



**Board of Executive Directors**  
**For consideration**  
On or after 15 June 2016

PR-4397  
31 May 2016  
Original: English  
**Public**  
**Simultaneous Disclosure**

**To:** The Executive Directors  
**From:** The Secretary  
**Subject:** Suriname. Proposal for a loan for the project "Support to the Institutional and Operational Strengthening of the Energy Sector III"

**Basic Information:** Loan type ..... Programmatic Policy-Based Loan (PBP)  
Borrower ..... Republic of Suriname  
Amount ..... up to US\$70,000,000  
Source ..... Ordinary Capital

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**Remarks:** This operation is the third loan in a programmatic series of three consecutive single-tranche operations, technically related to one another but independently financed as programmatic policy based loans, in accordance with document CS-3633-1, "Policy-based Loans: Guidelines for Preparation and Implementation. New version".  
  
As established in document GN-1838-1, "Criteria and norms for Board and Management relations", dated 1 July 1994, policy-lending operations are considered by the Board of Executive Directors by Standard Procedure.

**Reference:** GN-1838-1(7/94), DR-398-17(1/15), GN-2200-13(4/05), GN-2849(3/16), CS-3633-1(6/14), CS-4130(5/16), PR-3951(11/12), DE-188/12, PR-4075(10/13), DE-146/13



DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

**SURINAME**

**SUPPORT TO THE INSTITUTIONAL AND OPERATIONAL STRENGTHENING OF  
THE ENERGY SECTOR III**

**(SU-L1036)**

**LOAN PROPOSAL**

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Annex II	Policy Matrix

## ELECTRONIC LINKS

### REQUIRED

1. [Policy Letter](#)
2. [Means of Verification](#)
3. [Results Matrix](#)

### OPTIONAL

1. [Cost-Benefit Analysis](#)
2. [Monitoring and Evaluation Plan](#)
3. [Safeguard Policy Report](#)
4. [Suriname Power Sector Overview](#)
5. [Corporate Financial Assessment of EBS](#)
6. [Evolution of Policy Matrix](#)
7. [Public Utilities Policy Compliance Analysis](#)

## ABBREVIATIONS

AHP	Afobaka Hydropower Plant
CBA	Cost-Benefit Analysis
CS	Country Strategy
CSU	Country Office of Suriname
CIF	Caribbean Investment Facility
DEV	<i>Dienst Electrificatie Voorziening</i> (Department of Rural Energy)
EA	Executing Agency
EAS	Energy Authority of Suriname
EBS	<i>Energie Bedrijven Suriname</i>
ED	Energy Desk
ENIC	<i>Electricity Nieuw Nickerie</i>
EPAR	<i>Energie Voorziening Paramaribo</i>
FOB	<i>Stichting Fonds Ontwikkeling Binnenland</i> (Fund for the Development of the Interior)
GCI-9	Ninth General Capital Increase
GDP	Gross Domestic Product
GWh	Gigawatt hour
IDB	Inter-American Development Bank
km	Kilometers
kV	Kilovolt
kW	Kilowatt
kWh	Kilowatt-hour
MNH	<i>Ministerie van Natuurlijke Hulpbronnen</i> (Ministry of Natural Resources)
MOF	Ministry of Finance
MW	Megawatt
O&M	Operation and Maintenance
PBP	Policy-Based Programmatic
PPA	Power Purchase Agreement
PUP	Public Utilities Policy
SAIDI	System Average Interruption Duration Index
SBP	Strategic Business Plan
SEFS	Sustainable Energy Framework for Suriname
Staatsolie	<i>Staatsolie Maatschappij Suriname N.V.</i>
TC	Technical Cooperation
WAL	Weighted-average life

**PROJECT SUMMARY**  
**SURINAME**  
**SUPPORT TO THE INSTITUTIONAL AND OPERATIONAL STRENGTHENING OF**  
**THE ENERGY SECTOR III**  
**(SU-L1036)**

Financial Terms and Conditions				
Borrower: Republic of Suriname			Flexible Financing Facility <sup>(a)</sup>	
			Amortization Period:	20 years
Executing Agency: Ministry of Finance (MOF)			Original WAL:	12.75 years
			Disbursement Period:	1 year
Source	Amount (US\$)	%	Grace Period:	5.5 years
IDB Ordinary Capital (OC):	70,000,000	100	Supervision and Inspection Fee:	(b)
			Interest rate:	LIBOR-based
			Credit Fee:	(b)
Total:	70,000,000	100	Currency of Approval:	U.S. dollars chargeable to the Bank's OC
Project at a Glance				
<p><b>Project Objective/Description:</b> the general objective of the program is to increase the efficiency, transparency, sustainability and accountability of the power sector. The specific objectives are: (i) to develop an institutional and regulatory framework; and (ii) to strengthen the corporate capabilities of the sector to supply electricity in an economic, efficient and sustainable manner.</p> <p>This operation is the third and final in a programmatic policy-based series of independently and technically connected loans, in accordance with the Guidelines for Preparation and Implementation for Policy-based Loans (document CS-3633-1). The operation will consolidate the support for the policy reforms and sector decisions envisioned in the program, including the approval of a sector policy with an accompanying legal and institutional framework, a revised electricity tariff that reflects price-setting principles and improvements in <i>N.V. Energie Bedrijven Suriname</i> (EBS)'s corporate capacity and governance.</p>				
<p><b>Special Contractual Clauses prior to the first disbursement:</b> the single disbursement of loan resources will be subject to compliance with the policy conditions summarized in the Policy Matrix (Annex II) and in the Policy Letter (¶4.1), as well as compliance with the conditions contained in the loan contract.</p>				
<p><b>Exceptions to Bank Policies:</b> none.</p>				
Strategic Alignment				
<b>Challenges<sup>(c)</sup>:</b>		SI <input type="checkbox"/>	PI <input type="checkbox"/>	EI <input type="checkbox"/>
<b>Cross-Cutting Themes<sup>(d)</sup>:</b>		GD <input type="checkbox"/>	CC <input checked="" type="checkbox"/>	IC <input checked="" type="checkbox"/>

<sup>(a)</sup> Under the Flexible Financing Facility (FN-655-1), the borrower has the option to request modifications to the amortization schedule as well as currency and interest rate conversions. In considering such requests, the Bank will take into account operational and risk management considerations.

<sup>(b)</sup> The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors during its review of the Bank's lending charges, in accordance with the relevant policies.

