

BOARD APPROVAL
Lapse-of-time Procedure

3 October 2018

FOR INFORMATION

MEMORANDUM

TO : THE BOARD OF DIRECTORS

FROM : Vincent O. NMEHIELLE
Secretary General

SUBJECT : SENEGAL: PROJECT TO IMPROVE ACCESS TO ELECTRICITY IN PERI-URBAN AND RURAL AREAS (PAMACEL)

ADB LOAN OF EUR 36.32 MILLION

The above-mentioned Loan proposal together with the draft Resolution were submitted for your **consideration on a Lapse-of-time Basis** on 19 September 2018.

Since no objection was recorded by 5:00 pm., on 3 October 2018, the said proposal is considered as **approved** and the Resolution **adopted**.

Attach:

Cc : The President

* Questions on this document should be referred to:

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Mr. S. N'GUESSAN	Deputy Director General	RDGW	Extension 4042
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AFRICAN DEVELOPMENT BANK



PROJECT TO IMPROVE ACCESS TO ELECTRICITY IN PERI-URBAN AND RURAL AREAS (PAMACEL)

COUNTRY: SENEGAL

APPRAISAL REPORT

Date: September 2018

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AFRICAN DEVELOPMENT BANK



SENEGAL

**PROJECT TO IMPROVE ACCESS TO ELECTRICITY IN PERI-URBAN
AND RURAL AREAS**

APPRAISAL REPORT

RDGW/PGCL DEPARTMENT

September 2018

Public Disclosure Authorized

Public Disclosure Authorized

Table of Contents

Currency Equivalents, Weights and Measures, Acronyms and Abbreviations	ii
Project Information Sheet	iii
Project Executive Summary	v
Results-Based Logical Framework	vii
Project Implementation Schedule	viii
1. STRATEGIC THRUST AND RATIONALE	1
1.1 <i>Project Linkages with Country Strategy and Objectives</i>	1
1.2 <i>Rationale for Bank Involvement</i>	2
1.3 <i>Aid Coordination</i>	2
2. PROJECT DESCRIPTION	3
2.1 <i>Project Description and Components</i>	3
2.2 <i>Technical Solution Adopted and Alternatives Explored</i>	3
2.3 <i>Project Type</i>	4
2.4 <i>Project Cost and Financing Arrangements</i>	4
2.5 <i>Project Target Area and Beneficiaries</i>	6
2.6 <i>Participatory Approach for Project Identification, Design and Implementation</i>	7
2.7 <i>Bank Group Experience and Lessons Reflected in Project Design</i>	7
2.8 <i>Key Performance Indicators</i>	8
3. PROJECT FEASIBILITY	8
3.1 <i>Economic and Financial Performance</i>	8
3.2 <i>Environmental and Social Impact</i>	9
4. PROJECT IMPLEMENTATION	10
4.1 <i>Implementation Arrangements</i>	10
4.2 <i>Monitoring</i>	12
4.3 <i>Governance</i>	12
4.4 <i>Sustainability</i>	13
4.5 <i>Risk Management</i>	13
4.6 <i>Knowledge Building</i>	13
5. LEGAL FRAMEWORK	14
5.1 <i>Legal Instrument</i>	14
5.2 <i>Conditions for Bank Intervention</i>	14
5.3 <i>Compliance with Bank Policies</i>	15
6. RECOMMENDATION	15
Appendix I : Situation of the Power Subsector in Senegal	
Appendix II : Senegal's Comparative Socio-economic Indicators	
Appendix III : Table of Bank Portfolio in Senegal as at 30 June 2018	
Appendix IV : Key Related Ongoing Projects Financed by Other Development Partners in Senegal (2013-2017)	
Appendix V : Map of Project Area	

Currency Equivalents

June 2018

UA 1	=	XOF 794.31145
UA 1	=	EUR 1.21092
UA 1	=	USD 1.41665

Fiscal Year

1 January to 31 December

Weights and Measures

1 kilometre (km)	=	1 000 m
1 square kilometre (km ²)	=	1 000 000 m ²
1 kilovolt (kV)	=	1 000 volts (V)
1 kilovolt-ampere (kVA)	=	1 000 volt-ampere (VA)
1 kilowatt (kW)	=	1 000 watts
1 megawatt (MW)	=	1 000 000 W = 1 000 kW
1 gigawatt (GW)	=	1 000 000 kW = 1 000 MW
1 kilowatt-hour (kWh)	=	1 000 Watt-hour = 3 600 000 joules (J)
1 megawatt-hour (MWh)	=	1 000 000 Wh = 1 000 kWh
1 gigawatt-hour (GWh)	=	1 000 000 kWh = 1 000 MWh
1 tonne of oil equivalent (toe)	=	4.18 x 10 ⁴ joules = 11 630 kWh
1 million tonnes of oil equivalent (mtoe)	=	1 000 000 toe

Acronyms and Abbreviations

AFD	:	French Development Agency
AfDB	:	African Development Bank
APD	:	Final Design
ARD	:	Regional Development Agency
BD	:	Bidding Document
CESMP	:	Comprehensive Environmental and Social Management Plan
CGE	:	Feeder Roads Management and Maintenance Committee
CNE	:	National Energy Committee
CRSE	:	Electricity Sector Regulatory Commission
CSP	:	Country Strategy Paper
DCC	:	Directorate of Sales and Customers
DCFE	:	Directorate of External Cooperation and Financing
DD	:	Directorate of Distribution
DEG	:	Directorate of General Studies
DPD	:	Directorate of Distribution Projects
DPFC	:	Supervisory Directorate of Finance and Accounting
DSR	:	Directorate of Strategy and Regulation
LPDSE	:	Energy Sector Development Policy Letter
ESMP	:	Environmental and Social Management Plan
GDP	:	Gross Domestic Product
MEFP	:	Ministry of Economy, Finance and Planning
MPE	:	Ministry of Petroleum and Energy
PSE	:	Emerging Senegal Plan
SAR	:	<i>Société Africaine de Raffinage</i>
Senelec	:	<i>Société d'Electricité du Sénégal</i> (Senegal Power Utility)
TFP	:	Technical and Financial Partner
UA	:	Unit of Account
WB	:	World Bank

PROJECT INFORMATION SHEET

BORROWER : REPUBLIC OF SENEGAL
COUNTRY : REPUBLIC OF SENEGAL
EXECUTING AGENCY : Senelec - 28, rue Vincens - BP 93 Dakar, Senegal

Financing Plan

Sources of Financing	Amount (in UA million)	Amount (in EUR million)	Amount (in XOF million)	Instrument	%
AfDB	30.00	36.32	23 827	LOAN	47.60 %
Senelec	33.02	39.98	26 226	-	52.40 %
Total	63.02	76.30	50 053		100.00 %

Key ADB Loan Financing Information

Loan Currency:	Euro (EUR)
Loan Type:	Fully flexible loan
Tenor:	20 years
Grace Period:	5 years
Average Maturity**:	12.75 years
Repayment:	Half-yearly instalments after expiry of the grace period.
Interest Rate:	Base rate + Financing margin + Lending spread
Base Rate:	Floating (EURIBOR 6 months, set 2 working days before the applicable review date), with a free floating base rate option.
Financing Margin:	The Bank's financing cost margin revised twice yearly, on 1 st January for the half-year ending 31 December and 1 st July for the half-year ending 30 June. This margin is applied to the EURIBOR rate every 1 st February and 1 st August.
Loan Margin:	80 basis points (0.8%)
Front-end Fee:	0.25% of the loan amount payable latest 60 days following the date of effectiveness of the Loan Agreement
Commitment Fee:	0.25% per annum on the undisbursed loan amount, commencing 60 days following the date of signature of the Loan Agreement and payable on each interest payment date, including during the grace period.
Base Rate Conversion Option*:	Besides the free fixing option, the Borrower may revert to the floating rate or reset the rate on all or part of the disbursed amount of its loan. Transaction fees apply
Rate Cap or Collar Option*:	The Borrower may cap or collar the base rate for all or part of the disbursed amount of its loan. Transaction fees apply
Loan Currency Conversion Option*:	The Borrower may change the currency of all or part of its loan, whether disbursed or not, into another loan currency of the Bank. Transaction fees apply
FRR (baseline scenario) :	16,00%
NPV (baseline scenario):	XOF 15 billion
ERR (baseline scenario)	22,00%
ENPV(baseline scenario):	XOF 21 billion

*Conversion options and transaction fees are governed by the Bank's Conversion Guidelines available at: <http://www.afdb.org/fr/documents/document/guidelines-for-conversion-of-loan-terms-july-2014-87643>

Timeframe – Main Milestones (expected)

Concept Note Approval	June 2018
Project Approval	September 2018
ADB Loan Effectiveness	December 2018
Final Disbursement	December 2022
Completion	June 2023

Executive Summary

1. Project Overview

1.1. The Project to Improve Access to Electricity in Peri-urban and Rural Areas (PAMACEL) stems from the “Universal Electricity Access Programme” designed by the Senegal Power Utility (*Société d’Electricité du Sénégal*, Senelec) in 2017, which in turn falls under the Company’s 2020 strategic plan referred to as the “YEESAL Senelec 2020 Plan”. PAMACEL seeks to improve electricity distribution and increase the population’s access to quality power supply in many peri-urban and rural areas located within Senelec’s concession areas in all regions of Senegal outside Dakar, which is covered by other projects. Access by rural dwellers to basic services such as electricity is one of the means of improving inclusive economic growth in a country with a relatively wide disparity between urban and rural areas. More specifically, PAMACEL will help to: (i) increase the national electricity access rate from 68% in 2017 to 75% in 2022 by connecting 75 000 new subscribers; (ii) reduce the rate of overall power losses from 23% to 15% in the localities concerned; and (iii) strengthen Senelec’s business management and governance. The project cost is estimated at EUR 76.3 million and will be co-financed by the Bank and Senelec. The project will be implemented over a 43-month period from October 2018 to April 2022.

