# 1. Program Information

<table>
<thead>
<tr>
<th>Country</th>
<th>Practice Area (Lead)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burkina Faso</td>
<td>Macroeconomics, Trade and Investment</td>
</tr>
</tbody>
</table>

## Programmatic DPF

<table>
<thead>
<tr>
<th>Planned Operations</th>
<th>Approved Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Operation ID

- **Operation ID**: P157060
- **Operation Name**: BF - DPO series on Energy and PFM

<table>
<thead>
<tr>
<th>L/C/TF Number(s)</th>
<th>Closing Date (Original)</th>
<th>Total Financing (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDA-59390,IDA-D1560</td>
<td>30-Jun-2019</td>
<td>97,521,608.63</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bank Approval Date</th>
<th>Closing Date (Actual)</th>
<th>IBRD/IDA (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-Dec-2016</td>
<td>30-Jun-2019</td>
<td>97,521,608.63</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commitment</th>
<th>Co-financing (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Commitment</td>
<td>0.00</td>
</tr>
<tr>
<td>Revised Commitment</td>
<td>0.00</td>
</tr>
<tr>
<td>Actual</td>
<td>97,521,608.63</td>
</tr>
</tbody>
</table>
2. Program Objectives and Pillars/Policy Areas

a. Objectives

The project development objectives of the Burkina Faso First (DPF1) and Second (DPF2) Energy and Fiscal Management Development Policy Financing Operations were to "improve the fiscal sustainability of the energy sector; enable private sector participation in the energy sector and diversify the energy mix; and strengthen tax collection and public procurement processes." This statement from the Program Document for DPF2 (page v), differs slightly from the statement in the Program Document for DPF1 (page v), with reference to the second of the three objectives, "diversify the energy mix and improve the legal and institutional framework of the energy sector." According to the ICR (page 10), the statement was revised to "emphasize private sector involvement" in the programmatic operation.

For the purposes of this ICRR, the three objectives of the operation are taken as follows:

Objective 1: Improve fiscal sustainability of the energy sector

Objective 2: Enable private sector participation in the energy sector and energy mix diversification

Objective 3: Strengthen tax collection and public procurement processes

b. Pillars/Policy Areas
The programmatic operations supported three policy areas:

**Pillar 1 - Fiscal Sustainability of the Energy Sector** supported near-term measures to address national problems with low power supply, a dependence on costly and undiversified fuel sources, and unsustainable electricity and fuel subsidies through three strategies: (a) clearance of accumulated cross-arrears among the Government, the Société Nationale d'Electricité du Burkina (SONABEL), the state-owned electricity utility, and Société Nationale Burkinabé d'Hydrocarbures (SONABHY), the state-owned oil importer (PA1 and PA2); (b) setting up of new pricing mechanisms for electricity and for fuel that would gradually reduce the fiscal burden imposed by the sector on the Government (PA3); and (c) improvements in the operational and financial performance of SONABEL by boosting the firm’s revenues and reducing its operating losses (PA4, PA5, and PA6).

<table>
<thead>
<tr>
<th>Prior Actions (PAs) for Pillar 1 - Fiscal Sustainability of the Energy Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PA1.</strong> The Government, SONABEL and SONABHY have entered into a tripartite agreement to clear arrears accumulated between the government, SONABHY and SONABEL; with an implementation process that includes: (a) a one-time payment of CFAF 40 billion from SONABEL to clear part of the accrued arrears to SONABHY; (b) the conversion of the remaining CFAF 26.6 billion due by SONABEL to SONABHY into a debt to be repaid over ten years; and (c) clearance of the Government's arrears to SONABEL for electricity bills and compensation subsidies in the amount of CFAF 45.48 billion over the period of three years between 2017-2019.</td>
</tr>
<tr>
<td><strong>PA2:</strong> To reduce inter-agency arrears and promote transparency and predictability in the energy sector, the Government has: (a) cleared its arrears as accrued until October 10, 2017 to SONABEL for electricity bills and compensation subsidies and to SONABHY for fuel subsidies; and (b) allocated adequate funds in the draft 2018 Budget Law, approved by the Council of Ministers, to cover the projected maximum of fuel subsidies paid to SONABHY for fuel delivered to SONABEL’s plants.</td>
</tr>
<tr>
<td><strong>PA3.</strong> In order to improve the financial performance of SONABEL, the ministries responsible for commerce; energy; and finance have approved an inter-ministerial decree that states the following: (a) the Regulatory Authority of the Electricity Sector (ARSE) shall review SONABEL’s projections for each year’s fuel prices; (b) the Government shall determine an annual subsidy cap limiting budget exposure, which triggers an electricity tariff revision implemented by SONABEL; and (c) the establishment of disbursement modalities aimed at ensuring timely disbursements of subsidies to SONABEL.</td>
</tr>
<tr>
<td><strong>PA4:</strong> To improve its financial performance, SONABEL has optimized its fuel costs throughout 2016 by: (a) implementing Article 14 of the Performance Contract regarding fuel mix ratios aimed at decreasing dependence on higher cost energy sources; and (b) implementing the recommendations of the 2015 Audit Report regarding specific fuel consumptions.</td>
</tr>
<tr>
<td><strong>PA5.</strong> In order to improve its revenues, SONABEL’s Board of Directors has approved a Revenue Protection Program which provides for the use of smart meters that will strengthen the management of high-voltage and medium-voltage customers’ accounts.</td>
</tr>
<tr>
<td><strong>PA6:</strong> To improve billing and collection processes, SONABEL has deployed the information and monitoring system for the smart meters pursuant to the Revenue Protection Program.</td>
</tr>
</tbody>
</table>

**Pillar 2 - Private Sector Participation in the Energy Sector and Energy Mix Diversification** supported medium- and long-term initiatives to address national problems with low power supply, a dependence on costly and undiversified fuel sources, and unsustainable electricity and fuel subsidies through three strategies: (a) an improvement in the policy framework to increase generation capacity by formally adopting the strategy and investment plan for the sector that diversified the energy mix towards renewable sources and affordable imports
(PA7 and PA8a); (b) an improvement in the legal and regulatory framework to leverage private participation in
the sector using independent power producers (IPPs), public-private partnerships (PPPs), and power purchase
agreements (PPAs), operating under a competitive wholesale electricity market (PA9, PA10, and PA11); and (c)
an improvement of the institutional framework through the establishment of a structure for energy sector
planning at the Ministry of Energy (PA8b).

<table>
<thead>
<tr>
<th>Prior Actions for Pillar 2 - Private Sector Participation in the Energy Sector and Energy Mix Diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PA7.</strong> In order to improve sector planning, the Council of Ministers has approved a strategy for the energy sector which sets the priorities in said sector in terms of investments, energy diversification, and private sector participation over the period 2016-2020.</td>
</tr>
<tr>
<td><strong>PA8:</strong> To improve governance and planning, the Council of Ministers has: (a) approved the National Investment Plan, to shift the energy mix towards cleaner and affordable sources and extend access to reliable electricity services; and (b) established the Permanent Secretariat for the National Commission for Energy Sector Planning under at the Ministry of Energy pursuant to Decree N.2017-0350/PRES/PM/ME.</td>
</tr>
<tr>
<td><strong>PA9:</strong> To foster competition in the electricity sector, the Government has created, by law N.014-2017/AN, a competitive wholesale electricity market framework, providing direct access between generation companies and large consumers and third party-access to the network.</td>
</tr>
<tr>
<td><strong>PA10:</strong> To cost-effectively procure electricity, the Council of Ministers has established a structured and standardized competitive process to select Independent Power Producers pursuant to Chapter IV of Decree N.2017-1012 /PRES/PM/ME/MICA/MINEFID.</td>
</tr>
<tr>
<td><strong>PA11:</strong> In order to encourage private sector participation, the Ministry of Energy and Mines has appointed a technical expert responsible for providing assistance and advisory services on the preparation and negotiations of a revised Public-Private Partnerships (PPP) legal framework, including, power purchase agreements (PPA).</td>
</tr>
</tbody>
</table>

Pillar 3 - Tax Collection and Public Procurement Processes supported improvements in public financial management on two fronts: (a) on the fiscal revenue side, with selected tax administration measures to improve tax collection (PA12, PA13, PA14, and PA15); and (b) on the fiscal expenditure side, with legal, regulatory, and institutional reforms to improve public procurement (PA16 and PA17). This third policy area covered tax revenue and public procurement in general and was not specifically linked to the energy sector --- tax revenues were not focused on taxes related to electricity services or to fuel supply, and public procurement was not focused on procurement by SONABEL or SONABHY.

<table>
<thead>
<tr>
<th>Prior Actions for Pillar 3 - Tax Collection and Public Procurement Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PA12:</strong> To increase tax revenue collection, the Council of Ministers has approved the draft General Tax Code and submitted it to the National Assembly for enactment.</td>
</tr>
<tr>
<td><strong>PA13.</strong> The Council of Ministers has: (a) strengthened the administrative process through the introduction of garnishment* procedures in the Budget Law 2017; and (b) established a new flat tax of 0.2% on proprieties in urban areas in the revised Budget Law of 2016. *In fiscal laws in Francophone jurisdictions, garnishment (Avis à Tiers Détenteur (ADT)) is an administrative process requiring a third party, who owes money to a tax debtor, to instead pay the money to satisfy a debt to the tax administration. The third party is served with a garnishment to pay funds to the tax administration.</td>
</tr>
<tr>
<td><strong>PA14.</strong> To combat fraud and improve revenue collection, the Ministry of Economy, Finance and Development has introduced standardized VAT invoicing for the majority of firms under the Standard Tax Regime, as set out in Directive 00044 dated February 15, 2017.</td>
</tr>
</tbody>
</table>
PA15. In order to broaden the tax base, the Ministry of Economy, Finance and Development has improved the identification and monitoring of taxpayers by reconciling the DGI and DGD databases.