<sup>(c)</sup> SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

<sup>(d)</sup> GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

## I. DESCRIPTION AND RESULTS MONITORING

### A. Background, Problem Addressed, Justification

- 1.1 **Macroeconomic framework.** Suriname's economy is highly concentrated in the extractive industries—specifically gold, oil, and bauxite—which plays a key role in driving growth, employment and government revenues. On average, these sectors account for roughly 30% of Gross Domestic Product (GDP), 90% of total exports and 25% of government revenue. The Surinamese economy grew at a relatively high average yearly rate (3.8%) for most of the past decade; with macroeconomic stability (the fiscal deficit averaged 0.8% of GDP with an average current account to GDP surplus of 1.2%). However, when oil and gold prices fell, the economy faltered. GDP growth rates slowed to 1.8% in 2014 and 1.5% in 2015; and macroeconomic imbalances appeared (the fiscal and current account balances to GDP deteriorated to -10% and -14%, respectively in 2015).
- 1.2 The recent decline in commodity prices has contributed to a worsened external position in the past three years. Increased spending and reduced capital inflows also placed pressure on exchange rate stability. The foreign reserve position fell by 47% to US\$330.2 million (estimated at 2.1 months of import cover). As a result, the spread between the official and reported parallel exchange rate market widened by as much as 40 percent between 2015 and mid-March 2016. To align these two rates, the exchange rate against the US dollar was devalued by 25% in November 2015 and further depreciation (about 27%) occurred when the pegged exchange rate regime was converted to a managed float in March 2016. An improvement of the current account is expected in 2016 due to an increase in export volume given the start of operations of a large gold mining company. This trend will depend on international gold and oil prices stabilizing and improving in the medium term.
- 1.3 Lower revenues from the mineral sector weakened the fiscal position and subsequently increased the debt stock. The fiscal deficit at the end of 2015 is estimated at 10% of GDP, an increase of 4.2% over 2014 owing to a drop in total revenues (by 2.5% of GDP) and an increase in current expenditure (by 4.6% of GDP). Government outlays on subsidies and transfers were about 7% of GDP in 2015, with transfers to the power utility company comprising the bulk of this share. The worsened fiscal position increased Suriname's total debt stock, by 13% to 39.8% of GDP at the end of 2015. Though the debt ratio is low in comparison to countries in the LAC region, sustainability is partially dependent on commodity prices increasing. The International Monetary Fund (IMF) has projected a gross financing gap of US\$486 million for 2016 (10% of GDP). This operation represents about 15% of the country's financing needs.
- 1.4 With limited fiscal space for demand-side measures and in light of low growth from weak commodity prices and a subsequent slowdown in the extractive industry; it is expected that the government will adopt policies to ensure macroeconomic stability via structural reforms to foster sustained medium-term growth. This strategy will likely be shaped by an IMF program (currently under discussion), interrelated structural reform measures, strengthened institutional

capacity of the public sector, and sufficient information and data for evidence-based analysis and policy formulation.

- 1.5 **Energy sector.** The *Ministerie van Natuurlijke Hulpbronnen* (Ministry of Natural Resources, MNH) has responsibility for energy policy and supervision of the energy sector. The absence of a legal and regulatory framework for the power sector has resulted in the organization of the power sector based solely on contractual arrangements between the Government of Suriname and public and private companies.
- 1.6 *N.V. Energie Bedrijven Suriname* (EBS) is the state-owned power utility company supervised by the MNH and in charge of the operation of the power system. EBS's operations entail generation, transmission, distribution and commercialization of electricity. EBS shares its responsibility for rural electrification with the *Dienst Electrificatie Voorziening* (DEV), the MNH's department of rural energy, which operates small power systems in isolated and remote communities where EBS networks do not reach customers. In addition to DEV, the *Stichting Fonds Ontwikkeling Binnenland* (Fund for the Development of the Interior, FOB) is a foundation under the Ministry of Regional Development which plays an important role in rural electrification by developing grid extension projects and small power plants, which then are transferred to the DEV for Operation and Maintenance (O&M). *Staatsolie Maatschappij Suriname N.V.* (Staatsolie), the wholly state-owned oil company is engaged in the exploration, production, refining and trading of crude oil and oil products and since 2006 has generated electricity from its thermal power plant at Tuit Lui Faut refinery.
- 1.7 **Power sector infrastructure.** EBS operates seven isolated power systems in Suriname, serving over 145,000 customers. Overall electricity consumption in 2014 accounted for 1,410Gigawatt-hour (GWh) with the residential sector as the largest client group representing 88% of customers and 46% of total energy consumed. The commercial and small industrial sector is the second largest group with 11% of total customers and 31% of total energy consumption, while the remaining 1% of customers is classified as 'other consumers' with 23% of energy consumption.<sup>1</sup>
- 1.8 The *Energie Voorziening Paramaribo* (EPAR) is the largest of EBS's power systems, serving over 129,000 customers in the Paramaribo and surrounding areas, with a peak demand of approximately 205Megawatt (MW). The transmission infrastructure in EPAR accounts for 27km of 161kilovolt (kV) lines and 315km of 33kV lines, while distribution is provided through 1,200km with 12kV lines and 300km with 6kV lines.
- 1.9 The electricity supply in EPAR depends on the following three sources of generation: (i) the Afobaka Hydropower Plant (AHP), consisting of six turbines with an installed capacity of 189MW, which has been used as the base-load power plant providing low-cost electricity to EPAR. The AHP was constructed in the 1960's by Suralco under the Brokopondo Agreement. The agreement

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<sup>1</sup> Sub-groups within the 'other consumers' category include: (i) non-residential; (ii) industrial; (iii) social institutions; (iv) public lighting; and (v) billboards.

established that Suralco should supply 16MW to the Government of Suriname. When the associated smelter operation closed in 1999, a new agreement was signed and established an increase in supply of up to 135MW; (ii) EBS's own thermal generation is located in the Saramaccastraat Power Plant in Paramaribo, which comprises internal combustion engines running on fossil fuel, with a total installed capacity of 167MW; and (iii) Staatsolie's 98MW fossil fuel power plant located in Tuit Lui Faut refinery, which supports its crude oil processing operations and sells electricity to the government.

- 1.10 The *Electricity Nieuw Nickerie* (ENIC) sub-system serves roughly 10,000 customers in the district of Nickerie and is the second largest power system in Suriname. Electricity is distributed through 12kV lines from the Clara power plant, a generation facility owned by EBS with an installed capacity of 16.6MW running on fossil fuel.
- 1.11 The remaining power systems are located at: (i) Albina and Moengo in the Marowijne district; (ii) Apoera in the Sipaliwini district; (iii) Wageningen in the Nickerie district; and (iv) Totness in the Coronie district. These five power systems have, in combination, an approximate installed capacity of 22.2MW through fossil fuel power plants that supplies electricity to over 5,000 customers, located mainly in the coastal zone.
- 1.12 EBS's transmission and distribution infrastructure suffers from critical weaknesses and some of its components are no longer adequate to handle current demand loads, greatly limiting the effective operation of the system. This is evidenced by the high rate of System Average Interruption Duration Index (SAIDI) in the EPAR, which currently stands at 18.5 hours in comparison to a Latin America and Caribbean average of less than 12 hours.<sup>2</sup> The Bank is supporting the Government of Suriname to improve reliability of electricity supply by focusing on operational capacity and transmission and distribution infrastructure (¶1.26).
- 1.13 The Government of Suriname applied an implicit policy of low and affordable electricity tariffs by subsidizing the cost of electricity to the final consumer while also financing EBS's fuel purchases. This practice has been in place since 1972, when the government started providing these subsidies in order to cover EBS's operational losses incurred in the production and distribution of electricity.
- 1.14 **Problem.** Suriname is experiencing a significant growth rate in electricity demand. Over the past five years, demand has averaged 6.8% annually and estimates show it will double within five years as a direct effect of Suriname's economic development. Without an integrated, legal and regulatory framework to effectively govern its activities, agency roles and responsibilities are duplicated and there is limited vision for how to respond appropriately to promote the required investments in energy generation and to implement least-cost expansion planning, given the old and weak transmission and distribution infrastructure. It is not surprising that System Average Interruption Frequency

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<sup>2</sup> The World Bank (2008) "Benchmarking Analysis of the Electricity Distribution Sector in the Latin American and Caribbean Region". Washington, DC.