1.2. The direct project beneficiaries are Senelec, the 25 000 subscribers whose analogue electric metres will be replaced by new-generation prepayment metres, the 75 000 new subscribers who will be connected to the network under the project and the population living in one of the 786 localities located in the 13 regions covered who will benefit from better quality basic social and public services (health, education, etc.) and street lighting through improved power supply.

1.3. Project beneficiaries will develop more social and income-generating activities. They will also contribute to strengthen the project’s impacts following awareness campaigns encouraging them to adopt civic-minded behaviour by collaborating with Senelec to combat fraud and the destruction of networks.

2. Needs Assessment

By launching the Emerging Senegal Plan (PSE) in 2014, the authorities undertook to “address the energy crisis caused by the wide gap between power supply and demand, to ensure the country’s economic development”. Over the past five years, major projects have been initiated to increase the power generation capacity. Some have already been completed and others are being implemented. The generation capacity has improved significantly with an installed capacity increasing from 585 MW in 2012 to 911 MW at end-2017, with a renewable energy proportion of about 20% compared with only 6% in 2012. The peak demand for electricity in Senegal in 2017 was 606 MW, against an available capacity of 911 MW, indicating surplus electricity. Therefore, there is need to take measures to ensure better distribution, considering that the national electricity access rate was only 68% at end-2017 and only 40% in rural areas. Senelec seeks to connect at least 600 000 new customers by 2025. PAMACEL is consistent with this objective.

3. Bank’s Value Added

This project will complement and reinforce ongoing actions in the sub-sector. The Bank, which contributed to increasing the country’s energy supply capacity by financing the construction of the Kounoune 60 MW (already commissioned) and Sendou 125 MW (to be commissioned at end-2018) capacity plants, is financing this project to secure and extend electricity distribution, as well as build Senelec’s human and technical capacity. The Bank’s experience in similar operations was tapped to better structure the project.

4. **Knowledge Management**

A Monitoring and Evaluation Unit will be established within Senelec to better monitor the trends of indicators of the Company's projects, including PAMACEL, and their impact on beneficiaries. The Bank will also draw lessons on the achievement of PAMACEL's objectives from: (i) reports on the conduct of training envisaged under PAMACEL as well as monitoring/evaluation reports; and (ii) reports of supervision missions, the consulting engineer in charge of works control and the auditor of project accounts. These lessons will be used to better structure the Bank's future projects and operations.

VII. RESULTS-BASED LOGICAL FRAMEWORK

Country and Project Name: SENEGAL – PROJECT TO IMPROVE ACCESS TO ELECTRICITY IN PERI-URBAN AND RURAL AREAS (PAMACEL)

Project Goal: Improve power distribution and the quality of life for the people by increasing their access to quality energy service

RESULTS CHAIN		PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS/MITIGATION MEASURES	
		Indicators	Baseline Situation (2017)	Target (2022)			
IMPACT	Contribute to improve the population's access to quality electricity.	1.1 National electricity access rate.	68 %	75%	Reports: - Ministry of Energy - Senelec - Project Management Unit (PMU) monitoring reports - Reports of the Consulting Engineer		
OUTCOMES	2.1. Enhanced power distribution system. 2.2 Improved reliability, efficiency and quality of power supply services.	2.1.1 Number of new localities electrified. 2.1.2 Number of new customers connected. 2.1.3 Overall rate of losses in SENELEC's network in the project area.	- - 23%	786 75 000 customers (20% of them headed by unmarried women) 15%		Risk: Weak financial capacity of households, especially in rural areas, which may prevent them from subscribing. Mitigation measures: A reduced subscription price campaign will be carried out at the beginning of the installation of metres, particularly among customers in rural areas.	
OUTPUTS	3.1. Infrastructure 3.1.1 30 kV MV power transmission lines built. 3.1.2 0.4 kV LV power transmission lines built. 3.1.3 H61 substations built. 3.1.4 Pre-fabricated substations (by splitting and T) installed. 3.1.5 Prepayment metres procured and installed. 3.2 Institutional Support 3.2.1 Studies on new operations conducted. 3.2.2 SENELEC staff trained. 3.2.3 Trainees recruited and trained. 3.2.4 SENELEC's Monitoring and Evaluation Unit strengthened. 3.3. Project Management 3.3.1 Preparation of project status reports 3.3.2 Auditing of project accounts 3.3.3 Preparation of project socio-economic impact reports.	3.1.1.1 Length of 30 kV MV power transmission lines built. 3.1.1.2 Length of 0.4 kV LV power transmission lines built. 3.1.1.3 Number of H61 substations built. 3.1.1.4 Number of prefabricated substations (by splitting and T) installed. 3.1.1.5 Number of prepayment metres installed. 3.1.1.6 Number of metres replaced. 3.2.1.1 Reports on the feasibility studies and the ESIA of new operations carried out. 3.2.2.1 Number of staff trained. 3.2.3.1 Number of trainees recruited and trained. 3.2.4.1 Number of project monitoring and evaluation units operational. 3.3.1 Monitoring and evaluation reports prepared. 3.3.2 Audit reports prepared. 3.3.3 Project socio-economic impact reports prepared.	0 0 0 0 0 0 0 0 0 0 0 - - -	819 km 2 466 km 548 114 75 000 25 000 2 68, at least 30% of them women 10, 50% of them women 1 12 4 3			Reports: - Ministry of Energy - Senelec - PMU monitoring reports - Reports of the Consulting Engineer in charge of project supervision - Bank supervision mission reports
KEY ACTIVITIES BY COMPONENT	1. Infrastructure: (i) construction of an 819-kilometre 30 KV network in 786 localities; (ii) installation of 548 H61 transformer substations; (iii) connection and installation of 100 000 prepayment metres; (iv) construction of 2 466 kilometres of 0.4 kV low voltage networks; and (v) installation of 114 prefabricated 400 kVA substations. 2. Institutional Support: (i) conduct of a feasibility study on and the environmental and social impact assessment (ESIA) of a new operation; (ii) training of SENELEC and Project Management Unit (PMU) staff; (iii) training of 10 young trainees for six months, renewable once; and (iv) strengthening Senelec's Monitoring and Evaluation Unit. 3. Project Management: (i) works supervision; (ii) operation of the PMU; (iii) recruitment of an auditor; (iv) project monitoring/evaluation and preparation of reports.			Resources AfDB : EUR 36.32 million (UA 30.00 million) Senelec : EUR 39.98 million (UA 33.02 million) Resource Application Component 1 : EUR 68.34 million (UA 56.44 million) Component 2 : EUR 2.96 million (UA 2.45 million) Component 3 : EUR 5.00 million (UA 4.13 million)			

REPORT AND RECOMMENDATION OF BANK GROUP MANAGEMENT TO THE BOARD OF DIRECTORS CONCERNING THE PROPOSAL TO GRANT AN ADB LOAN TO THE REPUBLIC OF SENEGAL TO FINANCE THE PROJECT TO IMPROVE ACCESS TO ELECTRICITY IN PERI-URBAN AND RURAL AREAS (PAMACEL)

Management hereby submits the following report and recommendation concerning the proposal to grant a EUR 36.32 million ADB loan to the Republic of Senegal to finance PAMACEL.

1. STRATEGIC THRUST AND RATIONALE

1.1. *Project Linkages with Country Strategy and Objectives*

1.1.1. About a decade ago, the electricity sub-sector in Senegal was characterised by a power generation capacity far below demand. This resulted in frequent power cuts that caused the country to lose up to two annual growth points. To meet this challenge which is a serious impediment to the country's economic development, the Government in 2013 designed the Emerging Senegal Plan (PSE) cap 2035. This Plan focuses on eight thrusts including one entitled "Resolving the energy crisis to ensure the country's development". The PSE considers the energy sector as the pillar of emergence and the resolution of the vital energy issue as one of the preconditions for its implementation. The strategic recovery of the energy sector is one of the cornerstones of PSE Pillar I: "Structural transformation of the economy and growth". In this regard, Senegal has undertaken to attain universal access to electricity by 2025 in order to achieve the socio-economic objectives defined in the PSE. The project is fully in line with the country's CDN to reduce green-house gas emissions by 2030. In its Letter of Energy Sector Development Policy (LDPSE 2012-2017, which remains effective in 2018), the Government also defined the following objectives for the power subsector: (i) universal access by 2025, that is a 100% coverage rate in urban areas and the connection of at least 90% of rural households; (ii) intermediate objective of a 60% access rate in rural areas at end-2019 and at least a minimum of 30% in each administrative district ("département"); and (iii) intermediate objective of a 90% access rate in urban areas at end-2019.

1.1.2. Between 2013 and 2017, major projects were implemented to increase the power generation capacity. Some of these operations have already been completed, increasing the total installed capacity to 911 MW during the first quarter of 2018 against a peak demand of 606 MW on the interconnected network. Although the supply problem is being addressed, it is necessary to take appropriate measures to extend the distribution network in order to increase the national electricity access rate which is only 68%. In this regard, Senelec has identified the investments needed to achieve this goal in its "2025 Universal Electricity Access Programme", which seeks to connect at least 600 000 new subscribers. PAMACEL will contribute to achieving the above-mentioned objectives while strengthening Senelec's financial, technical and economic viability. It will help to improve the electricity access rate, particularly in peri-urban and rural areas. By improving access to energy in rural communities, the project will consolidate inclusive growth, contribute to reducing the cost of factors of production and boost the competitiveness of domestic small-scale handicrafts industries.

1.1.3. The project also plugs into Pillar 2 of the Bank's Country Strategy Paper (CSP) for Senegal for the 2016-2020 period, which aims to strengthen production and competitiveness support infrastructure (energy and transport).