PA16. The Council of Ministers has approved a new Procurement Code and submitted it to the National Assembly for enactment.

PA17: The Government has proceeded with the implementation of the Procurement Code by adopting: (a) a decree defining procurement procedures; (b) ministerial orders to clarify obligations regarding: annual procurement plans, public procurement deadlines, and archiving; and (c) a decree setting the mandate, organization and functioning of the Public Procurement Regulatory Authority.

c. Comments on Program Cost, Financing and Dates

Program Cost: The cost of DPF1 was estimated at SDR 32.8 million (US$45 million equivalent) and Euro 50.3 million (US$55 million equivalent) at appraisal, and DPF2 at SDR 17.8 million (US$25 million equivalent) and Euro 43 million (US$50 million equivalent), for total cost for the programmatic series of SDR 50.6 million and Euro 93.3 million (combined US$175 million equivalent).

Financing: DPF1 was financed by a Special Drawing Right (SDR) 32.8 million (US$44.4 million equivalent) grant and a Euro 50.3 million (US$53.1 million equivalent) credit from the International Development Association (IDA) and DPF2 by an SDR 17.8 million (US$25.7 million equivalent) grant and a Euro 43 million (US$52.9 million equivalent) credit. The total disbursement was SDR 50.6 million and Euro 93.3 million (combined US$176.2 million equivalent); the differences in the U.S. dollar amounts estimated at appraisal and reported as final disbursement are due to changes in the SDR/US$ and Euro/US$ rates.

Dates: DPF1 was approved on December 20, 2016, became effective on December 22, 2016, and closed as scheduled on June 30, 2019. DPF2 was approved on December 14, 2017, became effective on March 2, 2018, and closed as scheduled on June 30, 2019.

3. Relevance of Design

a. Relevance of Objectives

Relevance to Country Challenges. This development policy program aimed to address problems in energy and fiscal management in Burkina Faso, a small, low-income country in West Africa (GDP per capita of US$653 and GDP of US$11.8 billion in 2015) in a fragile and conflict-affected situation (the country was recovering from a coup in 2015 and would see an increase in security incidents through 2017 from a cross-border spillover of terrorist activity in the Sahel region).

- Burkina Faso had one of the lowest electrification rates in Sub-Saharan Africa (17 percent in 2015, including 4 percent in the rural areas where the majority of the 18.5 million population lived). The power supply was unreliable and a barrier to economic activity, with power outages increasing through 2015. Electricity generation depended largely on costly diesel distillate oil and heavy fuel oil, which were imported. Electricity tariffs were among the highest in the region but did not cover costs at SONABEL, and fuel price adjustments were opaque at SONABHY. Government payments to
SONABEL for electricity subsidies and SONABHY for fuel subsidies were in arrears, and so were payments by SONABEL to SONABHY for fuel purchases, the aggregate of which topped Communauté Financière Africaine franc (CFAF) 149 billion across the three entities in end-2015, about 2.4 percent of 2015 GDP.

- Burkina Faso also suffered from poor fiscal management. Revenue mobilization was low and declining, at 14 percent of GDP in 2015, undermining economic development. Weak tax revenue performance was also the result of a low tax base due to complex procedures and multiple databases, preventing the proper identification of taxpayers. The Public Expenditure and Financial Assessment of 2013 identified procurement as a serious bottleneck in budget execution. Significant parts of the investment budget were not spent as intended and did not achieve tangible development outcomes because of weaknesses in procurement.

Relevance to Government Priorities. The program objectives were relevant to the development priorities of Burkina Faso in response to these challenges.

- The Plan National de Développement Economique et Social (PNDES) 2016-2020 advanced three "strategic axes": (a) the reform of institutions and modernization of administration; (b) the development of human capital; and (c) the promotion of sectors of the economy with growth potential and with impact on employment. Program objective 1 (to improve the fiscal sustainability of the energy sector) and program objective 2 (to enable private sector participation in the energy sector) were aligned with the objectives of the PNDES second axis to "improve access to quality energy services and guarantee energy efficiency" and of the third axis to "improve the quality, reliability and accessibility of infrastructure to facilitate the structural transformation of the economy." Program objective 3 (to strengthen the tax collection and public procurement processes) was aligned with the objectives in the PNDES first axis to "improve the planning, management, and financing of development", "promote good economic governance", "promote effective and efficient public administration", and "develop a system of accountability at all levels."

- Additionally, the program objectives for energy reform were aligned with the goals of the Politique Sectorielle de l'Energie 2014-2025 (POSEN), the energy policy document adopted in 2013, which envisions an energy sector that "depends on endogenous resources and regional cooperation, ensures universal access to modern energy services, and affirms its driving role in sustainable development". POSEN aimed to: deliver 100 percent access to electricity in urban and 49 percent in rural areas by 2025; liberalize the electricity sector; control the cost of energy; and promote renewable energy.

- The program objectives for fiscal management were aligned with the goals of Politique du Secteur de l'Economie et des Finances 2011-2020 (POSEF). the economic and financial sector policy statement adopted in 2011. POSEF aimed to: enhance revenue mobilization and fiscal management; improve the efficiency of public accounts and financial systems; and establish effective control systems and mechanisms to fight corruption and fraud.

Relevance to Bank Group Strategy. The program objectives were consistent with the Bank Group's strategy in Burkina Faso.

- At appraisal, the Country Partnership Strategy for Burkina Faso for the Period FY13-16 (CPS) identified three "strategic objectives": accelerate inclusive and sustained growth; enhance governance to deliver social services more efficiently; and reduce social, economic, and environmental vulnerabilities. The program objectives to improve the fiscal sustainability of the energy sector and to enable private sector participation in the energy sector were consistent with outcomes enumerated
in the CPS first strategic objective: "reduce infrastructure deficits in energy" and "achieve higher investment by the private sector." The program objective to strengthen the tax collection and public procurement processes was consistent with the outcome cited in the CPS second strategic objective: "improve public financial management for good governance."

• At program closing, the Country Partnership Framework for Burkina Faso for the Period FY18-FY23 (CPF) identified three "focus areas": accelerate sustainable private sector led-growth for job creation; invest in human capital and social protection systems; and strengthen governance and support citizen engagement. The program objectives to improve the fiscal sustainability of the energy sector and enable private sector participation in the energy sector were consistent with the objective in the CPF first focus area to "improve energy access." The program objective to strengthen the tax collection and public procurement processes was consistent with the objective in the CPF third focus area to "strengthen domestic resource mobilization and public expenditure management."

b. Relevance of Prior Actions

Rationale

The program defined 17 prior actions under DPF1 and DPF2 to achieve the program objectives. Six prior actions (PA1 - PA6) were directed at the objective "to improve the fiscal sustainability of the energy sector"; five (PA7 - PA11) at the objective "to enable private sector participation in the energy sector and diversify the energy mix"; and six (PA12 - PA17) at the objective "to strengthen tax collection and public procurement processes" (see Section 2). Many of the prior actions were multi-part or multi-stage actions.

Relevance of Prior Actions for Pillar 1 - Fiscal Sustainability of the Energy Sector.

• Theory of Change. Over the long-term, Burkina Faso would need to diversify its energy sources and tap the private sector to meet its electricity needs, while it adopted market prices for fuel and electricity to ensure the fiscal sustainability of the sector. These efforts would take time, investment and political commitment, but certain actions in the near to medium term would lay the foundation for achieving these goals. Early rationalization of the pricing and subsidy system, by capping energy subsidies, settling cross-institutional arrears, and improving the operational and financial performance of SONABEL and SONABHY, should enable Burkina Faso to more readily adopt full fuel-cost pass-throughs and fully cost-reflective electricity tariffs once gains were made with energy diversification, cost-reduction, and private sector participation, assuming that the political commitment to subsidy and pricing reform was firm.

• PA1 (conclusion of an agreement to clear arrears between SONABHY, SONABEL, and the Government) was informed by IMF Staff Report on the Fourth and Fifth Reviews under the Extended Credit Facility Arrangement (IMF, 2016), according to the Program Document for DPF1 (page 23). The results chain linking this prior action to the achievement of the PDO was convincing. Three actions would begin to clear arrears in the energy sector --- (a) SONABEL would make a one-time cash payment of CFAF 40 billion to partly clear its arrears with SONABHY; (b) SONABEL would convert the remaining CFAF 26.6 billion due SONABHY to a ten-year debt; and (c) the Government would clear its arrears to SONABEL of CFAF 45.5 billion over three years, 2017-2019. The prior action would make a major contribution to the achievement of the objective to improve the fiscal sustainability of the energy sector, once the agreement was implemented, considering that arrears
among the three parties had accumulated to CFAF 140 billion, or about 2.4 percent of 2015 GDP. The relevance of this prior action is rated satisfactory.