Index (SAIFI) and SAIDI for 2013 reflect a decaying tendency in the reliability of the network, compared with values of 2012 and 2011.

- 1.15 While the government, with support from the Bank, has already made substantial efforts to improve transmission and distribution infrastructure (¶1.26), the rise in electricity demand and the urgent need to mitigate the risk of blackouts and brownouts,<sup>3</sup> requires additional actions to provide the sector with sufficient funding for investment. Security of supply and quality of provision requires improved coordination and planning between the key stakeholders. One aspect of this involves a revision of the tariff schedule ensuring cost-recovery principles are enshrined in the legal and regulatory structure so as to enable improved planning of energy supply over the long-term. The tariffs have stayed the same since 2002 and EBS has consistently shown net operational losses. Although EBS is established as a corporation, it depends on the government's subsidies, loans and hydro energy supply prices from AHP to maintain this precarious financial equilibrium.<sup>4</sup> Electricity rates in Suriname do not cover the costs of supply, least of all, investments in the power system. Assessing EBS's cost of production at approximately 22US¢/kWh and observing average tariffs of 7.6US¢/kWh indicates that subsidies have been accounting for 65% of the cost of production. This reduces EBS's financial capacity to invest in infrastructure and to ensure quality of service, resulting in postponed or scaled-down investments that ultimately compromise the sustainability of the power sector.
- 1.16 Studies suggested that this rate would have to increase to cover operating and investment costs, while leaving room for an appropriate return on investment.<sup>5</sup> In summary, subsidies are only sufficient to cover EBS's most urgent expenses but not to enable the company to develop and implement a long-term business plan. In addition to financial sustainability through a tariff increase, EBS as key stakeholder in the energy sector needs to modernize its corporate governance and operative capacities in order to provide electricity service more efficiently and within the minimum international standards required of a growing utility.
- 1.17 Closely related to the issue of weak quality in service provision and increased costs is the concern of electricity supplied in the rural areas.<sup>6</sup> Rural households, outside of EBS's coverage areas, are not charged for service provision, as all the costs are absorbed by the Government of Suriname. The provision of electricity to villages in the interior is expensive in nature because of low efficiencies of the generating units and high transportation costs. About 125 villages in the hinterland, accounting for roughly 30,000 people, are being intermittently served

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<sup>3</sup> [3403/OC-SU loan proposal](#) "Support for the Implementation of the EBS Investment Plan".

<sup>4</sup> [Corporate Financial Assessment of EBS](#); Gattelet, R. (2013).

<sup>5</sup> [Corporate Financial Assessment of EBS](#); Gattelet, R. (2013). In contrast to most neighboring Caribbean countries, EBS does not pass on variable fuel costs to consumers in the form of a fuel surcharge/rebate. Unable to generate sufficient funds through the sale of electricity, the company has maintained a delicate financial situation supported by various government's subsidies. When fuel costs increased sharply, government's subsidies matched those increases, rising from 26% of overall revenue in 2009 to 55% by 2013.

<sup>6</sup> Suriname is considered to have a relatively high coverage of electricity. The national electrification level in 2012 was estimated at 89%, with 83% of the population served by EBS mainly in the coastal areas, and 6% reliant on discontinuous rural electrification services, served by DEV in the hinterlands, according to the General Bureau of Statistics in Suriname (ABS).

with small generators, owned and operated by the DEV, with an approximate installed capacity totaling 6.2MW.<sup>7</sup> The electricity service provision covers an average time of six hours per day, from 5:00 pm to 11:00 pm. The supply of fuel for the rural villages served by the DEV is undertaken on a monthly basis, and in many cases, entails transportation by boat or airplane.<sup>8</sup> The total estimate in 2014 for the MNH to cover this service amounted to 14,150,000 Suriname Dollars (around US\$4.3 million), affecting government budgets and necessary energy infrastructure and maintenance investments which are then postponed, dismissed or scaled down.

- 1.18 The Government of Suriname's ability to adequately meet the energy needs of populations in the rural areas is affected by the absence of a single entity responsible for the organization and oversight of the sector, and the lack of coordination among sector entities, such as the MNH, EBS, the DEV and Staatsolie.<sup>9</sup>
- 1.19 Therefore an enabling environment reflected in the legal and regulatory structure is critical to ensuring the long-term reliability and cost-effective supply of electricity in Suriname. Without an overarching framework, there is an absence of secondary regulations for the sector, for example, in relation to tariff and subsidy methodology-setting and sector planning. Uncoordinated decisions by individual stakeholders have resulted in a disconnected and patchwork approach to improving the energy sector that is not part of a long-term plan based on informed decision-making. Econometric analysis assessing whether market reforms can be associated with improvements in the overall performance of the electricity industry in Latin America suggests that regardless of country characteristics and the level of private participation in the power sector, an efficient institutional and regulatory setting is key to the sound performance of the electricity sector.<sup>10</sup>
- 1.20 Taken together, these challenges outlined the need for the establishment of a fundamental legal and institutional base from which to develop the long-term vision for the energy sector in Suriname, the implementation of a revised tariff schedule and the support for EBS's efforts towards improved corporate capabilities.
- 1.21 **Government of Suriname's strategy.** There was no specific legislation to govern the power sector's activities, such as a Sector Act, License, Regulatory Code or dedicated policy or regulatory institutions. Aiming at safeguarding the energy sector in terms of availability, affordability and sustainable practices, the government is addressing the main sector constraints and challenges with a comprehensive strategy which includes: (i) the implementation of basic regulatory instruments to define a legal and institutional framework; (ii) improving

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<sup>7</sup> The installed capacity of the generators in the hinterlands varies according to the size of the community and ranges from 9 kW to 450 kW.

<sup>8</sup> According to MNH's budget for 2014, 125 villages receive monthly a total of 173,517 liters of diesel for electricity generation and 48,800 liters of gasoline to be used for transportation of the diesel fuel.

<sup>9</sup> Cost-Benefit Analysis, 3059/OC-SU and 3403/OC-SU.

<sup>10</sup> [Privatization, Institutional Reform, and Performance in the Latin American Electricity Sector](#); Balza, L.; Jimenez, R.; Mercado, J. (2013).

EBS's corporate and operations capabilities in order to enhance its performance; and (iii) improving EBS's financial sustainability through adequate cost-recovery for the electricity service.