1.2. Rationale for Bank Involvement

1.2.1. PAMACEL is in line with the strategic orientations of the Bank’s CSP for Senegal, the country’s strategic objectives as defined in the PSE and various Bank intervention policies in support of regional member countries. The inclusive scope of the project confirms its alignment on the Bank’s Energy Policy, Gender Strategy, Strategy for Addressing Fragility and Building Resilience in Africa 2014-2019 and 2013-2022 Ten-Year Strategy, Pillar 2 of which seeks to ensure affordable access to reliable power and transmission infrastructure within the framework of shared growth, among others. The project is also consistent with the Bank’s Strategy for the New Deal on Energy for Africa (approved in 2016) whose main objective is to achieve universal access to energy in regional member countries by 2025. Lastly, it is in keeping with two of the Bank’s High 5s, i.e.: (i) Light up and power Africa ; and (ii) Improve the quality of life for the people of Africa. The project also aligns with the second Climate Change Action Plan (2016-2020) by developing a climate-resilient energy system.

1.2.2. PAMACEL complements ongoing power subsector operations to increase generation capacity and will help to optimise their operation. The investment programme initiated by Senelec to address challenges in the sub-sector comprises three main components: generation, transmission and distribution. The Bank which financed the 60 MW-capacity Kounoune power plant, the Sendou 125 MW-capacity power plant and the OMVG Energy Project is expected, together with other TFPs, to continue financing investments to strengthen distribution, which has a direct impact on access to power by the population.

PAMACEL is consistent with two other projects initiated by the Government and being prepared with funding from the Bank: the Project to Support Development, Skills and Entrepreneurship in Growth Sectors, and the Emergency Community Development Programme (PUDC). PAMACEL provides electricity in areas concerned by the first project and brings Senelec’s power networks closer to rural communities impacted by PUDC, which will enjoy constant electricity.

1.2.3. The Bank’s expertise in defining and implementing similar projects to strengthen distribution networks in the sub-region was crucial in PAMACEL’s design and structuring. The Bank’s experience helped to emphasise that it no longer suffices to build infrastructure; such infrastructure should be supported through actions to build the capacity of entities responsible for its operation. Accordingly, special attention has been given to actions to build Senelec’s human capacity and improve its business management and governance in order to guarantee infrastructure sustainability.

1.3. Aid Coordination

1.3.1. The table below summarises the volume of interventions in the power sub-sector over the past five years (2013-2017).

	Subsector	Volume		
		GDP	Exports	Labour
	Electricity	6.2 %	n/a	n/a
Stakeholders – Annual Public Expenditure (average) 2013-2017				
	Government	Donors	BNP PARIBAS	23.45%
			Exim Bank India	16.87%
			IsDB	13.07%
			KfW	8.04%
			BOAD	5.74 %
			World Bank	5.44 %
			AfDB	3.98 %
			EIB	3.18%
			AFD	3.00%
			Other donors	6.75%
Aid Coordination Level				
	Existence of thematic working groups			YES
	Existence of a comprehensive sector programme			YES
	AfDB's role in aid coordination			Active Member
EUR 1 292.98 million 100%	EUR 129.3 million 10%	EUR 1 163.68 million 90 %		

n/a: not available.

1.3.2. Over the past five years (2013-2017), the technical and financial partners (TFPs) involved in Senegal's power subsector mainly financed operations to increase generation capacity (including renewable energy production), rehabilitate and extend power transmission and distribution networks for a cumulative EUR 1 163.68 million. The Bank served as leader of the highly operational energy thematic group a few years ago and is currently a very active member. All TFP operations are discussed in this group and each institution is informed of what others are doing to better orientate its own operations. TFP concerns are coordinated and presented to the Government through a single channel. Subsector dialogue is interactive and the Government, which is represented in each group meeting, appreciates its true worth.

2. PROJECT DESCRIPTION

2.1 Project Description and Components

2.1.1 PAMACEL's development objective is to increase access to electricity for people living in peri-urban and rural areas with a view to achieving the universal access envisaged by the Senegalese Government by 2025. The project seeks to rehabilitate and extend the low- and medium-voltage distribution networks in these areas in all regions of the country, and to improve Senelec's business management and governance by training staff, replacing thousands of post-payment metres with prepayment ones and establishing a monitoring and evaluation unit. The specific project objectives are to: (i) connect 75 000 new subscribers to the distribution network in 786 localities; (ii) replace 25 000 post-payment metres with smart prepayment metres; (iii) reduce the overall rate of losses (technical and commercial) in the localities concerned from 23% to 15%; and (iv) strengthen Senelec's business management and governance.

2.1.2 The project stems from Senelec's comprehensive "Universal Electricity Access Programme" whose objective is to connect at least 600 000 new customers by 2025. It comprises three components presented in the table below.

No.	Component Name	Estimated Cost	Component Description
A	Power Infrastructure	68.34	<ul style="list-style-type: none"> ▪ Construction of an 819-kilometre 30 kV distribution network, of which 65 kilometres underground ▪ Construction of a 2 465-kilometre 0.4 KV low voltage transmission line ▪ Procurement and installation of 548 high pole-type 160 kVA H61 substations

			<ul style="list-style-type: none"> ▪ Procurement and installation of 114 prefabricated cabin-type 400 kVA substations ▪ Procurement and installation of 100 000 smart prepayment metres ▪ Monitoring of ESMP implementation.
B	Institutional Support	2.96	<ul style="list-style-type: none"> ▪ Conduct of feasibility studies and environmental and social impact assessments of new operations ▪ Provision of support to SENELEC for the establishment of a project monitoring and evaluation unit ▪ Capacity building (training of SENELEC's staff) ▪ Training of 10 trainees for a six-month period, renewable once.
C	Project Management	5.00	<ul style="list-style-type: none"> ▪ Recruitment of a consulting engineer for works supervision and control ▪ Auditing of project accounts ▪ Preparation of the project procedures manual ▪ Procurement of computer hardware and office equipment ▪ Functioning of the Project Management Unit (PMU).
Total Project Cost		76.30	

2.2 *Technical Solution Adopted and Alternatives Explored*

2.2.1 The technical solution adopted is the construction of low-voltage (0.4 kV) distribution networks from the source substations of the medium-voltage (30 kV) distribution network, which will also be extended in each of the localities covered by the project. Prepayment metres will be installed for all new customers and the post-payment metres of some customers in the project area who so desire will be replaced with new-generation prepayment metres.

2.2.2 The alternative technical solutions explored, their brief description and reasons for their rejection are presented in the table below.

Alternative Solution	Brief Description	Reason for Rejection
Connect subscribers from solar mini-grids and private photovoltaic panels.	Construction of small stand-alone distribution networks in localities from small photovoltaic solar power plants.	Since the localities are situated near Senelec's transmission network, they will be connected to the integrated network at lower cost than the solar mini-network solution.
Connect subscribers from a 20 kV distribution network to be built.	Build a 20 kV instead of a 30 kV medium-voltage network to minimise costs.	Senelec is standardising its distribution network throughout the country. By building a 20 kV network, the operating costs will increase.

2.3 *Project Type*

2.3.1 PAMACEL is a stand-alone investment operation involving the construction of power distribution networks in 786 peri-urban and rural localities in Senegal. The proposed financing instrument is an ADB loan to be granted to the Government of Senegal and on-lent to Senelec under conditions acceptable to the Bank.

2.4 *Project Cost and Financing Arrangements*

2.4.1 The total project cost, net of taxes and customs duties, is estimated at EUR 76.3 million based on the unit costs of feasibility studies of the Universal Electricity Access Programme and similar work contracts obtained from recent competitive bid calls by Senelec. This cost includes a 5% provision for physical and technical contingencies, and a 5% provision for price escalation. It will be financed by the Bank to the tune of EUR 36.32 million.

2.4.2 The project cost is presented in the tables below, by component, source of financing and expenditure category. The exchange rates used are those given on page (iv).

Components	Amounts in UA Million			Amounts in EUR Million			% Foreign Exchange
	Foreign Exchange	Local Currency	Total	Foreign Exchange	Local Currency	Total	
Power Infrastructure	45.79	5.40	51.20	55.45	6.54	61.99	89%
Institutional Support	1.55	0.67	2.22	1.88	0.81	2.69	70%
Project Management	2.62	1.12	3.74	3.17	1.36	4.53	70%
Base Cost	49.97	7.19	7.16	60.50	8.71	69.21	87%
Provision for Physical Contingencies	2.50	0.36	2.86	3.03	0.44	3.46	87%
Provision for Price Escalation	2.62	0.38	3.00	3.18	0.45	3.63	87%
Total Project Cost	55.09	7.93	63.02	66.71	9.60	76.30	87%

2.4.3 Besides the Bank, Senelec will in parallel finance the project through mobilised bonded loan resources and Energy Support Fund (FSE) resources for a total EUR 39.98 million, net of taxes. The ADB loan resources totalling EUR 36.32 million will be granted under the conditions indicated in the Project Information Sheet on page (v), which have been negotiated and accepted by the Senegalese Party.

Sources of Financing	Amounts in UA Million			Amounts in EUR Million			% Total
	Foreign Exchange	Local Currency	Total	Foreign Exchange	Local Currency	Total	
ADB	25.93	4.07	30.00	31.40	4.93	36.32	47.6%
Senelec	29.16	3.86	33.02	35.31	4.67	9.98	52.40%
Total Project Cost	55.09	7.93	63.02	66.71	9.60	76.30	100%

2.4.4 The project cost by expenditure category is as follows:

Expenditure Category	Amounts in UA Million			Amounts in EUR Million			% Foreign Exchange
	Foreign Exchange	Local Currency	Total	Foreign Exchange	Local Currency	Total	
Works	45.05	5.35	50.40	54.55	6.48	61.03	89%
Goods	5.49	0.63	6.12	6.64	0.76	7.40	90%
Services	3.25	1.39	4.64	3.93	1.69	5.62	70%
Operating Costs	1.30	0.56	1.86	1.58	0.67	2.25	70%
Total Project Cost	55.09	7.93	63.02	66.71	9.60	76.30	87%

2.4.5 The following table shows the project cost by expenditure category and source of financing:

Expenditure Category	Amounts in UA Million			Amounts in EUR Million		
	ADB	Senelec	TOTAL	ADB	Senelec	TOTAL
Works	24.64	25.76	50.40	29.84	31.19	61.03
Goods	0.07	6.04	6.11	0.08	7.32	7.40
Services	4.65	-	4.65	5.62	-	5.62
Operating Costs	0.64	1.22	1.86	0.78	1.47	2.25
Total Project Cost	30.00	33.02	63.02	36.32	39.98	76.30

2.4.6 The provisional project expenditure schedule by component is as follows:

Components	Amounts in UA Million					Amounts in EUR Million				
	2 019	2 020	2 021	2 022	Total	2 019	2 020	2 021	2 022	Total
Power Infrastructure	11.29	19.75	22.58	2.82	56.44	13.67	23.92	27.34	3.41	68.34
Institutional Support	0.49	0.86	0.98	0.12	2.45	0.59	1.04	1.18	0.15	2.96
Project Management	0.83	1.44	1.65	0.21	4.13	1.00	1.75	2.00	0.25	5.00
TOTAL	12.61	22.05	25.21	3.15	63.02	15.26	26.71	30.52	3.81	76.30
% Total	20.0%	35.0%	40.0%	5.0%	100.0%	20.0%	35.0%	40.0%	5.0%	100.0%

2.4.7 The AfDB loan will partly finance the “Works” and “Goods” expenditure categories and fully finance the “Services” and Operating Costs” expenditure categories.