- **PA2** (clearance by the Government of arrears to SONABEL and SONABHY accrued until October 2017 and allocation of funds to pay fuel subsidies in the draft Budget Law for 2018) was informed by *IMF Staff Report on the Fourth and Fifth Reviews under the Extended Credit Facility Arrangement* (IMF, 2016), according to the Program Document for DPF2 (page 63). The results chain linking this prior action to the achievement of the PDO was convincing. This two-part prior action would implement the Government's commitments under the tripartite agreement mandated under PA1. The prior action would make a major contribution to the achievement of the objective to improve the fiscal sustainability of the energy sector. In particular, the explicit allocation of budgetary funds to cover fuel subsidies would strengthen the Government's commitment to ensure the fiscal sustainability of the energy sector. The relevance of this prior action is rated satisfactory.

- **PA3** (approval of an inter-ministerial decree to review SONABEL's fuel price projections for each year’s fuel prices, determine an annual subsidy cap limiting budget exposure, and establish of modalities for subsidy disbursements) was informed by the *Public Expenditure Review in the Energy and Transport Sectors* (World Bank, 2013), the *IMF Staff Report on the Fourth and Fifth Reviews under the Extended Credit Facility Arrangement* (IMF, 2016), the *Rapport sur l’approvisionnement en produits pétroliers du Burkina Faso et sur l’approvisionnement de la SONABEL* (Jean-Pierre Favennec, 2016) and *SONABEL’s Audit of Charges and Subsidies Received from the Government of Burkina Faso for the Period 2010-13* (2014), according to the Program Document for DPF1 (page 23). The results chain linking this prior action to the achievement of the PDO was convincing. To restore fiscal sustainability in the sector, the Government needed to adopt new market-oriented price-adjustment mechanisms and subsidy regimes in the fuel and electricity markets. This three-part prior action was supportive of this goal: (a) ARSE, the energy regulator, would review SONABEL’s annual fuel price projections --- in principle, SONABEL would pay a "market-oriented" fuel price to SONABHY capped at a threshold that reflected its break-even point, beyond which the Government would pay SONABHY a quarterly subsidy; (b) the Government would cap its annual energy subsidy spending --- the cap decisions would be informed by annual financial projections by SONABEL and annual fuel price projection reviews by ARSE, beyond which tariff adjustments would be triggered at SONABEL; and (c) the Government would improve its disbursement methods --- the purpose of this action was to ensure the timely payment of the subsidies. The prior action would make a major contribution to the achievement of the objective to improve the fiscal sustainability of the energy sector. According to the Program Document for DPF1 (page 14), the revisions to the subsidy arrangements were understood to be transitional --- once Burkina Faso improved its fuel mix and completed interconnections with the West Africa Power Pool at Ghana (planned for 2018) and at Nigeria (expected by 2022), the Government would be better positioned to shift to a full pass-through of fuel costs and fully-cost-reflective electricity tariffs. The relevance of this prior action is rated satisfactory.

- **PA 4** (implementation of Article 14 of the Performance Contract regarding fuel mix ratios, and implementation of the recommendations of the 2015 Audit Report regarding specific fuel consumption) was informed by the *Public Expenditure Review in the Energy and Transport Sectors* (World Bank, 2013), the *Rapport sur l’approvisionnement en produits pétroliers du Burkina Faso et sur l’approvisionnement de la SONABEL* (Jean-Pierre Favennec, 2016) and *SONABEL’s Audit of Charges and Subsidies Received from the Government of Burkina Faso for the Period 2010-13* (2014), according to the Program Document for DPF2 (page 63). The results chain linking this prior action to the achievement of the PDO was convincing. Together with PA5 and PA6, PA 4 would constitute one of three prior actions to improve the operational and financial performance of SONABEL, and hence improve the fiscal sustainability of the energy sector. Implementing the
performance contract with the Government would reduce dependence on high-cost energy source, while implementing the recommendations of the 2015 Audit Report would reduce specific fuel consumption. The prior action would make a major contribution to the achievement of the objective to improve the fiscal sustainability of the energy sector. The relevance of this prior action is rated satisfactory.

- **PA5** (approval of a Revenue Protection Program using smart meters) was informed by *The Benefits of Revenue Protection Program* (United Illuminating Company, 2007), according to the Program Document for DPF1 (page 23). The results chain linking this prior action to the achievement of the PDO was credible. The second of three prior actions to improve the operational and financial performance of SONABLEEL, PA5 supported the use of smart meters for high- to medium-voltage customers, which would help reduce commercial losses at the state-owned electric utility. The prior action would make a moderate contribution to the achievement of the objective to improve the fiscal sustainability of the energy sector, considering that the Government had just increased the tariffs for high-voltage clients at peak hours to better manage demand. The use of smart meters would help reduce supply costs at SONABEL and hence improve the fiscal sustainability of the energy sector. The relevance of this prior action is rated moderately satisfactory.

- **PA6** (deployment of an information and monitoring system for smart meters) was informed by *The Benefits of Revenue Protection Program* (United Illuminating Company, 2007), according to the Program Document for DPF2 (page 63). The results chain linking this prior action to the achievement of the PDO was credible. The third of three prior actions to improve the operational and financial performance of SONABLEEL, PA6 is linked directly to PA5 --- it deploys the associated information system for smart meters. The prior action would make a moderate contribution to the achievement of the objective to improve the fiscal sustainability of the energy sector. The relevance of this prior action is rated moderately satisfactory.

The relevance of the six prior actions to the objective to improve the fiscal sustainability of the energy sector is rated satisfactory.

**Relevance of Prior Actions for Pillar 2 - Private Sector Participation in the Energy Sector and Energy Mix Diversification**

- **Theory of Change.** Over the long-term, Burkina Faso would need to diversify its energy sources and tap private enterprise to meet its electricity needs, while it adopted market prices for fuel and electricity to ensure the fiscal sustainability of the sector. Developing an integrated energy investment plan, including linkages with the West Africa Power Pool, preparing for independent power producers, public-private partnerships, power purchase agreements, and creating a competitive wholesale electricity market would lay the groundwork for diversification and private investment. Diversification was important because dependence on imported and costly fuel oil was unsustainable, while private participation was important because the Government lacked the fiscal capacity to expand electricity services using only public resources. The attainment of the country's energy goals, would ultimately depend on the ability of the sector to reduce fuel costs through a combination of diversification of the energy mix and participation of the private sector in new energy investment. Changes in the policy, legal, and institutional frameworks for energy diversification and private sector participation would be necessary to achieve these goals.

- **PA7** (approval of the national energy sector strategy for 2016-20) was informed by the *Medium Term Strategy and Roadmap for Burkina Faso’s Energy Sector* (Tractebel/Nodalis, 2016), according to he Program Document for DPF1 (page 24). The results chain linking this prior action to the achievement of the PDO was credible. The sector strategy would set priorities for investments, energy...
diversification, and private sector participation in the energy sector over 2016-20. The prior action would make a moderate contribution to the achievement of the project objective. It would set the policy framework for energy diversification and private investment in energy. The relevance of this prior action is rated moderately satisfactory.

- **PA8** (approval of the National Investment Plan and creation of the Permanent Secretariat for the National Commission for Energy Sector Planning) was informed by the *Medium Term Strategy and Roadmap for Burkina Faso’s Energy Sector* (Tractebel/Nodalis, 2016), according to the Program Document for DPF2 (page 63). The results chain linking this prior action to the achievement of the PDO was credible. The first of this two-part prior action — the approval of the National Investment Plan — would set the policy framework for shifting the energy mix towards cleaner and more affordable sources of energy and extend access to reliable electricity services and fostering private sector investment in energy. The prior action would make a moderate contribution to the achievement of the project objective. It would set the policy framework for energy diversification and private investment in energy. The relevance of this prior action is rated moderately satisfactory.

- **PA9** (creation of the legal framework for a competitive wholesale electricity market) was informed by the *Medium Term Strategy and Roadmap for Burkina Faso’s Energy Sector* (Tractebel/Nodalis, 2016), according to the Program Document for DPF2 (page 63). The results chain linking this prior action to the achievement of the PDO was convincing. A competitive wholesale electricity market would provide large consumers direct access to generation companies and third party-access to the network. The prior action would make a major contribution to the achievement of the objective to enable private sector participation in the energy sector and diversify the energy mix. The relevance of this prior action is rated satisfactory.

- **PA10** (establishment of a competitive process for selecting IPPs) was informed by *Independent Power Projects in Sub-Saharan Africa - Lessons from Five Key Countries* (World Bank, 2014) and *Government of Burkina Faso Least-Cost Development Plan* (EDF, 2014), according to the Program Document for DPF2 (page 63). The results chain linking this prior action to the achievement of the PDO was convincing. A structured and standardized competitive process to select Independent Power Producers, following the provisions of Decree No. 2017-1012, would provide a level playing field to private entrepreneurs seeking to participate in the power generation market. The prior action would make a major contribution to the achievement of the objective to enable private sector participation in the energy sector and diversify the energy mix. It would set the legal framework to enable private sector participation in the energy sector. The relevance of this prior action is rated satisfactory.