- 1.22 **Solution.** The government has prioritized the establishment of a Sustainable Energy Framework for Suriname (SEFS). Supported by the IDB through a series of Policy-Based Programmatic (PBP) loans, the government has shaped and defined the SEFS since 2012, with the objective of organizing the energy sector to obtain improvements in financial sustainability and improved service provision. Given the key role that EBS plays in the sector, the program addresses specific corporate capabilities that will need to be strengthened to improve corporate governance, transparency and accountability required of a growing utility operating to international standards.
- 1.23 The PBP loan approach was envisioned as a set of three individual lending operations that would support and move in parallel with the energy reform process. This instrument provides the necessary flexibility to respond to technical and regulatory developments alongside the efforts undertaken by the Government of Suriname. The program has developed operations that, although independently delivered, are technically interlinked, with connected and coherent institutional and policy goals to be met in 2012, 2013, and 2016 respectively. The first operation (2848/OC-SU, US\$15 million), approved and disbursed in 2012 had the following objectives: (i) support the government in commencing the process of policy and legislation formulation by drafting policy documents and the establishment of basic regulatory norms and institutional structure for the sector; (ii) create a dedicated office within the MNH, as a focal point for sector dialogue and coordination of the reform process; (iii) prepare an expansion strategy to improve supply efficiency by EBS; and (iv) strengthen EBS's corporate governance through the development of a corporate assessment to identify upgrade requirements and areas of improvement. The second operation (3062/OC-SU, US\$10 million), approved and disbursed in 2013, sought to start the implementation of certain regulations and management practices that would: (i) reduce O&M costs of the system; (ii) review the current tariff schedule; (iii) draft a model contract for the purchase of electricity from third party generators; (iv) assess the potential of low-carbon energy technologies; (v) improve access to sustainable and quality energy; and (v) foster an increase of the electricity coverage in Suriname. As a way of advancing the development of the legal and institutional framework to incorporate all the above themes, the GOS opted for the establishment of an Energy Desk (ED). While this provided a good focal point for coordinating the preparatory work, the legal and institutional structure essential to establish a regulatory and planning agency required more form and definition.
- 1.24 This third operation is the last in the PBP series, and seeks to strengthen previous interventions, consolidating the sector reform by deepening and broadening its implementation. While the specific goals are defined in the Policy Matrix, the key interventions can be summarized as follows: (i) approval of a sector policy with an accompanying legal and institutional framework; (ii) a revised electricity tariff that reflects price-setting principles; (iii) implementation of environmental and sustainability practices; and (iv) improvements in EBS's corporate capacity and governance.

- 1.25 The program has built upon experience gained in its initial stages, as well as from other initiatives in the region,<sup>11</sup> to address reliability of electricity provision, in the context of limited technical, institutional and financial resources to deliver the required energy service. Additionally, the program has used the lessons learned from previous PBPs to guide the design of this operation. In particular, attention has been paid to efforts that support the revision of the tariff schedule so that it reflects price-setting principles and also to the definition of a stand-alone Energy Entity, which is central to the execution of the proposed new legal framework. Furthermore, given the expected increase in energy demand over the next years, and the key position that EBS will continue to play in the sector, this operation has taken into account and complements other IDB interventions in Suriname that help to strengthen the utility's corporate and operational capacities (¶1.26).
- 1.26 **Sector knowledge and IDB operations in the sector.** In providing the enabling environment for further development of the sector in Suriname, the program complements the following IDB operations focused on supporting energy infrastructure and EBS's corporate capacity and operations: (i) loan 3059/OC-SU "Support to Improve Sustainability and Accessibility of the Electricity Service" approved in 2013, which has disbursed 45% of the funds and is expected to yield the first results by 2016; and (ii) loan 3403/OC-SU "Support for the Implementation of the EBS Investment Plan" approved in 2014, which has disbursed 6% of the funds with expected results starting in 2017. Both operations will finance the upgrade and development of prioritized power distribution infrastructure, providing financial resources for the improvement of the power system's priorities.
- 1.27 The Bank has also supported the Government of Suriname with Technical Cooperation (TC) resources to finance: (i) a comprehensive power sector assessment<sup>12</sup> that consolidated sector knowledge, developed thorough analysis, and supported discussions on sector policy and system expansion options; (ii) the development of draft Power Purchase Agreements (PPA) contracts; (iii) an assessment of the current tariff structure and the development of tools to evaluate revised tariff schedules; (iv) an assessment of EBS's generation and transmission expansion scenarios; (v) a feasibility study for the introduction of natural gas in the Caribbean; and (iv) support on rural electrification and renewable energy planning. These efforts are complemented by parallel inputs from IDB's grants GRT/FM-13774-SU and ATN/ME-13406-SU, with contribution from the Global Environment Facility and the Multilateral Investment Fund respectively, which focus on increasing electricity coverage and service sustainability to the rural population. These two operations consistently contribute to the overall sustainability of the sector.<sup>13</sup>

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<sup>11</sup> Ecuador, Support for the Transition of the Energy Matrix in Ecuador (3420/OC-EC); and Peru, Development of a New Sustainable Energy Matrix Program IV (2847/OC-PE).

<sup>12</sup> ATN-SF-9038-SU, financed the "Suriname Power Sector Assessment and Alternatives for its Modernization", developed by KEMA consultants and completed in December 2008.

<sup>13</sup> The IDB is currently working on the potential leverage of European Union's Caribbean Investment Facility (CIF) funds. These funds would be allocated to support activities comprised under Component II, Sustainable Rural Electrification, of loan 3059/OC-SU.

- 1.28 **The results of the previous PBP operations.** The GOS complied with the agreed policy conditions for the first and second operations (2848/OC-SU; 3062/OC-SU). Some of the many outcomes include the following: (i) the draft Power Sector Policy, which proposes orientation for sector reform outlining priorities regarding the safeguarding of energy security in Suriname. This policy document guided the drafting of an Electricity Act, the definition of roles and responsibilities of main stakeholders in the sector and also called for the establishment of an energy authority. The carefully designed policy framework was the basis for the legislative package prepared under this program; (ii) the MNH set up the ED as the specific office to coordinate the energy sector's activities. With a focal point to exchange stakeholder opinions regarding legal and institutional options for the framework, the MNH through the ED was able to organize Suriname's first Energy Week in 2014, at which high level strategic dialogue further defined actions towards the development of the energy sector; (iii) EBS and MNH worked in close coordination to develop a revised electricity tariff schedule; (iv) EBS's Strategic Business Plan 2011-2020 (SBP) is being implemented and lays out the principles for the company's public grid expansion, organization development, investment regime, financial analysis and change management; and (v) the development of a new PPA contract model to foster efficiency in the purchase of electricity.
- 1.29 **Alignment with the Update to the Institutional Strategy 2010-2020 and the Corporate Results Framework 2016-2019 (GN-2727-6).** The program is consistent with the Update to the Institutional Strategy (UIS) 2010-2020 (AB-3008) and is aligned with the cross-cutting themes of: (i) climate change and environmental sustainability; and (ii) institutional capacity and rule of law, by: (a) supporting the development of a feasibility study for the implementation of renewable energies; and (b) establishing a new institutional and legal framework for the energy sector. Additionally, the program will contribute to the Corporate Results Framework 2016-2019 (GN-2727-6) (CRF) by: strengthening EBS corporate capabilities (Component III), in alignment with the Country Development Results Output Indicator: "Government agencies benefited by projects that strengthen technological and managerial tools to improve public service delivery".
- 1.30 **Alignment with IDB Country Strategy (CS).** The program's support to a reform agenda is consistent with the IDB Country Strategy with Suriname 2011-2015 (GN-2637-3), which has as an overall objective to support Suriname's reform agenda. The CS is assisting Suriname with transitioning to a more structurally sustainable economic model through better governance, stronger growth rates, increased living standards, improved human capital and equity.
- 1.31 The CS identified energy as one of its seven priority areas, and focuses on: (i) revamping the regulatory framework; (ii) strengthening operational efficiency in EBS, including corporate governance; (iii) modernizing and expanding generation (introducing lower carbon intensity technology, including hydro, solar photovoltaic, and co-generation); (iv) improving the capacity of the transmission and distribution network to reduce operational costs and improve reliability in the delivery of power; and (v) increasing the use of efficient technologies for conventional fuel. In the long-term, this strategy should contribute to reduce oil-dependence, and expand electricity service coverage in isolated locations.