Expenditure Category	Amounts in UA Million			Amounts in EUR Million			% Foreign Exchange
	Foreign Exchange	Local Currency	Total	Foreign Exchange	Local Currency	Total	
Works	22.18	2.46	24.64	26.86	2.98	29.84	90%
Goods	0.05	0.02	0.07	0.06	0.02	0.08	70%
Services	3.25	1.40	4.65	3.93	1.69	5.62	70%
Operating Costs	0.45	0.19	0.64	0.55	0.23	0.78	70%
Total	25.93	4.07	30.00	31.40	4.92	6.32	86%

2.5 Project Target Area and Beneficiaries

2.5.1 PAMACEL will be implemented in 13 of the country’s 14 regions (the Dakar region, which is not concerned by this project, is covered by other projects), especially 786 peri-urban and rural localities. Project implementation will help to connect 75 000 new households, i.e. about 525 000 people, and replace post-payment metres in 25 000 households, i.e. about 175 000 people. A total of 700 000 people will be directly affected by the project, of which 434 000 women (52%).

2.5.2 Senelec is also a direct beneficiary of the project because its technical, financial and human resource capacity will be strengthened through the reduction of electricity distribution losses, the connection of new customers, and training.

2.5.3 Besides these direct beneficiaries, the entire population in the localities concerned by the project will benefit indirectly from major socio-economic spinoffs, notably the improvement of public services such as health, education, drinking water supply, security, etc. The private sector will experience development in the project area due to the availability electricity and the attendant development of small handicrafts production units, trade and other small income-generating activities. Jobs will be created for the population of the project area during the execution of construction works

... The Project will help to strengthen Senelec’s financial situation

Until 2012, Senelec’s financial situation was characterized by: (i) recurrent operating losses attributable to an obsolete production tool and constantly increasing operating charges; and (ii) high levels of unpaid debts owed mostly by public departments. Between 2014 and 2017 and following the deployment of the Emerging Senegal Plan, a key objective of which is universal access to electricity by 2025, Senelec’s situation has gradually improved, thanks to investments made and enhanced sector governance. Its current financial situation enables it to obtain resources from financial markets. According to a rating agency licenced by the Regional Council for Public Savings and Financial Markets (CREPMF), Senelec currently presents a very low risk in the long term and a low risk in the short term. Since 2014, SENELEC has recorded successive positive annual results, which stood at XOF 36 billion in 2017. Financial projections for the 2018-2023 period are also good, with an upward total balance sheet trend, stronger equity capital and self-financing capacity. Senelec’s net cash flow should improve and exceed XOF 40 billion from 2023.

and the operation of facilities built. As regards socio-professional insertion, the project will enable at least 10 young graduates (50% of them girls) to embark on their first internship training, thus favouring their future employability.

2.5.4 The presence of a monitoring and evaluation expert in the PMU will allow for the preparation of gender- and age-disaggregated outcomes indicators to assess the progress made in improving the living conditions of various beneficiary groups. In addition, the activities of the women's associations operating in these localities will be strengthened and their income improved due to the availability of quality power supply.

2.6 Participatory Approach for Project Identification, Design and Implementation

2.6.1 During the project appraisal phase, special emphasis was laid on the participatory approach. Information and consultation sessions were held with the project area population during the conduct of technical feasibility studies and project preparation and appraisal missions. The main actors consulted include: (i) the authorities of the ministries in charge of finance, energy, women's empowerment, local communities and town planning; (ii) people living around the sites of facilities to be constructed; (iii) direct and indirect project beneficiaries (potential subscribers resident in the localities concerned, Senelec staff, government departments, women's groups, and handicraft associations); (iv) local administrative authorities; and (v) the technical and financial partners present in Dakar and involved in the energy sector. The expectations voiced by these different actors were analysed and factored into the project design. Consultations will continue during project implementation and operation phases.

2.7 Bank Group Experience and Lessons Reflected in Project Design

2.7.1 As at 31 June 2018, the Bank's portfolio in Senegal comprised 27 ongoing operations including 19 national sovereign projects, 4 private sector projects and 4 multinational projects for a total commitment of UA 811 million. The portfolio performance is deemed satisfactory with a score of 3 out of 4, based on the following: (i) the portfolio has been significantly rejuvenated in recent years (the average age of operations dropped from 5.5 years in 2011 to 2.7 years at end-2017); and (ii) the portfolio has no problematic project (PP) or potentially problematic project (PPP). Ongoing operations include one private sector (the Sendou Power Plant) and one multinational project (the OMVG Energy Project). The project to construct the Sendou (125 MW) power plant financed by the Bank in 2009 will soon be completed and the power generators will be operationalised by end-2018, while construction work on the OMVG Energy Project is at the start-up stage. The Rural Electrification Project (PER) is the latest national operation in the energy sector financed by the Bank for the Senegalese Rural Electrification Agency (ASER). It was completed in 2015 and was the subject of a completion report. PER faced implementation difficulties, particularly the long time taken by the Borrower and the Concession Holder to fulfil the conditions precedent to first disbursement of Bank resources, the weak financial capacity of local contractors responsible for the construction of networks and the difficulties faced by potential customers in rural areas to pay subscription fees. PER was implemented over nearly 11 years, against the five-year period envisaged initially and the outstanding amount of UA 3.6 million out of the UA 9.58 million loan amount was cancelled. Despite all these factors, PER has helped to provide energy to more than 11 000 rural dwellers.

2.7.2 All other projects financed by the Bank in Senegal in all sectors and completed have been the subject of a completion report. So far, all the financing agreements of Bank-funded projects have been signed and rendered effective. All Bank-funded projects have also been the

subject of first disbursement. In addition, the latest Country Portfolio Review prepared in November 2017 identified the key challenges to be met to improve the portfolio, namely: (i) build capacity in operations preparation; (ii) establish an operational monitoring/evaluation (M&E) system, and strengthen the performance culture in portfolio operations; (iii) strengthen the technical support provided to project executing agencies in procurement, financial management and monitoring/evaluation; and (iv) regularly monitor the implementation of the action plan, particularly the contracting plan and the monthly disbursement plan of each project. According to the Bank’s operations performance report indicators, about 26% of projects were flagged in June 2018 for various reasons, namely: (i) projects with commitments below 50% of the financing amount more than two years after approval; and (ii) projects with a disbursement rate below 50% more than two years after approval. For all the projects concerned, an action plan comprising a monthly disbursement programme has been prepared by the Senegal Field Office (COSN) to immediately reduce the rate of non-performing projects to below 20%.

2.7.3 The project design takes into account the recommendations of portfolio reviews, Bank project completion and supervision mission reports. The project is based on studies conducted within the framework of a comprehensive programme. The project intends to: (i) train staff of the Management Unit and Senelec, particularly in investment project structuring and management; (ii) establish an operational monitoring and evaluation unit within Senelec to obtain relevant indicators on project implementation status; and (iii) finance the feasibility studies, environmental and social impact assessments of new operations for future interventions by the Bank and other technical and financial partners in Senegal. Lastly, the Bank could authorize the use of advance contracting to reduce disbursement delays after approval and the launching of international competitive bids for works to select contractors that are technically and financially capable of providing the required services properly and on time. Bank supervision missions will be systematically fielded at least twice a year.

2.8 Key Performance Indicators

2.8.1 Project performance will be assessed based on trends in the key indicators outlined in the results-based logical framework. The key output indicators are: (i) the length of 30 kV networks built; (ii) the length of 0.4 kV distribution networks built; (iii) the number of H61 transformer substations installed; (iv) the number of prepayment metres procured and installed; and (v) the number of prefabricated substations installed. The outcome indicators are: (a) the number of new subscribers connected; (b) the overall rate of electrical network losses in the project area; and (c) the number of localities covered by the project. The only impact indicator is the national electricity access rate. The continuous monitoring of all these indicators by the PMU monitoring and evaluation expert will help to assess the progress made by the project.

2.8.2 Data on these performance indicators will be provided in the consulting engineer’s monthly reports, the quarterly project status reports submitted by the PMU, Bank supervision mission and project completion reports (by the Borrower and the Bank).

3. PROJECT FEASIBILITY

3.1 Economic and Financial Performance

Table 3.1: Key Project Economic and Financial Data			
Baseline scenario	FRR	16.00%	NPV XOF 15 billion
	ERR	22.00%	ENPV XOF 21 billion

3.1.1 *The project financial and economic performance* was analysed based on the financial rate of return (FRR) and the economic rate of return (ERR). The FRR was calculated

based on the project financial cost and its share of revenue derived from the sale of electricity to new subscribers, the increase in sales resulting from the reduction in energy losses on the distribution network and the replacement of faulty metres with new prepayment ones. The ERR was calculated based on the economic costs (investment costs adjusted to reflect conversion factors, net of price escalation) and expected project economic benefits.