- **PA11** (appointing a technical expert for the preparation of a legal framework for PPPs) was informed by *Independent Power Projects in Sub-Saharan Africa - Lessons from Five Key Countries* (World Bank, 2014) and *Government of Burkina Faso Least-Cost Development Plan* (EDF, 2014), according to the Program Document for DPF1 (page 24). The results chain linking this prior action to the achievement of the PDO was credible. The technical expert would provide advisory services for the preparation of a revised legal framework for public-private partnerships and power purchase agreements. The prior action would make a major contribution to the achievement of the objective to enable private sector participation in the energy sector and diversify the energy mix. The work of the technical expert would begin to set the legal framework for the use of public-private partnerships and power purchase agreements in energy. The relevance of this prior action is rated moderately satisfactory.

- The relevance of the five prior actions to the objective to enable private sector participation in the energy sector and diversify the energy mix is rated moderately satisfactory.
Relevance of Prior Actions for Pillar 3 - Tax Collection and Public Procurement Processes.

- **Theory of Change.** The approval of a new General Tax Code, introduction of garnishment procedures, standardization of value-added tax (VAT) invoicing, and consolidation of the internal revenue and customs tax databases would help the Government strengthen tax administration and collection. In addition, the introduction of a new urban property tax would add to tax revenues. Both tax administration and tax policy measures would raise VAT and non-VAT revenues. The approval of a new Procurement Code, the issuance of the law's implementing regulations, and the organization of the Public Procurement Regulatory Authority would provide for a legal, regulatory, and institutional framework to help strengthen public procurement. At the very least, these improvements should lead to gains in operational efficiency in procurement; at best, these improvements should help the Government to continue to combat corruption in procurement.

- **PA12** (approval and submission to the National Assembly of the draft General Tax Code) was informed by the *IMF Staff Report on the Fourth and Fifth Reviews Under the Extended Credit Facility Arrangement* (IMF, 2016) and the *Policy Note on Macroeconomic Management* (World Bank, 2016), according to the Program Document for DPF1 (pages 63-64). The results chain linking this prior action to the achievement of the PDO was convincing. According to the Program Document for DPF1 (page 21), the General Tax Code would address the "lack of regulatory interpretative provisions" in existing tax laws which hindered taxpayers' understanding of their tax obligations and dampened tax compliance rates. The prior action would make a major contribution to the achievement of the objective to strengthen the tax collection process by unifying multiple and fragmented changes to tax laws made over the years, resolving conflicting interpretations and loopholes in tax laws, harmonizing and simplifying tax and customs procedures, improving verifications and controlling exemptions, and establishing mechanisms to resolve disputes and redress grievances, thereby facilitating tax enforcement and increasing taxpayer compliance. The relevance of this prior action is rated satisfactory.

- **PA13** (introduction of garnishment procedures and introduction of a 2 percent flat tax on urban properties) was informed by the *IMF Staff Report on the Fourth and Fifth Reviews Under the Extended Credit Facility Arrangement* (IMF, 2016) and the *Policy Note on Macroeconomic Management* (World Bank, 2016), according to the Program Document for DPF1 (page 24). The prior action consisted of two parts. The first part --- the introduction of garnishment procedures --- was a tax administration measure. The results chain linking this prior action to the achievement of the PDO was credible. Garnishment --- the administrative process requiring a third party who owes money to a tax debtor, to instead pay the money to satisfy a debt to the tax administration --- would give tax authorities recourse to the assets of tax debtors to settle tax delinquencies. This prior action would conceivably make a moderate contribution to the achievement of the objective to strengthen the tax collection process. The second part --- the introduction of a 2 percent flat tax on properties in urban areas --- was a tax policy measure. This prior action, because it introduced a new tax, went beyond the scope of the project to strengthen the tax collection process. The Program Documents for DPF1 and DPF2 do not provide a rationale for the inclusion of this new tax among the tax administration measures supported by this programmatic series, although they state that land tax collections were historically low. The IMF supported multiple tax measures under the Extended Credit Facility arrangements for 2014-17 and 2018-21. It could be surmised that the 2 percent flat tax on urban properties would have been compatible with, and complementary to, these tax measures, but there is no actual discussion to this effect in the IMF documents. The relevance of this prior action is rated moderately satisfactory.
• **PA14** (introduction of standardized VAT invoicing of firms) was informed by the *IMF Staff Report on the Fourth and Fifth Reviews Under the Extended Credit Facility Arrangement* (IMF, 2016) and the *Policy Note on Macroeconomic Management* (World Bank, 2016), according to the Program Document for DPF2 (page 63). The results chain linking this prior action to the achievement of the PDO was credible. Introduction of a standardized VAT invoicing system for firms would help reduce the complexity of VAT procedures for taxpayers and streamline VAT administration by the tax authorities, reducing VAT tax fraud. The prior action would make a moderate contribution to the achievement of the objective to strengthen the tax collection process considering that non-standard invoicing systems made VAT administration inefficient, opaque and susceptible to tax evasion. The relevance of this prior action is rated moderately satisfactory.

• **PA15** (reconciliation of the DGI and DGD databases) was informed by the *IMF Staff Report on the Fourth and Fifth Reviews Under the Extended Credit Facility Arrangement* (IMF, 2016) and the *Policy Note on Macroeconomic Management* (World Bank, 2016), according to the Program Document for DPF1 (page 24). The results chain linking this prior action to the achievement of the PDO was credible. Combining the internal revenues and customs databases of the Direction Generale de Impots (DGI), the directorate for tax, and the Direction Generale de Douanes (DGD), the directorate for customs, would help expand the tax base and combat tax fraud, addressing tax collection problems stemming from a multiplicity of databases and allowing the tax authorities to cross-check information across directorates. The prior action would make a moderate contribution to the achievement of the objective to strengthen the tax collection process considering that disparate and uncoordinated tax databases were a hindrance to the proper identification of taxpayers and the efficient monitoring of tax collection. The relevance of this prior action is rated moderately satisfactory.

• **PA16** (approval and submission to the National Assembly of the new Procurement Code) was informed by the *Policy Note on Governance and Public Administration* (World Bank, 2016), according to the Program Document for DPF1 (page 24). The results chain linking this prior action to the achievement of the PDO was credible. The new Procurement Code would improve the performance and efficiency of the procurement process and promote accountability and transparency, according to the Program Document for DPF1 (page 22), by, among others, setting the guidelines for single-source procurement following international standards, reducing the number of steps in the procurement process, and strengthening contract implementation and performance monitoring. The prior action would make a moderate contribution to the achievement of the objective to strengthen the public procurement process. The Procurement Code would establish the necessary legal foundation for strengthening the public procurement process. However, the requirement that the new Procurement Code be simply submitted to the National Assembly, and not necessarily enacted by the National Assembly, provides only a moderate contribution to the achievement of the objective. The relevance of this prior action is rated moderately satisfactory.

• **PA17** (adoption of decrees and orders defining procurement procedures, obligations, and the mandate and organization of the Public Procurement Regulatory Authority) was informed by the *Policy Note on Governance and Public Administration* (World Bank, 2016), according to the Program Document for DPF2 (page 64). The results chain linking this prior action to the achievement of the PDO was only partly convincing. The first two of this three-part prior action would adopt the regulations to implement the new Procurement Code, while the third would create the Public Procurement Regulatory Authority. The link of the regulatory measures to the objective to strengthen the public procurement process is fairly evident, since the regulations serve to implement the Procurement Code. However, the link of the Public Procurement Regulatory Authority to the objective is less clear and cannot be definitively established, since the Program Documents provide no
information about the purpose or mission of this Authority. The relevance of this three-part prior action is rated moderately unsatisfactory.

- The relevance of the six prior actions to the objective to strengthen the tax collection and public procurement processes is rated moderately satisfactory.

Rating

Moderately Satisfactory

4. Relevance of Results Indicators

Rationale

The program defined ten results indicators to measure attainment of the program outcomes. At least four targets were revised with the appraisal of DPF2 --- the first revision took cognizance of progress already made under DPF1, the next two would transform numerical value targets to percentages, and the fourth would correct for the baseline data. One indicator would be difficult to monitor during program implementation, but the problem appears to be less a deficiency of design than a shortcoming in M&E implementation. This indicator was revised by the Government during program implementation.