- 1.32 **Coordination with other Multilateral Development Banks.** The IDB is working closely with the Caribbean Development Bank with the aim of leveraging parallel financing, and also with the European Union's Caribbean Investment Facility (CIF) to provide grant resources for sustainable rural electrification.
- 1.33 **Alignment with the Public Utilities Policy (PUP).** The program meets the IDB's PUP (document GN-2716-6) conditions of: (i) economic evaluation, by taking into consideration the benefits of EBS's power system expansion (§1.43) as a fundamental element of sector planning supported by the program (§1.38); and (ii) financial sustainability, considering that as a result of the program, the Government of Suriname is taking actions towards the implementation of a revised tariff schedule based on cost-recovery principles and will include a revision of the current subsidy levels (§1.37b), which according to the provisions set forth in the Electricity Act will be targeted. The government's budgetary allocation to subsidize the provision of electricity by EBS is transparent. The program is also aligned with the objectives of the PUP in terms of: (i) promoting access to electricity by supporting the development of renewable energy projects; (ii) increasing the delivery of a reliable, quality service by enhancing EBS corporate and operational performance; (iii) delivering a service efficiently by improving reliability of the electricity service in urban and rural areas; and (iv) creating suitable incentives for service demand by improving the conditions of supplying electricity to consumers. (See [Public Utilities Policy Compliance Analysis](#)).
- 1.34 The program is also consistent with the IDB's Sustainable Infrastructure for Competitiveness and Inclusive Growth Strategy (document GN-2710-5) by: (i) supporting the construction and maintenance of socially and environmentally sustainable infrastructure, thus enhancing quality of life; and (ii) promoting the ongoing improvements in infrastructure governance to enhance efficiency in the delivery of infrastructure services.

## **B. Objective and Components**

- 1.35 **Program objectives.** The general objective of the program is to increase the efficiency, transparency, sustainability and accountability of the power sector. The specific objectives are: (i) to develop an institutional and regulatory framework; and (ii) to strengthen the corporate capabilities of the sector to supply electricity in an economic, efficient and sustainable manner. This operation is the third and last in a programmatic policy-based series of independently and technically connected loans, in accordance with the Guidelines for Preparation and Implementation for Policy-based Loans (CS-3633-1). This operation will consolidate support for the policy reforms and sector decisions envisioned in the program, including the approval of a sector policy with an accompanying legal and institutional framework, a revised electricity tariff that reflects price-setting principles and improvements in EBS's corporate capacity and governance.
- 1.36 **Component I. Macroeconomic stability.** This component seeks to monitor and ensure that the Government of Suriname maintains a sustainable macroeconomic framework that is consistent with the objective of the program and the Policy Matrix.

1.37 **Component II. Development of a sustainable power sector framework.** The program will support the evolution of an energy policy, institutional, legal and regulatory framework for the energy sector in Suriname.

- a. **Regulatory and legal framework.** This sub-component will contribute to a more effective power sector by supporting: (i) the approval of a Power Sector Policy for Suriname that establishes the basic principles for the sustainable growth of the energy sector, consistent with its new legal and institutional structure; and (ii) the presentation to Parliament of the draft Electricity Act that will regulate the organization and functioning of the electricity sector.<sup>14</sup> The Electricity Act aims to address the shortcoming of the sector by: (a) defining the institutional framework and responsibilities of all energy sector entities, (b) determining the role and responsibilities of an energy authority, (c) creating rules and guidelines detailing the changes in roles and responsibilities, (d) defining what represents an acceptable level of energy security, and (e) delineating clear boundaries for the energy authority to ensure independence on the one hand, and sufficient stakeholder input on the other.
  
- b. **Implementation of Sector Institutions.** The program, through this sub-component, supports the development of instruments, mechanisms and necessary organizational arrangements to enable a commercially-based operation and clear social, economic and financial incentives to achieve efficiency. The program has set up the following policy conditions for this sub-component: (i) draft legislation that creates the Energy Authority of Suriname (EAS) presented to Parliament for its approval.<sup>15</sup> This policy condition has changed from the previous operation (3062/OC-SU) to reflect a change in view by the government that the EAS should be defined by law as opposed to the set-up of an entity that only requires ministerial approval, and that its role be more central and authoritative regarding sector planning and regulation. Having the EAS created by law improves the institutional and legal infrastructure to ensure a clear single entity responsible for oversight of the sector. Having the definition, structure and responsibilities of the EAS in a legal Act ensures a greater level of coherence in function between the agencies and avoids duplication or overlap of mission and activities. The EAS will be responsible for the formulation and implementation of an Electricity Sector Plan and will facilitate communication and cooperation among energy sector entities. In summary, while the set-up of the ED was timely, cost-effective and supported the preparation of drafts and coordination of stakeholder inputs to the draft legislation as per the first two PBP operations, the scope of the newly envisioned EAS is substantially broader than what was originally anticipated. It rightly forms an integral component of the new structures proposed by the draft Electricity Act and provides a more coherent and decisive place within Suriname's energy

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<sup>14</sup> The office of the President of Suriname submitted the draft Electricity Act (Elektriciteitswet 2015) to Parliament on August 28<sup>th</sup>, 2015, which was subsequently discussed and approved by the Parliament of Suriname on March 1<sup>st</sup>, 2016.

<sup>15</sup> The office of the President of Suriname submitted the draft Energy Authority of Suriname Act (Wet Energie Autoriteit Suriname) to Parliament on August 28<sup>th</sup>, 2015, which was subsequently discussed and approved by the Parliament of Suriname on March 1<sup>st</sup>, 2016.

sector; (ii) price setting principles are reflected in a new tariff schedule. EBS has started the implementation of the first stage of a tariff adjustment program which is scheduled for a timeframe of one year. The adjustment will be completed along three stages, after which it is expected that EBS will no longer require government subsidies. The first stage came into effect on October, 2015 and entailed a tariff increase for all groups of consumers, including residential, commercial and industrial. In the case of residential customers, the average price of electricity increased from 0.17 SRD/kWh to 0.35 SRD/kWh<sup>16</sup>, a relative increase above 100%. In order to protect the most vulnerable consumers, during the implementation of the first stage, the Government of Suriname established a special tariff for small households using up to 150 kWh per month, with a tariff of SRD0.15 plus a flat rate of SRD10.85. The remaining two other tariff adjustment stages are programmed for 2016.