3.1.2 ***The sensitivity of project financial and economic performance*** was analysed in respect of: (i) a 10% increase in investment costs; (ii) a 10% increase in operating costs; and (iii) a 10% drop in revenue. This analysis shows that the rate of return is sensitive to variation in the various factors but exceeds the economic cost of capital estimated at 10% in the country, thus confirming the project's financial and economic viability. Project performance is more sensitive to a reduction in revenue than the other factors considered (details are presented in Technical Annex B.7).

3.2 ***Environmental and Social Impact***

3.2.1 ***Environment***: the project has been classified under Environmental Category 2, in accordance with the Bank's Integrated Safeguards System (ISS). Such a classification is appropriate, given the potentially low-to-moderate environmental impacts. A strategic environmental and social assessment (SESA) of the programme, from which the project stems, was conducted in 2018, combined with an Environmental and Social Management Framework (ESMF). The summary of the ESMF will be posted on the Bank's website latest by 25 August 2018. The major negative environmental and social impacts include: (i) traffic disruptions and various nuisances during works, most of which will be executed along roads and within existing feeder roads; and (ii) health and safety risks for workers and the population. During the operation phase, the negative impacts will concern health and safety risks for the neighbouring population and Senelec's workers in the event of non-compliance with safety measures. The major positive project environmental impact is the mitigation of greenhouse gas emissions (see paragraph 3.2.2). Negative project impacts will be mitigated and enhanced by implementing appropriate measures contained in the ESMF. The cost of the mitigation measures defined in the ESMF, including ESMF implementation monitoring, is estimated at EUR 200 000. The PMU environmental expert will be responsible for overall ESMF implementation monitoring and production of the related half-yearly reports. Monitoring will be conducted by the contractor's environmental expert, while the consulting engineer will be responsible for works supervision.

3.2.1 ***Climate change***: the project is not exposed to any particular climate change risk or issue (Category 3). In addition, the substation sites are not located in flood-prone areas. Concerning adaptation, the reference airspeeds generally considered for pole foundations are appropriate for climatic conditions in Senegal. Civil engineering works will box up these facilities. Regarding mitigation, it is worth noting that greenhouse gas emissions by the project will be insignificant. In contrast, the project will help to reduce energy losses from 23% to 15%. Hence, it will improve network efficiency by about 269 gCO₂eq per kWh distributed, compared with the no-project situation, and will contribute to reducing green-house gases as set out in the CDN.

3.2.2 ***Gender issues and women's empowerment***: in most low-income countries, women are the managers of household energy supply and consumption, but disproportionately bear the burden of energy poverty. Women are largely under-represented in industry, energy policy and decision-making bodies. In Senegal, charcoal and fuelwood respectively cover 26% and 58% of household energy needs. Access to electricity will contribute to easing women's domestic tasks and enable them to save time for income-generating activities. Improving power supply

will also have a positive impact in terms of maternal and neonatal health as well as reduction of gender-based violence (street lighting in towns will contribute to reducing acts of aggression against women). Senelec will ensure that households headed by women are connected to the network the same as those headed by men. Moreover, Senelec will ensure that women have equitable access to jobs under the project. In this regard, it will strive to recruit, retain and train women for technical positions. The same will apply to the youth trainee programme (50 %). The connection of health centres and schools to the power network will facilitate childbirth and improve the academic success and enrolment rate for girls, thanks to the revision of lessons at night and, especially, the availability of girls for schooling owing to the easing of household chores.

3.2.3 **Social issues:** Senegal has a population of nearly 16.1 million, with a growth rate of about 2.6% in 2017. Approximately 52% of the population live in urban areas. In spite of Senegal's abundant natural resources, about 55% of the population still live below the poverty line. Although the country has recorded satisfactory economic growth in recent years, it has not been inclusive enough because of persistent rural and urban inequalities. Rural poverty is compounded by a shortage of infrastructure and basic social services. At end-2017, the electricity access rate was 92% in urban areas, against 40% in rural areas. Apart from the 250 jobs that will be created during project implementation, there will be socio-economic benefits for all inhabitants of the localities concerned, with indirect impacts on the rest of the country. In addition to enhancing the quality of public health and education services, better access to electricity, especially in rural areas, should improve living conditions by increasing income from income-generating activities. It will encourage greater access by youths and women to information and communication technologies.

3.2.4 **Involuntary resettlement:** project implementation will not entail the physical resettlement of the population. In contrast, the project could generate economic compensation for loss of farming land or areas. Such losses will be assessed during the conduct of the SESA and the preparation of the ESMF. Project-affected persons (PAP) will be paid compensation, in accordance with Operational Safeguard 2.

4. PROJECT IMPLEMENTATION

4.1 Implementation Arrangements

4.1.1. **Project implementation:** Senelec will be the project owner and contracting authority. The delegated contracting authority will be the Directorate of Distribution Projects (DPD) within which a Project Management Unit (PMU) has been set up for day-to-day project management. The PMU will be headed by a Coordinator selected from among Senelec staff, whose CV should have been approved beforehand by the Bank. He/she will be detached from his/her current duties to focus solely and exclusively on the project. The PMU will also comprise: (i) an Administrative and Financial Officer; (ii) an Accountant; (iii) a Civil Engineer; (iv) a Procurement Expert; (v) a Monitoring and Evaluation Officer; (vi) an Environmental and Social Expert; (vii) 2 Senior Power Engineers and 2 Junior Power Engineers; and (viii) a focal point in each of the six regions covered by the project. The PMU will be backed by support staff. In addition to the Coordinator, the two Senior Power Engineers and the Civil Engineer who make up the key staff already in place, other PMU senior officers will be recruited by Senelec for project implementation. The DPD project officers will also back the project. Similarly, the services of Senelec's various directorates will be called upon as required. The PMU will be backed by a consulting engineering firm, which will be responsible for works control and supervision, as well as monitoring the implementation of the project ESMF. Under the supervision of the DPD Director, the PMU Coordinator will ensure the implementation and regular monitoring of project activities as well as management of various contracts. He/she will

be provided with the technical and management resources required for project technical, administrative and financial management.

4.1.2 Procurement arrangements: all project procurements will be done in accordance with the Procurement Policy for Bank Group-funded Operations approved in October 2015, and the provisions set forth in the Financing Agreement. The assessment of Senegal's Public Procurement System (SPMS) concluded that the public procurement risk is moderate. This generic country risk was re-assessed in the context of implementation of all activities included in PAMACEL to determine the overall project procurement risk. The overall project procurement risk rating (PPRR) at the time of assessment is deemed moderate. Therefore, the SPMS will be used for procurement of works, goods and consultancy services for which the fiduciary risk is considered relatively low. Bank procurement methods and procedures (BPMPs) will be used for works, goods and major and more complex consultancy services contracts, for which the country fiduciary risk is deemed substantial.

4.1.3 Procurement risk and capacity assessment (PRCA): the country, sector and project procurement risks as well as the executing agency's procurement capacity were assessed and the findings used to guide the decision to use the country procurement system (SNPM) for all project activities, with the exception of auditing. Appropriate risk mitigation measures have been included in the PERCA Action Plan indicated in Annex B5. A procurement audit will be conducted annually by an independent audit firm.

4.1.4 The project will be implemented by Senelec, which will enlist the help of the Directorate of Distribution Projects (DPD) within which a Project Management Unit (PMU) will be set up. The PMU will be backed by a procurement specialist recruited through a call for candidature. In collaboration with Senelec's Procurement Unit, the procurement specialist will be responsible for all procurement activities.

4.1.5 Financial management arrangements: financial management will comprise six components, namely budgeting, internal control, accounting, financial reporting, flows of funds and external auditing. The project budget will be submitted for approval by Senelec's Board of Directors and to the Bank, before it becomes effective. The PMU will produce quarterly project financial monitoring reports and yearly financial statements subject to external auditing. Project accounting will use Senelec's accounting management software to produce financial statements using Excel spreadsheet. In addition, Senelec will prepare an administrative, financial and accounting procedures manual for project management within three months following project approval.

4.1.6 Disbursement arrangements: ADB loan resources will be disbursed in accordance with the Bank's standard rules and procedures, i.e.: (i) the direct payment method to settle services, works and goods contracts; (ii) the reimbursement method; and (iii) the special account or revolving fund method to cover PMU training and operating expenditure. The Borrower will open a special account in a bank acceptable to the Bank to receive loan resources for financing PMU's training activities and operation.

4.1.7 External audit arrangements: project financial statements will be audited annually by an independent audit firm. The audit terms of reference should be approved beforehand by the Bank and the firm should be recruited within six (6) months following project start-up. The audit contract will be concluded for a period of three (3) years, non-renewable. The validation of the audit reports for the first year by the Bank will be a condition for continuing the contract for the other two years. The audit reports should reach the Bank within six (6) months following the closure of the financial year.

4.2 Monitoring

4.2.1 The PMU monitoring and evaluation expert will produce periodic reports on project indicator trends. Periodic Bank supervision mission reports, monthly reports by the consulting engineer responsible for works control and supervision and project audit reports will help to monitor implementation and the achievement of set objectives. Quarterly project status reports prepared by the PMU will be submitted to the Bank. The above reports will help to identify constraints and delays, as appropriate, and to take appropriate actions that will enable the project to be implemented as scheduled in order to achieve its overall objectives.

4.2.2 Bank project monitoring activities to be carried out based on the project implementation schedule outline on page (x), are summarised in the table below. The Bank will field two project supervision missions yearly. At the end of the project, Senelec will prepare and submit a completion report to the Bank. In turn, the Bank will prepare its own completion report and, two years later, the project performance evaluation report.