Relevance of Results Indicators for Pillar 1 - Fiscal Sustainability of the Energy Sector

<table>
<thead>
<tr>
<th>Results Indicators (RIs) for Pillar 1 - Fiscal Sustainability of the Energy Sector</th>
<th>Associated Prior Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RI1:</strong> Reduction of cross arrears between the Government, SONABHY and SONABEL.</td>
<td>PA1, PA2, PA3</td>
</tr>
<tr>
<td>Baseline: Arrears accrued by June 30, 2016: CFAF 140 billion; Target in 2018:</td>
<td></td>
</tr>
<tr>
<td>Below CFAF 1 billion.</td>
<td></td>
</tr>
<tr>
<td><strong>Change:</strong> Replaced original target set at “below CFAF 60 billion”.</td>
<td></td>
</tr>
<tr>
<td><strong>RI2:</strong> Improved financial performance of the state-owned electricity provider,</td>
<td>PA4</td>
</tr>
<tr>
<td>SONABEL, as measured by Earnings Before Interest, Tax, Depreciation and</td>
<td></td>
</tr>
<tr>
<td>Amortization (EBITDA).</td>
<td></td>
</tr>
<tr>
<td>Baseline 2015: CFAF 14 billion; Target 2018: above CFAF 40 billion</td>
<td></td>
</tr>
<tr>
<td><strong>RI3:</strong> Reduction in customer’s outstanding bills due to SONABEL (as measured</td>
<td>PA5, PA6</td>
</tr>
<tr>
<td>by client receivables).</td>
<td></td>
</tr>
<tr>
<td>Baseline 2015: CFAF 55 billion; Target 2018: below CFAF 39 billion.</td>
<td></td>
</tr>
</tbody>
</table>

- **RI1** (reduction of cross arrears between the Government, SONABHY and SONABEL) was appropriate as a measure of the fiscal sustainability in the energy sector, considering the heavy buildup of cross-arrears among the parties to around CFAF 149 billion in 2015, about 2.4 percent of 2015 GDP. This results indicator was linked to PA1, PA2, and PA3 on subsidy and pricing reform and arrears clearance. With the arrears largely cleared by 2017, the target was revised during the appraisal of DPF2 to effect
a reduction of cross arrears to under CFAF 1 billion by 2018. The reduction in cross arrears fully adequately measures the impact of: the tripartite arrears clearance agreement; the budgetary allocation in 2018 for subsidies; and the decrees reviewing fuel pricing, setting annual subsidy caps, and ensuring timely subsidy disbursements. The indicator is well defined, has credible baseline data and a clear target, and had available data to measure achievement of the target. This results indicator is rated highly satisfactory.

- **RI2** (increase in Earnings Before Interest, Tax, Depreciation and Amortization (EBITDA)) was an appropriate measure of improved operational and financial performance at SONABEL. The accounting measure EBITDA, calculated using a firm's earnings, from which interest expenses, taxes, depreciation, and amortization are subtracted, reflects the firm's current operating profitability. This results indicator was linked to PA4 on operational and financial improvements in SONABEL. The target called for a three-fold increase in EBITDA over two years, from CFAF 14 billion to CFAF 40 billion. The increase in EBITDA mostly adequately measures the impact of the implementation of the Performance Contract decreasing dependence on high-cost energy sources and the implementation of the 2015 Audit Report recommendation to reduce specific fuel consumption, both of which would reduce operating costs and raise EBITDA. The indicator is well defined (is an accounting measure), has credible baseline data and a clear target, and had available data to measure achievement of the target. This results indicator is rated moderately satisfactory.

- **RI3** (decrease in client Accounts Receivables) was an appropriate measure of improved operational and financial performance at SONABEL. The accounting measure Accounts Receivables is the balance of money due to a firm for goods and services delivered or used but not yet paid for by customers; it is listed on the firm's balance sheet as a current asset and reflects money owed by customers for purchases made on credit. This results indicator was linked to PA5 and PA6 on operational and financial improvements in SONABEL. The target called for a 30 percent reduction in client Accounts Receivable, also over two years, to roughly the level it was five-years earlier in 2011. The decrease in Accounts Receivables mostly adequately measures the impact of the approval of the Revenue Protection Program providing for the use of smart meters for high- and medium-voltage customers and the deployment of monitoring systems for the smart meters, both of which would improve customer billing and collection processes, and hence reduce Accounts Receivables. The indicator is well defined (is an accounting measure), has credible baseline data and a clear target, and had available data to measure achievement of the target. This results indicator is rated moderately satisfactory.

- Based on the foregoing ratings, the relevance of the results indicators for Pillar 1 is rated satisfactory.

### Relevance of Results Indicators for Pillar 2 - Private Sector Participation in the Energy Sector and Energy Mix Diversification

<table>
<thead>
<tr>
<th>Results Indicators for Pillar 2 - Private Sector Participation in the Energy Sector and Energy Mix Diversification</th>
<th>Associated Prior Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RI4:</strong> Solar PV capacity (% of total installed capacity). &lt;br&gt; Baseline 2015: 0; Target 2018: 15%. &lt;br&gt; <strong>Change:</strong> Replaced indicator measuring ‘maximum installed capacity for new solar plants.’ Baseline (2015) = 0 MW; Target = 77 MW.</td>
<td>PA7 &lt;br&gt; PA8</td>
</tr>
<tr>
<td><strong>RI5:</strong> Capacity available on the interconnected network, excluding guaranteed imports (% of installed capacity). &lt;br&gt; Baseline 2015: 52 percent; Target 2018: 62 percent.</td>
<td>PA7 &lt;br&gt; PA8</td>
</tr>
</tbody>
</table>
### RI6: Number of Independent Power Producer (IPP) projects having been signed and successfully negotiated.

<table>
<thead>
<tr>
<th>Baseline 2015: 0</th>
<th>Target 2018: 2</th>
</tr>
</thead>
</table>

**RI7: Number of IPPs under standardized competitive process.**

Baseline 2015: 0; Target 2018: 1.

**Change:** *Original was set as "percentage of IPPs" rather than "number."*

**Baseline = 0%; Target = 50%.**

- **RI4** (percentage share of solar photovoltaic (PV) capacity in total installed capacity) was an appropriate indicator of the extent of diversification in the energy mix in the country. This results indicator was linked to PA7 and PA8 on the policy, legal and regulatory, and institutional frameworks for energy investment. To achieve its goal to provide secure and affordable electricity to 45 percent of its population by 2025, Burkina Faso adopted a two-fold strategy, the first of which was to shift its energy mix from costly fossil fuels and biomass towards renewable sources. In 2015, the mix consisted of 63 percent thermal generation from distillate diesel oil and heavy fuel oil, 31 percent electricity imports, and 6 percent renewables. The goal was to raise the share of renewables to 30 percent of installed domestic capacity by 2025, for which a 15 percent share of solar PV by 2018 would be a feasible near-term target. The percentage share of PV capacity in total installed capacity adequately measures the impact of the: approval of national energy sector strategy for 2016-2020 (policy framework); approval of the national investment plan shifting the energy mix towards cleaners and affordable sources (policy framework); and creation of the Permanent Secretariat for the National Commission for Energy Sector Planning (institutional framework). The indicator is well defined, has credible baseline data (zero PV solar capacity) and a clear target, and had available data to measure achievement of the target. This results indicator is rated satisfactory.

- **RI5** (the capacity available on the interconnected network) was an appropriate indicator of the extent of diversification in the energy mix in the country. This results indicator was linked to PA7 and PA8 on the policy, legal and regulatory, and institutional frameworks for energy investment. To achieve its goal to provide secure and affordable electricity to 45 percent of its population by 2025, Burkina Faso adopted a two-fold strategy, the second of which was to shift its energy mix from costly fossil fuels and biomass towards more affordable imports of electricity through interconnections with producers in the West Africa Power Pool. The goal was to raise capacity on the interconnected network (Burkina Faso was connected with Cote d’Ivoire at program appraisal, and was expected to be connected with Ghana by 2018 and Nigeria by 2022) from 52 to 62 percent of installed capacity by 2018. The percentage share of capacity on the interconnected network in total installed capacity adequately measures the impact of: the approval of national energy sector strategy for 2016-2020; approval of the national investment plan shifting the energy mix towards cleaners and affordable sources; and creation of the Permanent Secretariat for the National Commission for Energy Sector Planning. The indicator is well defined, has credible baseline data and a clear target, and had available data to measure achievement of the target. This results indicator is rated satisfactory.

- **RI6** (number of IPP projects that were successfully negotiated and signed) was an appropriate measure for the extent of private sector participation in the energy sector. This results indicator was linked to PA9, PA10, and PA11 on the policy, legal and regulatory, and institutional frameworks for energy investment. IPPs are private entities which own and/or operate facilities that generate electricity under an unbundled market structure, and which sell the electricity to a utility, a central government buyer, or directly to end-users. According to a Bank report in 2016, *Independent Power Projects in Sub-Saharan Africa*, IPPs were "essential to electrify Sub-Saharan Africa" as they provided the investment
needed to meet the region's electricity goals, the funding of which "largely exceeded the African countries' stretched public finances." Most private sector finance for electricity was being channelled through privately financed IPPs, supported by non-recourse or limited-recourse loans, and with long-term power purchase agreements with the state utility or another off-taker. With Burkina Faso new to IPPs (the Bank listed 125 IPPs in 17 Sub-Saharan African countries in 2014), the target was for Burkina Faso to negotiate and sign two IPP projects by 2018. The number of IPP projects successfully negotiated and signed adequately measures the impact of: the creation of the legal framework for a competitive electricity market; establishment of a competitive process for the selection of IPPs; and appointment of an expert to help prepare the legal framework for PPPs and PPAs. The indicator is well defined, has credible baseline data (zero IPPs) and a clear target, and had available data to measure achievement of the target. This results indicator is rated satisfactory.

- **RI7** (number of IPPs under standardized competitive process) was an appropriate measure for the extent of private sector participation in the energy sector. This results indicator was linked to PA9, PA10 and PA11 on the policy, legal and regulatory, and institutional frameworks for energy investment. The target was to have at least one of the two expected IPPs obtained through a competitive process. The number of IPP projects obtained under standard competitive process adequately measures the impact of: the creation of the legal framework for a competitive electricity market; establishment of a competitive process for the selection of IPPs; and appointment of an expert to help prepare the legal framework for PPPs and PPAs. The indicator is well defined, has credible baseline data (zero IPPs) and a clear target, and had available data to measure achievement of the target. This results indicator is rated satisfactory.

- Based on the foregoing ratings, the relevance of the results indicators for Pillar 2 is rated satisfactory.