- c. **Preparation of an Expansion Strategy to Improve Supply Efficiency.** This sub-component seeks to improve the economic and technical efficiency of EBS's electricity purchases, while contributing also to climate change and environmental sustainability. More specifically, the program will support: (i) the use of EBS's new PPA contract model, as required also by the new Electricity Act; (ii) the implementation of environmental and social sustainability principles throughout the project cycle (from planning to execution); and (iii) the completion of at least one feasibility study for the implementation of renewable energy technologies to increase energy access.

- 1.38 **Component III. Strengthen sector corporate capabilities.** Following up on the actions taken during the first and second PBP operations, Component III aims to support efforts to strengthen EBS's corporate governance, transparency and accountability. The program will support technical and corporate governance improvements to enable the company to strengthen its strategic decision-making capacity and operate to international standards. The sub-components reflecting this support include: (i) the execution of the EBS's expansion plan; (ii) the implementation of technical recommendations from a corporate assessment that include improvements in monitoring the transmission and distribution of electricity; and (iii) the update of EBS's corporate and operational instruments, codes and laws, according to findings from corporate internal assessment.

## C. Key Results Indicators

- 1.39 The program will benefit the total population of Suriname, through a more efficient and sustainable power supply. Gains in efficiency will benefit the economy and boost confidence in the capacity of the power sector to supply an increasing demand which will in turn foster growth within the commercial and industrial sectors. The government will benefit from a reduction in financial

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<sup>16</sup> Based on the residential sector electricity consumption of 2013. For that year, EBS sold a total of 603 GWh to residential customers, with revenue of 102 million Suriname Dollars. After the first stage of the tariff adjustment, the yearly revenues for the residential sector are expected to grow up to 210 million Suriname Dollars approximately considering the same level of consumption.

transfers to the sector when tariffs increase their contribution, facilitating cost recovery, and cost efficiency in the purchase of energy will be increased when PPA contracts are implemented.

- 1.40 **Expected results.** The program has contributed to a substantial improvement of the power sector, by meeting the expected objectives of the programmatic series. The main results from the implementation of the program are: (i) approval of the power sector policy; (ii) creation of legal and institutional framework by the approval of two sector laws, which will increase the technical capacity to implement a sustainable power sector framework; (iii) readiness to invest in renewable energy by having at least one feasibility study; (iv) a sole entity to regulate and manage the sector affairs; (v) a tariff that allows for cost-recovery; (vi) the provision to develop an Electricity Sector Plan that will include a coordinated plan for rural electrification; (vii) a power utility that is more financially sound and operationally efficient; and (viii) improvement of country's fiscal position given the reduced subsidies provided to the company by the government.
- 1.41 The outcomes of the program will be evaluated against the indicators and targets contained in the Results Framework. The corresponding [Results Matrix](#) represents the full scope of the program, including its three individual operations for which disbursement conditions are presented in the Policy Matrix. The expected outcomes have been analyzed and agreed upon with the agencies involved in the program which will contribute to their monitoring.
- 1.42 The sustainability of the reform process is expected to be reflected in the following indicators: (i) electricity Law or an equivalent instrument approved by Parliament; (ii) improvements in EBS's net operating results; (iii) an energy sector agency in place; (iv) a new model of contract is used for the purchase of additional power; (v) an increase in energy sold per employee; and (vi) new generation capacity installed.
- 1.43 **Economic analysis.** For this operation, a Cost-Benefit Analysis (CBA) was carried out that provided an update of the program's CBA undertaken during the preparation of the first PBP (2848/OC-SU). For the purpose of this CBA, the entire power system was modeled using specialized software, finding that in order to supply demand growth beyond 2014 and provide a reliable service, significant investments in generation and transmission capacity are required. The CBA was prepared taking into account scenarios "with" and "without" the implementation of a program to expand the Surinamese power system and to meet increased demand with an acceptable reliability margin. Without the reforms that are to be undertaken as part of the program, it would not be possible to carry out the improvement and expansion plan required to meet demand growth in the coming years ensuring service reliability.
- 1.44 The CBA evaluates economic benefits derived from: (i) the increase of EBS power sales with respect to 2014 levels, valued at the generation and transmission economic cost; and (ii) EBS's associated consumer's surplus in the residential sector, as permitted by the higher capacity facilitated by the program. The CBA evaluates economic costs associated with supplying demand growth

from 2015 onwards, which are: (i) generation and transmission investment costs; (ii) fuel costs incurred to generate electricity; and (iii) O&M costs.

- 1.45 The [CBA](#) was carried out using a 12% discount rate and its results indicate that, with the program, the EBS expansion plan would produce a Net Present Value of US\$94 million. The economic return yields 14.7%. A sensitivity analysis for the CBA was carried out considering variations in: (i) generation and transmission investment costs; (ii) fuel costs incurred to generate power; (iii) cost of hydropower electricity purchases; (iv) O&M costs; and (v) price elasticity. The results illustrate that a 20% increase in investment costs, 20% increase in fuel prices, 20% in hydropower purchases, or 20% increase in O&M costs will still permit significant net economic benefits. Opposite changes in those parameters will significantly improve its economic indicators.

## **II. FINANCING STRUCTURE AND MAIN RISKS**

### **A. Financial Instruments and Contractual Conditions**

- 2.1 The program is a PBP loan and the final of three consecutive individual operations with a single disbursement each, technically related to each other, but financed independently, in accordance with document CS-3633-1. The first two operations were approved in 2012 and 2013 (¶1.23). The proposed operation will draw upon the resources of the IDB's Ordinary Capital for an amount of up to US\$70 million in a single disbursement, upon execution of the respective contract and fulfillment of the policy matrix conditions agreed upon with the Government of Suriname and included in the Policy Matrix and Verification Matrix.

### **B. Environmental and Social Safeguard Risks**

- 2.2 In accordance with Directive B.13 on Environment and Safeguards Compliance Policy (OP-703), the program, which is based on policy commitments, does not entail an environmental classification. The program does not finance physical investments; it is therefore expected to have no direct negative social or environmental impact. However, as a result of the actions and policy changes supported by the program, energy projects within Suriname are expected to be socially and environmentally sustainable helping to mitigate potential effects on Suriname's environmental and natural resources. The program provides an opportunity to help Suriname minimize those impacts through consideration of environmental and social factors in the planning stage (e.g. expansion strategies), and thereafter throughout the project cycle.
- 2.3 The program supports consolidation of the power sector reform through a comprehensive approach of technical, economic, environmental and social aspects, as well as the proposed policy decisions and environment sector actions relating to the: (i) inclusion of environmental provisions in the development of a sustainable power sector legal and regulatory framework; (ii) inclusion of basic environmental and social sustainability principles within the sector expansion plan; and (iii) implementation of environmental and social sustainability principles throughout the project cycle for power sector projects.