Period	Phases	Monitoring Activities/Feedback Loop
September 2018 – December 2018	Project approval, loan effectiveness and fulfilment of conditions precedent to first disbursement	<ul style="list-style-type: none"> - Approval by the Board of Directors - General Project Information Note - Notification to Government/Senelec - Signature of the Loan Agreement - Loan effectiveness - Project launching - Fulfilment of conditions precedent to loan effectiveness and first disbursement
September 2018 to March 2019	Recruitment of PMU staff (who will not be from SENELEC), the consulting engineer and works contractors	<ul style="list-style-type: none"> - Notice of Expression of Interest, bidding dossier - Dossier approval and bid evaluation - Recruitment of the consulting engineer - Finalisation of BDs, bid launching and evaluation, and award of works contracts
April 2019 to March 2021	Execution of power infrastructure construction works	<ul style="list-style-type: none"> - Supply and installation of equipment - Control and supervision (consulting engineer) - Project supervision missions (Bank) - ESMP implementation monitoring
January 2019 to December 2019	Recruitment of the project accounts auditor and other consultants to provide various services	<ul style="list-style-type: none"> - Call for Expression Interest, and bidding dossier - Dossier approval and bid evaluation - Recruitment of the audit firm and other consultants
February 2021 to December 2021	Project completion	<ul style="list-style-type: none"> - Borrower's project completion report - Bank's project completion report

4.3 Governance

4.3.1 Senelec, which will implement the project and operate its facilities, is a business corporation set up in 1983 under Senegalese law with a public majority shareholding (Law No. 83-72 of 5 July 1983). With a share capital of XOF 175 billion, Senelec is responsible for electricity generation, transmission, distribution and sale. It is also responsible for identifying, financing and constructing new facilities within its domain. The State regulates and controls the sector through the Electricity Sector Regulatory Commission (CRSE) to ensure the efficiency of the economic system, given the strategic position of the electricity industry in the national economy. To ensure Senelec's sustainability and efficiency in a controlled and regulated context, the Government of Senegal has signed a number of reciprocal commitments with the corporation to sustain and assess its performance through a performance contract. To steer the corporation, Senelec has a Board of Directors and a Management Committee that meet periodically and whenever the need arises. The Board of Directors is vested with sweeping

powers to act in all circumstances, under conditions laid down by law, on the corporation's behalf, and to take all decisions relating to all administrative acts. It approves Senelec's financial statements which are, moreover, regularly audited by an independent audit firm. Senelec has an operational procurement unit that ensures transparency in all procurement transactions.

4.3.2 As part of project implementation, specific fiduciary and governance risk mitigation measures will be adopted to ensure that resources are utilised efficiently and for the intended purposes. Prior Bank review and approval will be required for some procurement activities. In addition, independent auditors will be recruited to conduct financial audits and audits of project procurement processes.

4.4 Sustainability

4.4.1 The sustainability of project investments depends on good governance in the power subsector and Senelec's sound financial situation to appropriately ensure the maintenance and replacement of the facilities to be built. Over the past five years, Senelec has recorded positive results that have gradually strengthened and improved its financial situation, thanks to enhanced administrative, commercial and financial management. Its current situation has actually enabled it to raise resources on the financial market through calls on public funding. A rating agency approved by the Regional Council for Public Savings and Financial Markets (CREPMF) has indicated that Senelec represents a very low risk in the long term and a low risk in the short term.

4.4.2 This project, which will reduce the rate of losses in the distribution network and increase the number of subscribers, will raise Senelec's turnover and indirectly strengthen its positive results, *ceteribus paribus*. Therefore, Senelec will be able to ensure appropriate maintenance, replacement and extension of the facilities put up.

4.5 Risk Management

4.5.1 The potential project implementation risks identified are: (i) the weak financial capacity of potential customers, especially in rural areas, to subscribe; and (ii) the failure of contractors to execute works due to their weak financial capacity.

4.5.2 These risks will be mitigated by: (a) a campaign offering a reduced subscription rate, especially for customers in rural areas, to be organised at the beginning of the metre installation phase; (b) works contractors to be recruited through competitive bidding open to international and national contractors. The post-evaluation qualification criteria will be closely monitored, especially the financial soundness of contractors and thorough scrutiny of the contract execution certificates provided.

4.6 Knowledge Building

4.6.1 At project launching and during fiduciary clinics and supervision missions that the Bank will organise in Senegal, PMU staff will be trained in Bank procurement, disbursement and financial management rules and procedures. Furthermore, IEC campaigns to be organised during works execution and at the start of the operation of facilities, as Senelec usually does for all its projects, will constitute forums for sharing knowledge on electricity safety and consumption control with the beneficiaries.

4.6.2 Senelec and Project Management Unit staff will also be trained in the specific areas of development project management and management of new-generation prepayment metres. A Monitoring and Evaluation Unit will be set up at Senelec to help monitor key project indicator trends, compare them with projections and draw appropriate lessons.

Similarly, the project will train some ten graduates through professional internships averaging six months, to acquaint them with the labour environment.

4.6.3 Quarterly project status reports, interim financial reports and annual external audit reports will constitute sources of information on the project, and will be used as a basis for Bank supervision missions at the end of which lessons will be drawn. The publication of project completion and performance evaluation reports will help to place knowledge acquired at the disposal of Bank staff and the public. The lessons learned will improve the design of future Bank operations.

5. LEGAL FRAMEWORK

5.1 Legal Instrument

5.1.1 The financing instrument adopted is an ADB loan to be granted to the Republic of Senegal, which will on-lend it to Senelec under conditions acceptable to the Bank.

5.2 Conditions for Bank Intervention

(A) Conditions Precedent to Effectiveness Effectiveness of the loan agreement shall be subject to the Borrower's fulfilment of the conditions set forth in Section 12.01 of the General Conditions Applicable to Loan Agreements and Guarantee Agreements of the Bank, to the Bank's satisfaction.

(B) Conditions Precedent to First Disbursement of ADB Resources

5.2.2 In addition to effectiveness of the Loan Agreement, the first disbursement of ADB loan resources shall be subject to provision by the Borrower, to the Bank's satisfaction, of evidence of signing an agreement to on-lend the loan resources to Senelec, drafted in terms and conditions acceptable to the Bank.

(C) Commitments

5.2.3. The Borrower undertakes to comply with project objectives. In this regard, the Borrower shall implement the project and ensure that the Executing Agency, its contractors and/or staff implement the project in accordance with the provisions of the Loan Agreement and Article VII (*Project Implementation – Cooperation and Information*) of the General Conditions.

(D) Institutional Arrangements

5.2.4. The Borrower undertakes to recruit, to the Bank's satisfaction, other PMU members within three (3) months following the project approval date, namely: (i) the Administrative and Financial Manager; (ii) the Accountant; (iii) the Procurement Expert; (iv) the Monitoring and Evaluation Expert; (v) the Expert in charge of Environmental and Social issues; and (vi) two (2) Junior Power Engineers.

(E) Environmental and Social Safeguards

5.2.5. The Borrower undertakes and shall ensure that the Executing Agency, its contractors, sub-contractors and staff undertake to:

(a) Implement the project in accordance with the ESMF, the Bank's safeguards policy and applicable national legislation in a manner satisfactory to the Bank, in form and substance;

(b) Prepare and submit to the Bank within the context of project reporting, half-yearly reports on the ESMP implementation, including weaknesses identified and corrective measures taken.

(c) Refrain from any action likely to impede or hinder the implementation of the ESMP, including any modification, suspension, renunciation and/or annulment of any related provision totally or partially, without the prior written agreement of the Bank; and

(d) Collaborate fully with the Bank in case where project implementation or any change in its scope causes unintended population displacement and/or resettlement; and to not start works in a project area until all PAPs are compensated and/or resettled in accordance with the Resettlement Policy Framework (RPF) prepared.

(F) Integrity

5.2.6. The Borrower shall implement the project and ensure that the Executing Agency and its contractors and/or staff implement the project in accordance with the provisions of anti-corruption policies.

5.3 Compliance with Bank Policies

The project is consistent with all applicable Bank policies.

6. RECOMMENDATION

6.1. Management recommends that the Board of Directors approve the proposal to grant an EUR 36.32 million ADB loan to the Republic of Senegal to finance the Project to Improve Access to Electricity in Peri-urban and Rural Areas, under the conditions set forth in this report.

Appendix I: Situation of the Power Subsector in Senegal

Senegal is a West African country with a population estimated at about 16.1 million in 2017, 52% of them living in urban areas.

Senegal faces many challenges in ensuring the availability of energy, which is one of the essential factors of economic growth and social progress. The country has often faced difficulties in supplying economic actors with sufficient power. Following a very difficult period between 2006 and 2011, the electricity sub-sector in Senegal started picking up gradually in 2012 with fresh investments in all segments of the sub-sector (generation, transmission and networks). In October 2012, the Government concretised its new vision for the development of the sub-sector by adopting a Letter of Energy Sector Development Policy (LPDSE 2013-2017 extended to end-2018) whose main objectives are to: (i) ensure energy security and access to energy for all by 2025 in order to boost economic growth and equitable development; (ii) develop, as a basis for solving the crisis, an energy mix policy combining thermal generation, hydropower, charcoal, natural gas and renewable energy by making the most of all the regional and sub-regional interconnection opportunities; (iii) promote energy control and efficiency; (iv) continue and accelerate the liberalisation of the energy sector by encouraging non-utility generation and institutional reform of the sector; (v) improve sector competitiveness to render energy accessible at affordable cost while ensuring profitability for energy service providers, and to gradually reduce Government financial support; and (vi) step up the regulation of the sector and improve its governance. A priority action plan (PAP) has been drawn up to ensure energy supply security and scale up access by the population to quality modern energy services in sufficient quantity. A new letter of energy sector development policy is being prepared for the period 2018-2023. It will be accompanied by a new priority action plan in line with the objectives of the Emerging Senegal Plan (a reference framework for all sector operations, which considers universal access to energy as a priority).

Efforts made by the Government over the last five years have helped to ensure the availability of power to households and industries, with improved service quality. The frequency of power cuts previously observed owing to insufficient generation has reduced considerably. There are just a few interruptions in power supply resulting from the state of the transmission and distribution networks.