### Relevance of Results Indicators for Pillar 3 - Tax Collections and Public Procurement Processes

<table>
<thead>
<tr>
<th>Results Indicators for Pillar 3 - Tax Collection and Public Procurement Processes</th>
<th>Associated Prior Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>RI8: An increase in VAT revenues. Baseline 2015: 6.0 percent of GDP; Target 2018: 7.0 percent of GDP.</td>
<td>PA12 PA13 PA14</td>
</tr>
<tr>
<td>RI9: An increase in non-VAT tax revenues. Baseline 2015: 8 percent of GDP; Target 2018: 10 percent of GDP. <strong>Change:</strong> Original was set as Baseline = 9.5% of GDP; Target = 10.5% of GDP.</td>
<td>PA12 PA13 PA14</td>
</tr>
<tr>
<td>RI10: Percentage of all procurement (by value) completed within the time limit. Baseline 2016: 87 percent; Target 2018: No target set. <strong>Change:</strong> Replaced original reduction in the number of days, on average, to complete a public procurement from the invitation to bid to contract signed and approved. Baseline 2015: 142 days; Target 2018: 100 days.</td>
<td>PA16 PA17</td>
</tr>
</tbody>
</table>

- **RI8** (increase in VAT revenues) was intended to assess improvement in tax collection. This results indicator was linked to PA12, PA13, and PA 14 on tax administration. VAT revenue performance had been weak with tax revenues at 15 percent of GDP in 2014, one of the lowest in the West African Economic and Monetary Union. VAT revenues declined from 41 percent of total revenues in 2009 to 32
percent in 2014. VAT collections reached only 20-25 percent of the potential tax base. And VAT tax arrears topped CFAF 35 million in end-2014. The target was to raise VAT revenues by a percentage point of GDP over three years, from 6 percent of GDP in 2015 to 7 percent of GDP in 2018.

- **RI9** (increase in non-VAT tax revenues) would be reflective of the success of efforts to improve both tax policy, headlined by a new General Tax Code, and tax administration, including through the introduction of garnishment procedures. This results indicator was linked to PA12, PA13, and PA15 on tax policy and tax administration.

- There are two attribution problems associated with the choice of Results Indicators 8 and 9. First, increases in tax revenues are achieved as a result both of general macroeconomic factors and reform interventions. The Bank could have made projections of fiscal revenues over time, driven by macroeconomic factors and without the reform program, and attribute only the gains above the forecast values, or above the time trend, to reform interventions. Second, and more difficult to address, the arrangements under the IMF’s ECF in 2014-17 and 2018-21 also supported government revenue reform measures during the implementation period of this programmatic series. Untangling the impact on VAT and non-VAT revenue performance over the period of reform measures supported by the Bank from reform measures supported by the IMF would be difficult.

- **RI10** (percentage of all procurement, by value, completed within the time limit) was considered the principal indicator for improvements in the public procurement process, a choice that would reflect efficiency gains in the conduct of procurement. This results indicator was linked to PA16 and PA17 on the legal and institutional framework for procurement reform. The original indicator (reduction in the number of days, on average, to complete a public procurement from the invitation to bid to contract signed and approved) would turn out to be difficult monitor because agencies reported procurement end-dates but not start-dates. The revised indicator was more robust, in large part because associated indicators would also measure the percentage of procurement that was competitively tendered --- competitive tendering is generally thought to be superior because, first, it promotes competition among potential suppliers, and second, it offers transparency that helps mitigate corruption. The percentage of all procurement completed within the time limit would be mostly adequate to measure the impact of: the approval of the new Procurement Code; submission of the new Procurement Code to the National Assembly; adoption of a decree defining procurement procedures; adoption of ministerial orders on annual procurement plans; and adoption of a decree creating and operationalizing the Public Procurement Regulatory Authority. This revised indicator is well defined, has credible baseline data, but has no clear target, although it had available data to measure the value of the indicator at closing. This results indicator is rated moderately unsatisfactory, because it lacked a target.

- Based on the foregoing ratings, the relevance of results indicators for this pillar is judged to be moderately unsatisfactory.

**Rating**

Moderately Satisfactory

### 5. Achievement of Objectives (Efficacy)

**OBJECTIVE 1**
### Objective

To improve the fiscal sustainability of the energy sector.

### Rationale

**Outcomes.** Only one of three outcome targets were met.

- Cross arrears among the government, SONABEL, and SONABHY were reduced from CAF 149 billion in 2015 and CAF 140 billion in mid-2016 to CAF 64.6 billion in 2018, failing to achieve the target that the cross arrears be reduced to under CAF 1 billion by 2018. The original target in the Program Document for DPF1 was to reduce the cross arrears to under CAF 60 billion. The arrears were largely cleared by 2017. The expectation then was that the arrears could be nearly eliminated by 2018, hence, the revised target to reduce arrears to under CAF 1 billion. However, arrears built-up anew in 2018 as central government expenditures for defense and security ballooned in response to a sharp rise in security incidents (the number of internally displaced people increased by 267,000 in three months to reach 486,000 in October 2018). By end-2018, the CAF 64.6 billion of cross arrears consisted of CAF 10.3 billion in subsidy to SONABEL, CAF 49.5 billion to SONABHY, and CAF 4.9 billion in finance charges, offset only by some CAF 0.8 billion in credit for the butane gas subsidy.

- EBITDA at SONABEL rose from CAF 40 billion in 2015 to CAF 40.7 billion in 2018, meeting the target for an increase to above CAF 40 billion. SONABEL managed to lower its average costs, mainly through imports of lower-priced electricity.

- Accounts receivables at SONABEL were only slightly cut from CAF 55 billion in 2015 to CAF 53.9 billion in 2018, failing to meet the target for a reduction to under CAF 39 billion. According to the ICR (page 18), the persistence of high receivable levels could continue to impair SONABEL’s operations.

### Rating

Moderately Unsatisfactory

### OBJECTIVE 2

**Objective**

To enable private sector participation in the energy sector and diversify the energy mix.

**Rationale**

**Outcomes.** Three of the four outcome targets were met.

- The percentage share of solar PV in total installed capacity increased from zero percent in 2015 to 9.8 percent in 2018 (34.1 MW of solar PV out of 355 MW of total installed capacity), only partly achieving the target for a 15 percent share. (The original target was stated in the Program Document for DPF1 as raising the maximum installed capacity for new solar plants from zero MW in 2015 to 77 MW in 2018). According to the ICR (page 18), the target is likely to be exceeded in the near-term considering the long list of signed contracts as well as plans for PV installation. Although solar PV
capacity installation was slower than expected through 2018, activity has picked up since. The Asian Development Bank and the African Development Bank are co-financing the installation for 53 MW in 2021, and the European Investment Bank, for 17 MW in 2022, and the Bank for 300 MW also in 2022. Altogether, some 30 MW of solar PV capacity is expected to be operational in 2020, 255 MW in 2021, and 317 MW in 2022.

- The capacity available on the interconnected network (excluding guaranteed imports), as a percentage of installed capacity, rose from 52 percent in 2015 to 82 percent in 2018, exceeding the target for an increase to 62 percent. SONABEL imported 1000 MW of less-expensive energy from Ghana, more than an originally-planned 400 MW, taking advantage of lower-cost electricity to advance capacity on the interconnected network by 20 percentage points higher than the target.
- The number of IPP projects successfully negotiated and signed increased from zero in 2015 to seven in 2018, exceeding the target for two IPP projects.
- The number of IPPs obtained under standardized competitive procurement processes increased from zero in 2015 to seven in 2018, exceeding the target for one IPP project. (The original target was stated in the Program Document for DPF1 as the percentage in the number of IPPs obtained under standardized competitive procurement processes from zero percent in 2015 to 50 percent in 2018).

Rating
Moderately Satisfactory

**OBJECTIVE 3**

**Objective**
To strengthen tax collection and public procurement processes.

**Rationale**

**Outcomes.** Two of three outcome targets were met.

- VAT revenues increased from 6 percent of GDP in 2015 to 6.93 percent of GDP in 2018, almost meeting the target to raise VAT revenues to 7 percent of GDP.
- Non-VAT revenues increased by more than two percentage points of GDP from 8 percent of GDP in 2015 to 10.21 percent of GDP in 2018, exceeding of 10 percent of GDP. (The original target was stated in the Program Document for DPF1 as raising non-VAT revenues from 9.5 percent of GDP to 10.5 percent of GDP). The new General Tax Code, which had been approved by the Council of Ministers and submitted to the National Assembly as part of the prior actions for DPF2, was enacted into law by the National Assembly in 2017.
- According to the Autorite de Regulation de la Commande Publique (ARCOP), the regulatory authority for public procurement, the percentage of all procurement (by value) completed within the time limit dropped from 87 percent in 2016 to 81.4 percent in 2018. The original target was to reduce the average number of days to complete a public procurement (from the issuance of the invitation to bid to the signing and approval of the contract) from 142 days in 2015 to 100 days by 2018. As noted, this indicator could not be measured during implementation. Hence, the completion of procurement within the time limit was substituted for the original outcome indicator. The ARCOP added other indicators to
Evidence improvement of the procurement process. The results were mixed: (a) the percentage share of competitive tenders (by value) in total procurement rose from 69.1 percent in 2016 to 79.8 percent in 2018 for equipment and supplies procurement, and (b) from 24.8 percent in 2016 to 67 percent in 2018 for services procurement. However, (c) the percentage share of single-source and restricted-tender contracts (by value) in total procurement rose from 0.6 percent in 2016 to 8.6 percent in 2018 for civil works procurement, and (d) from 16.9 percent in 2016 to 25.2 percent in 2018 for intellectual property procurement.