### C. Fiduciary and Procurement Risks

- 2.4 **Fiduciary risk.** As a PBP operation, the program will provide untied resources with no specific acquisitions contemplated to be specifically financed; therefore no fiduciary risks have been identified.
- 2.5 **Execution risk.** The set of policy measures are consistent with the objective of the program and it is anticipated that policy measures considered in this Operation will be substantially completed prior to its submission to the IDB Board of Executive Director's consideration; therefore no execution risks are anticipated.
- 2.6 **Other risks.** PBP's identified risks were mitigated by the implementation of actions taken by the government in a timely manner during the implementation of the first two operations. Mitigation actions included: (i) close coordination with the different stakeholders; (ii) monitoring performance measures, as included in the Monitoring and Evaluation Plan; and (iii) implementation of a communication strategy focusing on the need for a cost structure consistent with the long term sustainability of the sector.
- 2.7 For the third and last operation, a risk of policy reversal affecting the sustainability of the reforms due to a change of sector priorities was identified as medium. Although there is no guarantee of fully mitigating this risk, measures to be implemented through ongoing lending instruments and TC assistance will reduce its magnitude, for example as they relate to: (i) support for the development of a long term electricity strategy;<sup>17</sup> (ii) increased public awareness about the critical situation of the electricity sector; and (iii) the start of a comprehensive energy efficiency program in Suriname to minimize the economic impact of the tariff adjustment in the residential sector.<sup>18</sup> The overall risk qualification for the program is low.

## III. IMPLEMENTATION AND MANAGEMENT PLAN

### A. Summary of Implementation Arrangements

- 3.1 **Borrower and Executing Agency (EA).** The Borrower is the Republic of Suriname and the Executing Agency (EA) will be the Ministry of Finance (MOF). The Policy Matrix (Annex II) has been agreed and will be monitored through the MOF. The MNH, as the head of the energy sector, is the entity with technical responsibility for demonstrating compliance with the agreed policy conditions of the program. Coordination between the MNH and the MOF regarding the fulfillment of all policy conditions is undertaken via the Joint Desk, which manages donor communication in Suriname. To document evidence against the

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<sup>17</sup> The Electricity Sector Plan, to be financed by the TC "Support to Surinam's Power Sector" (ATN/OC-14820-SU), will serve as a long term development strategy and will outline actions related to investment decisions, performance targets and electricity tariffs, among others.

<sup>18</sup> The energy efficiency program will be financed through the loan "Support for the Implementation of the EBS Investment Plan" (3403/OC-SU).

fulfilled conditions, the MOF through the Joint Desk will submit the required documentation to the IDB country office in Suriname.

- 3.2 The MOF will have the following responsibilities: (i) to provide evidence that the conditions have been met and any other reports that the IDB may need to approve the disbursement; (ii) to support the actions required to fulfill the third PBP loan; and (iii) once the disbursement of the program is completed, to gather and prepare the required information and performance indicators so that the IDB and the Government of Suriname can coordinate, in order to measure and evaluate the results of the program.

## **B. Monitoring and Evaluation**

- 3.3 The commitments identified in the Policy Matrix and Verification Matrix, as well as the indicators in the Results Framework Matrix establish the key parameters for the supervision and evaluation of program results. The MNH and EBS are responsible for the compilation, analysis and delivery of verification reports, as stated in the [Monitoring and Evaluation Plan](#), which presents the evaluation methodology, the indicators to be assessed, the institutions responsible for data collection, milestone timeline and budget.
- 3.4 **Monitoring arrangements.** The Banks project team will also be monitoring the 'program both from its country office in Suriname and the Energy Division, which will be responsible for the supervision and monitoring of the program.
- 3.5 **Evaluation arrangements.** An evaluation and ex post CBA will be carried out following the completion and disbursement of the third PBP and will be part of the Project Completion Report, to be funded by the Bank, which is expected to be prepared six months after the disbursement of this program.

## **IV. POLICY LETTER**

- 4.1 The Bank and the Government of Suriname have agreed on the macroeconomic and sector policies to be supported by the program, including a Policy Letter, presented by the MOF, describing the main components of the government's strategy for the program and reaffirming its commitment to implement the agreed activities with the Bank.

Development Effectiveness Matrix			
Summary			
<b>I. Strategic Alignment</b>			
<b>1. IDB Strategic Development Objectives</b>		<b>Aligned</b>	
Development Challenges & Cross-cutting Themes	-Climate Change and Environmental Sustainability -Institutional Capacity and the Rule of Law		
Regional Context Indicators	-Government effectiveness (average LAC percentile) -Rule of law (average LAC percentile)		
Country Development Results Indicators	-Government agencies benefited by projects that strengthen technological and managerial tools to improve public service delivery (#)		
<b>2. Country Strategy Development Objectives</b>		<b>Aligned</b>	
Country Strategy Results Matrix	GN-2637-3	- Increased financial sustainability of power supply for interior locations. - Improved institutional and policy setting environment for energy in Suriname. - Improved financial sustainability and governance of EBS.	
Country Program Results Matrix		The intervention is not included in the 2016 Operational Program.	
Relevance of this project to country development challenges (if not aligned to country strategy or country program)			
<b>II. Development Outcomes - Evaluability</b>			
	Evaluable	Weight	Maximum Score
	8.3		10
<b>3. Evidence-based Assessment &amp; Solution</b>	9.2	33.33%	10
3.1 Program Diagnosis	3.0		
3.2 Proposed Interventions or Solutions	3.6		
3.3 Results Matrix Quality	2.6		
<b>4. Ex ante Economic Analysis</b>	10.0	33.33%	10
4.1 The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General Economic Analysis	4.0		
4.2 Identified and Quantified Benefits	1.5		
4.3 Identified and Quantified Costs	1.5		
4.4 Reasonable Assumptions	1.5		
4.5 Sensitivity Analysis	1.5		
<b>5. Monitoring and Evaluation</b>	5.6	33.33%	10
5.1 Monitoring Mechanisms	1.5		
5.2 Evaluation Plan	4.1		
<b>III. Risks &amp; Mitigation Monitoring Matrix</b>			
Overall risks rate = magnitude of risks*likelihood	Low		
Identified risks have been rated for magnitude and likelihood	Yes		
Mitigation measures have been identified for major risks	Yes		
Mitigation measures have indicators for tracking their implementation	Yes		
Environmental & social risk classification	B,13		
<b>IV. IDB's Role - Additionality</b>			
The project relies on the use of country systems			
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Budget, Treasury, Accounting and Reporting, External control, Internal Audit.	
Non-Fiduciary			
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:			
Gender Equality			
Labor			
Environment			
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	Yes	TC SU-T1055 and SU-T1077. The IDB through TC resources supported the preparation of sector assessments and the drafting of the Power Sector Policy, among others.	
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan			

Note: (\*) Indicates contribution to the corresponding CRF's Country Development Results Indicator.