The national electricity access rate increased from below 50% in 2012 to 68% at end-2017. The rate in rural areas rose from 24% in 2012 to 40% at end- 2017 and in urban areas from 80% in 2012 to 92% in 2017. The generation capacity rose sharply and stood at 911 MW at end-2017, with the share of renewable energy standing at close to 20%, against barely 6% in 2012. Peak power consumption stood at 606 MW in 2017, leaving a sufficient and even surplus margin for which measures should be taken to ensure better distribution. This poses the challenge of constructing transmission and distribution networks so that efforts to increase generation capacity can lead to improved access to electricity by the population.

In a bid to play its role in achieving the objective of universal access to electricity by 2025 set by the Government, Senelec has adopted a vast programme for universal access to electricity, which incorporates this project. The programme seeks to connect more than 600 000 new urban and rural customers by 2025.

The high-voltage transmission network is concentrated in the West of the country, mainly in Dakar Region. It is currently developing towards the Southeast in anticipation of interconnection with the planned OMVS and OMVG 225 kV network. The network comprises two voltage levels: 90 kV and 225 kV. In 2016, the transmission network was 531.72 kilometres long, of which 277.85 kilometres of 90 kV lines and 253.87 kilometres of 225 kV lines.

Power is distributed to subscribers through 5 429 HVA/LV substations (6.6 kV or 30 kV/380V). These substations supply 9 584.55 kilometres of HVA lines and 9 164 kilometres of LV lines. The 9 584.55 kilometres of lines are broken down into: (i) 8 478.89 kilometres of overhead lines, representing 88.46% of the total line; (ii) 1 098.23 kilometres of underground lines, or 11.46%; and (iii) 7.44 kilometres of river lines, or 0.8 %.

At end-2017, Senelec had 1 332 072 subscribers with total billed energy of 3 920.54 GWh, against 2 875.02 GWh in 2016. The average price per kWh was XOF 107.45 at end-2017, against XOF 117.6 in 2016 and XOF 116.9 in 2015. As part of its strategic policy, Senelec has opted for large-scale development of prepayment metres for subscribers. As a result, WOYOFAL (prepayment) clientele increased from 86 146 subscribers in January 2016 to 193 719 in December 2016. Senelec's objective is to reach 65% of subscribers on prepayment. PAMACEL will contribute to achieving that objective.

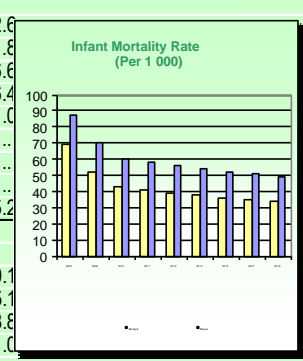
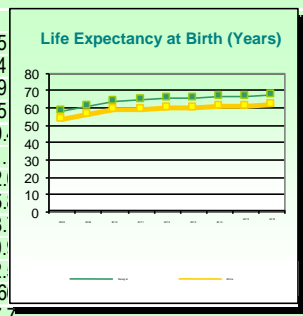
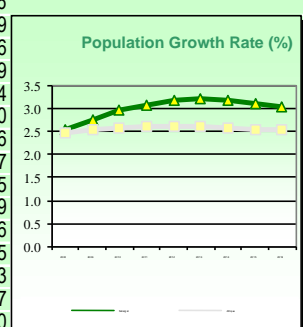
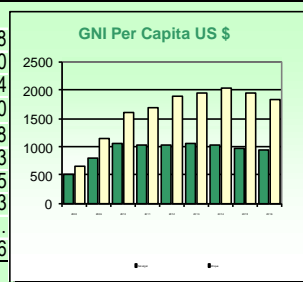
Until 2012, Senelec's financial situation was characterized by: (i) recurrent operating losses attributable to an obsolete production tool and constantly increasing operating charges; and (ii) high levels of unpaid debts owed mostly by public departments. Between 2014 and 2017 and following the deployment of the Emerging Senegal Plan, a key objective of which is universal access to electricity by 2025, Senelec's situation has gradually improved, thanks to investments made and enhanced sector governance. Its current financial situation even enables it to obtain resources from financial markets. According to a rating agency licenced by the Regional Council for Public Savings and Financial Markets (CREPMF), Senelec's current risk profile is very low in the long term and low in the short term.

For the 2018-2023 period, the total balance sheet shows an upward trend, from XOF 1 120 billion in 2018 to XOF 2 115 billion in 2023, i.e. an 88% increase. Senelec's net cash flow should improve to stand at XOF 41 304 million in 2023, with a stable outlook. Since 2014, Senelec has recorded positive earnings, from XOF 2 036 million to XOF 36 376 million in 2017.

The implementation of investments planned under the YEESAL Plan will help push SENELEC's net income to XOF 68 308 million in 2023, i.e. an annual 28.4% growth rate. Despite the substantial investments, Senelec should post a positive cash flow for the period, from XOF 7 759 million in 2017 to XOF 42 868 million in 2023, i.e. an average 62% growth rate over the period.

Appendix II: Senegal's Comparative Socio-economic Indicators

	Year	Senegal	Africa	Developing Countries	Developed Countries
Basic Indicators					
Area ('000 Km ²)	2017	197	30 067	94 716	35 018
Total Population (million)	2017	16.1	1 244.8	6 252.1	1 190.0
Urban Population (% of Total)	2017	43.8	40.5	49.2	81.4
Population Density (per Km ²)	2017	83.4	42.4	66.0	34.0
GNI per capita (USD)	2016	950	1 836	4 442	41 208
Labour Force Participation * - Total (%)	2017	57.5	65.8	62.3	60.3
Labour Force Participation ** - Female (%)	2017	45.3	55.3	47.8	52.5
Sex Ratio (Males per 100 Females)	2017	96.7	100.2	107.5	105.3
Human Development Index (rank among 187 countries)	2015	162
Population Living Below USD 1.90 a Day (%)	2011	38.0	...	16.3	0.6
Demographic Indicators					
Population Growth Rate - Total (%)	2017	3.0	2.5	1.3	0.6
Population Growth Rate - Urban (%)	2017	3.6	3.5	2.4	0.9
Population <15 years (%)	2017	43.7	40.8	27.9	16.6
Population Aged 15-24 years	2017	19.4	19.2	16.7	11.9
Population > = 65 years (%)	2017	2.9	3.5	6.8	17.4
Dependency Ratio (%)	2017	87.2	79.6	54.6	52.0
Female Population Aged 15 - 49 years (%)	2017	24.1	24.0	25.6	22.6
Life Expectancy at Birth - Total (Years)	2017	67.7	61.9	70.2	80.7
Life Expectancy at Birth - Female (Years)	2017	69.5	63.3	72.3	83.5
Crude Birth Rate (per 1 000)	2017	36.2	33.9	20.6	10.9
Crude Death Rate (per 1 000)	2017	5.6	9.0	7.5	8.6
Infant Mortality Rate (per 1 000)	2016	33.6	49.3	33.1	4.5
Under-five Mortality Rate (per 1 000)	2016	47.1	72.6	44.3	5.3
Total Fertility Rate (per woman)	2017	4.9	4.4	2.6	1.7
Maternal Mortality Rate (per 100 000)	2015	315.0	444.1	237.0	10.0
Women Using Contraception (%)	2017	22.5	37.6	62.1	...
Health and Nutrition Indicators					
Physicians (per 100 000 people)	2005-15	6.1	41.6	121.6	293.5
Nurses and Midwives (per 100 000 people)	2005-15	43.0	120.9	211.3	873.4
Births Attended by Skilled Health Personnel (%)	2010-16	53.2	55.9	76.6	98.9
Access to Safe Water (% of Population)	2015	78.5	71.6	89.4	99.5
Access to Health Services (% of Population)	2015	47.6	39.4	61.5	99.1
Percent. of Adults (15-49 years) Living with HIV/AIDS	2016	0.4	3.6	1.1	...
Incidence of Tuberculosis (per 100 000)	2016	140.0	221.7	163.0	12.1
Children Immunized Against Tuberculosis (%)	2016	97.0	82.1	84.9	95.1
Children Immunized Against Measles (%)	2016	93.0	74.4	84.0	93.1
Underweight Children (% of children under 5 years)	2010-15	18.1	18.1	15.3	0.1
Prevalence of Stunted Growth	2010-15	19.4	33.3	25.0	2.1
Prevalence of Malnutrition (% of population)	2015	11.3	17.5	12.28	2.6
Public Expenditure on Health (as % of GDP)	2014	2.4	2.6	3.0	7.7
Education Indicators					
Gross Enrolment Ratio (%)					
Primary - Total	2010-16	82.2	101.7	103.8	102.6
Primary - Female	2010-16	86.9	98.8	102.2	101.8
Secondary - Total	2010-16	49.6	51.8	...	106.6
Secondary - Female	2010-16	49.1	49.7	...	106.4
Primary School Female Teaching Staff (% of Total)	2010-16	32.4	46.0	51.3	81.0
Adult Literacy Rate - Total (%)	2010-16	42.8	68.6
Adult Literacy Rate - Men (%)	2010-16	52.8	76.0
Adult Literacy Rate - Women (%)	2010-16	33.6	61.7
Percentage of GDP Spent on Education	2010-16	7.4	4.9	4.1	5.2
Environmental Indicators					
Arable Land (as % of Total Land Area)	2015	16.6	8.0	11.3	10.1
Agricultural Land (as % of Total Land Area)	2015	46.1	37.4	38.1	35.1
Forests (as % of Total Land Area)	2015	43.0	21.0	31.4	28.8
Per capita CO2 Emissions (metric tons)	2014	0.6	1.1	3.5	11.0



Source: AfDB Statistics Department Database;

Last Update:

January 2018

World Bank WDI; UNAIDS; UNSD; WHO, UNICEF, UNDP, Country Reports.

