.** As a result of the ramp up of hydropower generation, under the most economical PDMC scenario, the specific system cost falls from US$0.14/kWh to US$0.07 per kWh and the greenhouse gas (GHG) intensity of power generation decreases sharply from 221 gCO2/kWh to 40 gCO2/kWh over the decade between 2018 and 2028.

101. **The PDMC also concluded that an in-depth financial study is needed to inform decisions on preferred type of development contract (under an IPP model or through an engineering, procurement and construction contract, or EPC) for the hydropower plants.** These decisions have a major influence on JIRAMA’s financials. **The PDMC also recommended that** JIRAMA should urgently upgrade its dispatching tools (specifically its supervisory control and data acquisition system; or SCADA) to make best use of existing and newly developed generation sources.