Rating
Moderately Satisfactory

Overall Achievement of Objectives (Efficacy)

Rationale
The overall efficacy of the program is rated as moderately satisfactory, meeting the outcome targets for two of the three objectives of the program.

Overall Efficacy Rating
Moderately Satisfactory

6. Outcome

Rationale
The relevance of prior actions was moderately satisfactory -- the prior actions were linked to the achievement of the program objectives in credible results chains and made moderate contributions to the achievement of the objectives. The relevance of results indicators was moderately satisfactory --- the results indicators were mostly adequate to measure the impact of the prior actions on the achievement of the program objectives, although there were attribution issues with two indicators. Most results indicators were clearly defined, had baseline data and clear targets, and had available for measurement. The efficacy of the first objective to improve the fiscal sustainability of the energy sector is assessed as moderately unsatisfactory principally because cross arrears among the Government, SONABEL and SONABHY rose anew in 2018 after having been largely cleared in 2017. The driver was an exogenous shock, however, as higher budgetary expenditures for defense and security in 2018 (arising from a dramatic increase in terrorist, conflict, and security incidents in 2017) impaired the Government's ability to pay subsidies to SONABHY. The efficacy of the second objective to enable private sector participation in the energy sector and diversify the energy mix is rated as moderately satisfactory as the
number of IPP projects approved and the available capacity on the interconnected network exceeded targets, with the target for solar PV capacity partly met. The efficacy of the third objective to strengthen tax collection and public procurement processes is rated as moderately satisfactory as targets for increases in revenues were met. The original measure to evidence improvement in public procurement could not be monitored, and the substitute indicators devised at implementation yielded mixed results at best.

a. Rating

Moderately Satisfactory

7. Risk to Development Outcome

There are substantial risks to the sustainability of the development outcomes of this program.

Security Risk. Burkina Faso is affected by "medium-intensity conflict", according to the Bank. Security challenges reflect the cross-border spillovers of terrorist activity in the Sahel region, which has increased in recent years (from around 40 incidents in 2011 to 110 in 2017). Conflict situations disrupt economic activity and lead to the diversion of government resources toward defense and security expenditures. The rapid increase in security expenditures in 2017 to around 2.3 percent of GDP impaired the ability of the Government to pay subsidies to SONABHY, according to the ICR (page 18). Cross arrears among the Government, SONABEL and SONABHY, which had been largely cleared in 2017, accumulated anew to CFAF 66.4 billion in end-2018, derailing the achievement of the first objective of this program (see Section 4, Objective 1).

Macroeconomic Risk. The third review by the International Monetary Fund (IMF) of the three-year Extended Credit Facility (ECF) arrangement for SDR 108.4 million (US$149.3 million) approved in March 2018 found: (a) macroeconomic performance to be satisfactory; (b) the near-term growth and fiscal balance prospects to be stable; but (c) the downside risks to the growth outlook and hence to the reform agenda to be high.

Political Risk. There is a risk that political commitment to energy pricing and energy subsidy reforms --- the full pass-through of fuel costs and the adoption of fully cost-reflective electricity pricing --- might falter and waver if political and social pressure to preserve the subsidies weighs heavily on the Government. The IMF finds in its third review of the ECF arrangement for 2018-21 that the implementation of the fuel price adjustment mechanism has not been entirely delegated to a technical committee as envisioned and that the Government missed fuel price adjustments that should have taken place in April and July 2019.

COVID-19 Risk. The COVID-19 pandemic has taken a major toll on Burkina Faso's economy. The Bank approved grants and credit of $21.15 million from the IDA in April 2020 to help Burkina Faso respond to the COVID-19 pandemic. The IMF also approved emergency assistance of US$115.3 million under the Rapid Credit Facility in April 2020 to help address urgent balance-of-payment needs triggered by the pandemic. The country is also expected to benefit from IMF debt service relief under the Catastrophe Containment and Relief Trust. In Burkina Faso, as elsewhere, the immediate challenge is to contain the spread of COVID-19, implement containment measures, strengthen medical care, and mitigate the socio-economic impact of the pandemic, especially on the most vulnerable, to preserve macroeconomic stability and recent development gains.
8. Assessment of Bank Performance

a. Bank Performance – Design

Rationale

Lessons From Prior Experience. The preparation of this program was informed by analytic work by the Bank, including the Public Expenditure Review in the Energy and Transport Sectors (2013), Independent Power Producers in Sub-Saharan Africa (2014), Medium-Term Strategy and Roadmap for Burkina Faso's Energy Sector (2016), Policy Note on Macroeconomic Management (2016), and Policy Note on Governance (2016). The operation was also informed by analytic work prepared by the IMF, including those contained in the IMF Staff Report on the Fourth and Fifth Reviews Under the Extended Credit Facility Arrangement (2016), the Sixth Review (2016), the Seventh Review (2017), and the IMF Staff Report on the 2016 Article IV Consultation.

This programmatic series was integrated with other Bank operations in the energy sector and fiscal policy and management in Burkina Faso.

- The Electricity Support Project, approved in 2013, aimed to expand access to electricity, improve the reliability of electricity supply, and foster the efficient use of energy. The project financed the construction of two diesel power stations and the extension of the grid to 40 communities. Supporting complementary goals, this program focused on renewable energy sources and imports of lower-cost electricity. The emphasis on electricity imports dovetailed with two other Bank projects linking Burkina Faso to the West Africa Power Pool --- the First Phase of the Inter-Zonal Transmission Hub Project of the West Africa Power Pool Program, approved in 2011, which connected Burkina Faso to Ghana in 2018, and the West African Power Pool for a North Core/Dorsale Nord Regional Power Inter-Connector Project, approved in 2018, which will connect Burkina Faso, as well as Benin and Niger, to Nigeria in 2022.

- The Economic Governance and Citizen Engagement Project, approved in 2016, aimed to enhance domestic revenue mobilization and improve the use of public resources by strengthening revenue collection systems, public expenditure management, and accountability mechanisms. Among other activities, the project examined revising the eligibility criteria and liability threshold for VAT and reorganizing VAT billing, which were precursors to the changes to the VAT invoicing system supported by this program. Additionally, the fiscal management reforms introduced with this program were to be strengthened with the First and Second Fiscal Management, Sustainable Growth, and Health Delivery Development Policy Operations, approved in 2019 and 2020. These new operations aim to improve revenue mobilization, among other objectives, through various tax administration reforms --- auditing the taxpayer identification system, establishing a registry of urban landholders, devising a system for assessing property values, simplifying taxes for micro-enterprises, and allowing the online filing and payment of taxes.

Risk Identification and Mitigation. The Bank identified risks to the program and proposed mitigation measures. According to Program Documents for DPF1 (page 30) and DPF2 (page 33), institutional capacity risk (capacity for implementation and sustainability) and environmental and social risk were substantial risks. The Bank cautioned about the implementation capacity of the Ministry of Energy and ARSE for the energy reforms and he Ministry of Economy, Finance and Development for the fiscal management reforms. However, the Bank asserted that the risk would be mitigated with continued technical assistance to the Government for program
implementation. The environmental and social risk was related to extreme climatic conditions (flooding and
drought in the Sahel region) that could affect agricultural production (food and cotton), strain government
finances (diversion of resources for disaster aid), and slow the pace of program implementation. The Bank said
that other operations were helping strengthen the government's capacity to monitor, assess, mitigate, and
manage environmental and social risks.

Although the Bank rated the institutional capacity risk as substantial, it acknowledged that the national
authorities --- the Council of Ministers and the unicameral National Assembly --- had the capacity and the
commitment to adopt the public policies, draft and enact the new laws, and issue the implementing decrees to
achieve the program objectives. The prior actions for which the Council of Ministers and the National Assembly
were responsible included, among others: the adoption of a national strategy for the energy sector for 2016-20;
the drafting and enactment of a new General Tax Code; the drafting and enactment of a new Procurement
Code; the issuance of laws for a competitive wholesale electricity market (see Section 5, Objective 2 and
Objective 3).

Stakeholder Consultation. The Bank assessed the potential social, poverty, environmental, and gender
impacts of this program.

- Program Documents for DPF1 (pages 25-27) and DPF2 (pages 28-29) expected the energy reforms
  supported by this program to help alleviate poverty in Burkina Faso, principally through greater access to
electricity by consumers, which would enhance household living conditions, and to firms, which would
raise firm productivity and create new jobs. The Program Documents also said that reforms to fiscal
management could be expected to have positive effects on poverty reduction in the medium
term. Improved tax collection would expand the fiscal space and free up resources for pro-poor
spending and improved public procurement would increase the efficiency of government spending.
- Program Documents for DPF1 (pages 27-28) and DPF2 (pages 30-31) asserted that shifting the
country’s energy mix from fossil fuels and biomass towards solar energy and electricity imports, fueled
mainly by renewable sources (hydropower), would cut greenhouse gas emissions, reduce local pollution,
and reduce deforestation. Meanwhile, fiscal management reforms were expected to have neutral or
positive effects on the environment.
- The reforms in energy and fiscal management did not have any explicit gender dimensions and the
operations did not have any person-related outcomes and results indicators. The Program Documents
only indirectly stated that improvements in fiscal management would help to finance programs in
education and health sectors, which, if they emphasized the school enrollment of girls and the delivery of
maternal health care services, would help promote gender equality.