Although electricity coverage in Suriname is high, the quality of the service is poor and unreliable. In addition, the state-owned utility company in charge of the operation of the power system is not financially sustainable and requires significant government subsidies to operate. The principal causes of these problems are the lack of an integrated, legal and regulatory framework for the energy sector, the high subsidies to the electricity tariff and the deficient capacity of the utility company to operate the system. The PBL operation is intended to address these problems by supporting the government in the development of a power sector framework and strengthening the utility company's capabilities.

The results matrix has vertical logic. Based on the actions to take place, the objective of the program, which is reflected in its outcomes, is "to increase the efficiency, transparency, sustainability and accountability of the power sector.". What is labeled as specific objectives indicates what the program will do and thus are not outcomes. All outcome and output indicators have means of verification, baselines and targets. All output indicators are SMART. The outcome "increase the electricity coverage" does not appear to be a direct effect of the program's outputs and thus should not be included as an outcome indicator. Instead an indicator that reflects the increases in power supply that will result from the use of the new contract models to purchase additional power by EBS should be used. Not all output indicators are SMART. For example the indicator, "A corporate governance action plan in implementation" is not specific.

The project was analyzed using a cost-benefit analysis. The economic benefits were adequately quantified and the costs reflect real resource costs to the economy. The assumptions used were presented and a sensitivity analysis was performed.

The project has a monitoring and evaluation plan. The evaluation plan does not follow the DEM guidelines because the matrix does not have all the indicators required to answer the evaluation questions. The operation will be evaluated using an ex-post cost-benefit analysis.

## POLICY MATRIX

Issues	Objective	Policy Conditions 1 <sup>st</sup> Operation	Policy Conditions 2 <sup>nd</sup> Operation	Policy Conditions 3 <sup>rd</sup> Operation
<b>I. Macroeconomic Stability</b>				
	Maintain a stable general macroeconomic framework.	Macroeconomic framework is consistent with the objectives of the program and with policy letter.	Macroeconomic framework is consistent with the objectives of the program and with policy letter.	Macroeconomic framework is consistent with the objectives of the program and with policy letter.
<b>II. Development of a Sustainable Power Sector Framework</b>				
Lack of an integrated policy and regulatory framework to regulate sector activity.	Define the regulatory and legal framework to contribute to a more effective power sector with increased efficiency, transparency, and accountability.	A diagnostic assessment that includes an identification of the main issues and initial proposals for sector reform has been developed and presented for stakeholders consultations.	The first draft of a policy document that addresses the main guidelines for sector reform and the basic institutional structure for the power sector has been submitted to Cabinet.	The Power Sector Policy that establishes the basic principles for a sustainable growth of the energy sector, consistently with its new legal and institutional structure has been approved.
		Guidelines to draft the legal framework that will regulate the energy sector have been developed and presented for stakeholder consultations.	Drafting of regulatory instruments that will regulate the organization and functioning of the electricity sector has been initiated.	The proposed draft legislation to regulate the energy sector is presented to Parliament for its approval.
High level of subsidies from the government to the utility due to low electricity tariffs. Lack of proper price signals to consumers and inefficient operation of the utility.	Implement institutions with a view to having a commercially-based operation and clear social, economic, and financial incentives to achieve efficiency.	A specific office within the MNH has been created to serve as a focal point for sector dialogue and coordination of the reform process.	A specific office within the MNH to manage the energy sector affairs is presented for consideration of and approval by the Cabinet.	The proposed draft legislation to create an Energy Sector entity to regulate and manage the energy sector affairs is presented to Parliament for its approval.
		A set of basic principles to establish a new tariff structure has been identified and a proposal of a new tariff schedule based on such principles has been prepared by EBS.	A tariff structure proposal was submitted to the Cabinet for consideration.	Price setting principles are reflected in the tariff schedule implemented by EBS.

Issues	Objective	Policy Conditions 1 <sup>st</sup> Operation	Policy Conditions 2 <sup>nd</sup> Operation	Policy Conditions 3 <sup>rd</sup> Operation
<p>A significant increase in power demand due to new residential, commercial and industrial projects.</p>	<p>Update the expansion strategy of the sector to improve supply efficiency.</p>	<p>The EBS has initiated the process to adopt a new mechanism to improve the economic and technical efficiency of its energy purchases through updated Power Purchase Agreements (PPAs).</p>	<p>A revised draft model of PPA contract was developed by EBS as guideline.</p>	<p>The new contract model has already been used for the purchase of additional power by EBS.</p>
		<p>A decision to promote the incorporation of environmental and social sustainability principles in the sector has been adopted to support the initiation of sector assessments on environmental issues.</p>	<p>The sector expansion plan included basic environmental and social sustainability principles.</p>	<p>Environmental and social sustainability principles are being implemented throughout the project cycle (planning to execution).</p>
		<p>A program to pilot the implementation of a sustainable electrification scheme using on-grid and off-grid renewable energies has been designed and endorsed by the borrower.</p>	<p>The Government of Suriname has approved the financing for the implementation of the Program with Renewable Energy Technologies (RETs).</p>	<p>At least one feasibility study for the implementation of RETs to increase energy access has been completed.</p>
<p><b>III. Strengthen Sector Corporate Capabilities</b></p>				
<p>EBS faces several operational and financial challenges including: (i) production costs; (ii) financial sustainability; (iii) electricity rates; and (iv) increase of electricity demand with new investments or through contracts for the purchase of reliable supply.</p>	<p>Strengthen utility's capabilities to operate by contributing to improvements in technical tools and corporate governance, transparency and accountability.</p>	<p>A review of the expansion plan of the Generation and Transmission System has been carried out by EBS to analyze alternatives and their technical and economic outcomes.</p>	<p>EBS applies rigorous technical and economic criteria to evaluate alternatives within its expansion plan.</p>	<p>The EBS expansion plan is being executed.</p>
		<p>A corporate assessment of EBS has been completed to identify upgrade requirements and areas of improvement and a report has been issued with the corresponding results.</p>	<p>EBS has issued an action plan to implement fundamental technical recommendations from corporate assessment.</p>	<p>Fundamental technical recommendations from corporate assessment are being implemented.</p>
		<p>Basic principles to strengthen EBS's corporate structure to enhance its governance, transparency and accountability have been</p>	<p>EBS is carrying out a study to strengthen its corporate structure to enhance its governance, transparency and</p>	<p>EBS is undertaking an update of its corporate and operational instruments, codes and laws, according to findings from corporate</p>

Issues	Objective	Policy Conditions 1 <sup>st</sup> Operation	Policy Conditions 2 <sup>nd</sup> Operation	Policy Conditions 3 <sup>rd</sup> Operation
		identified by EBS.	accountability.  EBS is making public its operational statistics, preferably on the web.	internal assessments.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-\_\_\_\_/16

Suriname. Loan \_\_\_\_/OC-SU to the Republic of Suriname  
Support to the Institutional and Operational  
Strengthening of the Energy Sector III

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Republic of Suriname, as Borrower, for the purpose of granting it a financing to cooperate in the execution of a program to support the institutional and operational strengthening of the energy sector III. Such financing will be for an amount of up to US\$70,000,000 from the Ordinary Capital resources of the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Approved on \_\_\_\_\_ 2016)

Pipeline No. SU-L1036  
LEG/SGO/SU/IDBDOCS-39389372