Development Partners Coordination. The Bank and the IMF collaborated on the economic reform program in
Burkina Faso. The prior actions in this Bank-supported series and the performance criteria and indicative
targets in the IMF ECF programs in 2014-17 and 2018-21 were complementary. In its third review of the ECF
arrangement for 2018-21, the IMF stated that "the gradual implementation of the fuel price adjustment
mechanism is expected to reduce the burden of fuel subsidies on the state budget" and that sustained revenue
and expenditure efforts will help create "fiscal space for critical public investment, social sector priorities, and
security spending," with the authorities being "committed to step up efforts to broaden the tax base through
further simplification and computerization of the tax system." The Bank also coordinated energy investments
with other development partners in Burkina Faso, with the African Development Bank and European Investment
Bank co-financing solar PV IPPs (see Section 5, Objective 2).
b. Bank Performance – Implementation

Rationale

Monitoring. The Bank closely monitored progress in the context of the programmatic series and assisted the Government to monitor results indicators. The cross arrears indicator was difficult to measure. The Bank suggested that the Direction Générale du Trésor et de la Comptabilité Publique, the directorate for public accounts, redouble efforts to keep a running tally of monthly cross arrears. The number of days to complete a procurement process was also difficult to measure. The Bank asked the Government to explore alternative indicators to show evidence of procurement performance.

The Bank extended technical assistance to the Government in the preparation and drafting of the new General Tax Code, which was approved in 2017, and the new Procurement Code, which was approved in 2016. The technical assistance included capacity building for the implementation of the new laws. The Direction Generale de Impots, the directorate for tax, and the Direction Generale de Douanes, the directorate for customs, were able to jointly improve their databases, which helped with tax collection.

Adaptation. In the transition from DPF1 to DPF2, the Bank adjusted the indicative triggers for DPF2 because of changed conditions. The trigger to allocate funds in the Budget Law of 2018 to settle national government arrears in the energy sector as of 2016 (trigger 1) was expanded and became the prior action to clear arrears accumulated up to October 2017. Two triggers were reduced in scope --- the trigger to approve a legal framework for competition in fuel deliveries from SONABHY to SONABEL (trigger 2) became the prior action to implement Article 14 of the performance contract between the Government and SONABEL to decrease dependence on higher-cost energy sources; and the trigger to adopt a policy revising the eligibility criteria for VAT and reorganizing VAT billing (trigger 8) became the prior action to standardize VAT invoicing. One trigger was dropped and replaced with a new prior action --- the creation of an Electricity Sector Development Fund (trigger 6) was scrapped because of risks to budgetary integrity and accountability, and instead, the enactment of a law creating a competitive electricity market was adopted as a prior action.

The Bank coordinated closely with the IMF, as the macroeconomic environment worsened, with higher-than-expected fiscal deficits, in the period leading to the approval date for DPF2. The Bank participated in the IMF Article IV consultation in 2016 and 2018.

c. Overall Bank Performance

Rating

Moderately Satisfactory
Rationale

The overall performance of the Bank is rated as moderately satisfactory. Bank performance at design was moderately satisfactory. The prior actions were informed by Bank and IMF analytic work, integrated with other Bank operations and IMF programs in Burkina Faso, and aligned with the implementation capacity of the national authorities. The Bank identified the potential poverty, social and environmental impacts of the operations, identified the ex-ante risks to the implementation of the program, and proposed mitigation measures. Bank performance at implementation was moderately satisfactory. The Bank provided technical assistance to the Government and contributed to capacity building at the Ministry of Energy and Ministry of Economy and Finance, Direction Generale de Impots, the Direction Generale de Douanes, and the Direction Générale du Trésor et de la Comptabilité Publique for the energy and fiscal management reforms. It coordinated with the IMF on the economic reform program, with the West African Economic and Monetary Union on interconnections with the West Africa Power Pool, and with the Asian Development Bank, African Development Bank and European Investment Bank on investments in renewables. It adapted the triggers for use as prior actions for DPF2. And it helped the Ministry of Energy and the ARCOP with monitoring the results of the energy and procurement reforms.

Overall Bank Performance Rating

Moderately Satisfactory

9. Other Impacts

a. Social and Poverty

The ICR (page 22) argues that the expansion in installed generation capacity, including the increase in the import of electricity from the West African Power Pool, improved the supply of electricity to households and to enterprises, raising economic activity and living standards. Fuel costs rose during the operation from their depressed levels July-December 2014 but not beyond estimates made by the CIDPH, which would have triggered higher electricity prices at SONABEL and made electricity more costly to households and enterprises. The ICR, however, admits that none of these effects were measured; hence, the net poverty and social impacts of the energy reform could not be quantified.

b. Environmental

According to the ICR (page 22), the energy reforms supported by this program substantially cut carbon dioxide (CO2) emissions from electricity generation and consumption in Burkina Faso: (a) the use of solar PV rather than heavy fuel oil for electricity generation avoided 14,140 metric tons of CO2 emission in 2018, based on electricity production in the year of 56.2 gigawatt hours; (b) the importation of 560 gigawatt hours of electricity from Cote d'Ivoire, which produces 30 percent of its power from hydro sources, avoided 45,360 metric tons of CO2 emissions in 2018; and (c) the importation of 271 gigawatt hours of electricity from Ghana, which produces 50 percent of its power from hydro sources, avoided 38,780 metric tons of CO2 emissions in 2018. These
annual benefits in 2018 are expected to increase as solar PV capacity in the country expands and as more supply is sourced from the West African Power Pool.

c. Gender

The ICR does not mention gender at all.

d. Other

---

10. Quality of ICR

Rationale

The ICR provides an adequate record of the project, using tables to provide succinct summaries of many aspects of the project. The prior actions, indicative triggers, and results indicators are summarized in Table 3, the analytic backing for the prior actions in Table 9, and the outcome targets achieved in Table 7. The tables on cross arrears in 2018 (Table 4), on government plans for expanding electricity generation (Table 5), on procurement performance (Table 6), and CO2 emissions avoided (Table 8) also provide useful information, in quick summary form. What was not provided, but might have been useful, would have been time-series data on: energy subsidies (electricity and fuel); revenue performance (VAT and other taxes); and budgetary expenditures (including for defense and security).

The ICR offers a candid assessment of the program achievements.

The discussion on risk is less extensive than warranted. The ICR does not raise the question of the sustainability of political commitment to energy pricing and energy subsidy reform, when the pipeline of IPP projects will require even more firm decisions on pricing and subsidy reform.

a. Rating

Substantial

11. Ratings

<table>
<thead>
<tr>
<th>Ratings</th>
<th>ICR</th>
<th>IEG</th>
<th>Reason for Disagreement/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome</td>
<td>Moderately Satisfactory</td>
<td>Moderately Satisfactory</td>
<td></td>
</tr>
<tr>
<td>Bank Performance</td>
<td>Moderately Satisfactory</td>
<td>Moderately Satisfactory</td>
<td></td>
</tr>
</tbody>
</table>
Relevance of Results Indicators --- Moderately Satisfactory
Quality of ICR --- Substantial

12. Lessons

Three lessons are drawn from the ICR (pages 26-27), with some adaptation.

Governments and the Bank might consider including a contingency emergency response component in FCV situations, when security shocks impair a government's ability to maintain its fiscal obligations under a reform program. In this program, the escalation of Burkina Faso's spending for defense and security in 2018 impaired its ability to pay subsidies to SONABHY, raising arrears in the energy sector a year after they were largely settled. The ICR (page 26) speculates that emergency funding, presumably from external sources, could have helped the Government meet its defense and security expenditures while at the same time preserving the gains made earlier with the clearance of cross arrears in the energy sector. A heightened security risk is common in many FCV settings. Anticipating the implications of these events for government obligations under a reform program and planning for fiscal responses might be considered during program planning.

Basic tax administration reform measures can yield material contributions to revenue performance. While this program benefited from changes to Burkina Faso's General Tax Code as well as from the introduction of new specific taxes, improvements in tax administration possibly helped drive VAT and non-VAT revenue higher than in the baseline. These tax administration reforms included such basic improvements as giving clarity to tax invoices, facilitating payments by taxpayers, and cleaning-up tax databases, including by reconciling tax and customs datasets. According to the ICR (page 26), these improvements in tax administration helped foster tax compliance and broadened the tax base in Burkina Faso.

Resolving fuel pricing and electricity tariff distortions is needed to attract private equity financing for the power sector. In this program, the onrush of IPP projects is lending a sense of urgency to Burkina Faso resolving its fuel pricing and electricity tariff setting issues soon. Current reforms supported under this operation provided only partial pass-through of fuel costs and the adoption of fully-cost-reflective electricity tariffs. An inability to agree on costs and tariffs will derail the country's ability to obtain guaranteed equity financing (usually 30 percent of investment costs) and to cover additional investment costs for these IPP projects as they advance through the pipeline.

13. Project Performance Assessment Report (PPAR) Recommended?

No