Notes: n.a. Not Applicable ... : Data Not Available. * Labour Force Participation, Total (% total population aged above 15 years)

** Labour Force Participation, Women ((% female population aged above 15 years))

Appendix III: Table of Bank Portfolio in Senegal as at 30 June 2018

3.1. Active National Projects as at 30 June 2018

	Sector / Operation	Approval Date	Amount Approved (UA million)	Amount Disbursed (UA million)	Disbursement Rate (%)	Disbursement Deadline
RURAL						
1	Community Roads Project in Support of PNDL (PPC/PNDL) - ADF - OPEC	17-July-13 11-Dec.-13	15.00 7.11	13.39 3.77	89.3 53.0	31-Dec.-18 30-June-19
2	Project to Restore the Ecological and Economic Functions of Lake Guiers (PREFELAG)- ADF - GEF	4-Sept.-13 4-Sept.-13	15.00 0.93	12.07 0.50	80.5 54.2	31- Dec.-18 31- Dec.-18
3	Food Security Support Project in Louga, Matam and Kaffrine Regions - ADF - GAFSP	26-Apr.-13 26-Apr.-13	2.00 28.44	1.26 19.07	63.0 67.1	31- Dec.-18 31- Dec.-18
4	Project to Open Up Production Areas in Support of the National Local Development Programme (PDZP/PNDL)	22-June-18	20.00	0	0	31- Dec.-23
5	PPF Rice Value Chain Development Project in the Senegal River Valley (PDCV Riz)	18-May-16	0.55	0.02	4.46	30-June-18
6	PPF Youth Entrepreneurship Development Project in the Agricultural and Agro-food Sub-sectors in Senegal (PDEJAS)	01-June-16	0.81	0.78	95.5	31- Dec.-18
7	Project to Improve Climate Information Quality for Building the Resilience of Communities in Senegal (CDSF)	17-March-17	0.82	0.01	1.6	31- Dec.-19
	Sub-Total		90.66	50.87	56.1	
INFRASTRUCTURE						
8	Dinguiraye-Nioro-Keur-Ayib (DNK) Road Rehabilitation Project - ADF	28-May-14	23.77	15.81	66.5	31- Dec.-19
9	Project to Rehabilitate RN 2 and Open Up Access to Morphil Island - AfDB	16-Dec-15	100.20	16.92	16.9	31- Dec -19
10	Urban Modernisation Programme (PROMOVILLES) - ADB	29-March-17	94.84	7.49	7.9	31- Dec.-21
11	Dakar Regional Express Train Project (TER) - ADB	21-June-17	151.74	17.42	11.5	31- Dec.-21
12	Digital Technologies Pool Project - ADB	21-Oct-15	50.56	1.54	3.0	31- Dec.-20
	Sub-Total		421.11	59.18	14	
WATER AND SANITATION						
13	Project to Reinforce Multiple-Use Water Supply along the Louga - Thiès - Dakar Road from the Keur Momar Sarr Treatment Plant- AfDB	18-Nov.-16	53.91	3.12	5.8	30-June-21
14	Project to Improve Faecal Sludge Management and Re-use in the Town of Ziguinchor	23-Apr.-13	1.04	1.04	100	31- Dec.-18
15	Water and Sanitation Sector Project (PSEA) - ADF - RWSSI	23-Apr.-14 23-Apr.-14	20.00 4.97	8.07 2.10	40.4 42.3	31- Dec -18 31- Dec -18
	Sub-Total		79.92	14.33	17.9	
SOCIAL						
16	Youth and Women's Employment Promotion Support Project (PAPEJF) - ADF	23-Oct.-13	21.19	3.56	16.8	30-June.-19
17	Senegal Virtual University Support Project (PAUVS) - ADF	18-Dec.-13	3.38	1.30	38.4	30-June-19
	Sub-Total		24.57	4.86	19.8	
GOVERNANCE						
18	Private Sector Promotion Support Project (PAPSP) - ADF		4.04	2.98	73.9	30-Dec.-18
19	Legal Assistance to the Mining Sector (ALSF)	30-Sept.-16	0.71	0	0	31-Dec.-18
	Sub-Total		4.75	2.98	62.7	
TOTAL			621.01	132.22	21.3%	

* Source: SAP-PS, June 2018

Sector Breakdown: Infrastructure (70%); Water and Sanitation (13.3%); Rural Sector (11.8%); Social (4.1%) and Governance (0.8%)

3.1. Active Private Sector Window Projects as at 30 June 2018

Sector/Operation	Approval Date	Amount Approved (UA million)	Amount Disbursed (UA million)	Disb. Rate (%)	Closing Date
1 Blaise Diagne International Airport (AIBD)	17-Dec.-10	58.06	58.06	100	5-March-29
2 Dakar Toll Motorway Project - Senior Loan	19-Jul.-10	7.85	7.85	100	31-Dec.-25
3 Sendou Power Plant Project - Senior Loan	25-Nov-09	45.62	45.62	100	31-Dec.-24
- Supplementary Loan	30-Oct.-15	4.15	4.15	100	
4 Rice Project of the Senegal Compagnie Agricole de Saint Louis (CASL)	22-June-16	13.02	8.34	64,1	23-Mar.-22
TOTAL		128.70	124.02	96.3%	

* Source: SAP-PS, June 2018

3.2. Active Multinational Projects as at 30 June 2018

Sector/Operation	Approval Date	Amount Approved (UA million)	Amount Disbursed (UA million)	Disb. Rate (%)	Disbursement Deadline
RURAL					
1 Programme to Build Resilience in the Sahel (P2RS)	16-Mar.-15	22.25	7.68	34.5	30-June-20
INFRASTRUCTURE					
2 Multinational Project for the Construction of the Trans-Gambia Bridge and Cross-border Improvement (Senegal Loan)	16-Dec-11	3.18	0.02	0.7	31-Dec.-19
3 Rosso Bridge Construction Project (Senegal Loan)	09-Dec-16	7.50	0.06	0.8	31-Dec.-20
4 OMVG Energy Project	30-Sept-15	42.50	8.80	20.7	31-Dec-20
Subs -Total		53.18	8.88	16.7	
TOTAL		75.43	16.56	22%	

* Source: SAP-PS, June 2018 - Sector Breakdown: Infrastructure (70.5%) and Rural Sector (29.5%).

Appendix IV: Key Related Ongoing Projects Financed by other Development Partners in Senegal (2013-2017)

The ongoing electricity projects financed by other donors are presented in the table below.

No.	Project	Donor	Amount	Financing Year
1.	Fatick-Kaolack 225 kV HVB Link + Fatick 225/30 Kv Substation	BOAD	XOF 7.2 billion	2015
2.	Mbour-Fatick 225 kV HVB Link + Fatick 225/30 Extension substation	IsDB	XOF 18 billion	2015
3.	Kounoune-Patte d'Oie 225 kV Underground Link	IsDB	XOF 20 billion	2015
4.	Tobène-Kounoune 225 kV Double Circuit Link	BOAD	XOF 14 billion	2015
5.	Sendou-Kounoune 225 kV Double Circuit Link	BOAD	XOF 2.5 billion	2015
6.	Tamba-Kolda-Ziguinchor 225 kV Link	EXIM BANK INDIA	XOF 80 billion	2017
7.	Sambagalou-Kédougou-Tamba 225 kV Link	OMVG	XOF 5 billion	2017
8.	Mauritania-Senegal 225 kV Link	IsDB	EUR 111 million	2015
9.	Replacement of CdB-Hann 90kV Transmission Lines (PASE 48)	WB	XOF 5.24 billion	2015
10.	Replacement of GIS Sococim 90 Kv Substation with GIS	JICA	XOF 9.5 billion	2013
11.	Installation of a GIS 90/30 kV Substation in Guédiawaye Rehabilitation of 30 kV Cells at the University and Airport 90/30 kV Substations	EIB	XOF 27 billion	2016
12.	Extension of 2x80 MVA 225/30 kV at the Touba Substation	FSE	XOF 1.2 billion	2016
13.	Extension of the Hann and Bel Air 30 kV Substations	WB	XOF 1.622 billion	2012
14.	Upgrading and Modernisation of SENELEC's Network with a view to Incorporating Renewable Energy	AFD	EUR 45 million	2018
15.	Construction of 6 MV Backbones	EU	EUR 6.65 million	2018
16.	Electricity Access and Energy Efficiency Project (Phases 1 and 2)	KfW	EUR 57 million	2014 (1)-2016(2)
17.	Renewable Energy Promotion Project (Diass solar energy plant and diesel-solar hybrid plants) – Phases 1 and 2	KfW	EUR 47 million	2015 (1)-2018(2)
18.	Supplementary Financing of PASE (distribution and commercial network)	WB	USD 70 million	2016
19.	Supplementary Financing of PASE (distribution and commercial network)	EIB	USD 80 million	2016
20.	Extension and Densification of the Distribution Network	BOAD	XOF 25 billion	2016
21.	Extension, Modernisation and Automation of Distribution Networks in Regions Construction of HV Substations and Transmission Lines: Diarniadio and Thiès HV Substations	BNP PARIBAS	XOF 129 billion	2018
22.	Tamba-Bakel 225 kV Links and related 225/30 kV Substations + Tanaf-Ziguinchor 225 kV Links + Universal Access	Exim Bank India	USD 112.5 million	2018
23.	Ferlo loop (Matam-Linguère-Touba 225 kV link)+ Universal Access	BNP PARIBAS	EUR 106.6 million	2018

AFRICAN DEVELOPMENT BANK

BOARD OF DIRECTORS

Resolution N° B/SN/2018/67

Adopted by the Board of Directors on a lapse-of-time basis, on 3 October 2018

Loan to the Republic of Senegal to finance part of the costs of the Project to Improve Access to Electricity in Peri-urban and Rural Areas (PAMACEL)

THE BOARD OF DIRECTORS,

HAVING REGARD to: (i) Articles 1, 2, 12, 13, 14, 15, 16, 17, 18, 32 and 37 of the Agreement Establishing the African Development Bank (the “Bank”); (ii) the Fully Flexible Loan Product: Embedding Risk Management Features in Sovereign and Sovereign - Guaranteed Loans (the “FFL Policy”); (iii) the Fully Flexible Loan Guidelines for Conversion of Loan Terms (the “Conversion Guidelines”); (iv) the Review of Sovereign and Sovereign-Guaranteed Loan Charges and the Addendum concerning Front-end Fee Payment Modalities; and (v) the appraisal report contained in Document ADB/BD/WP/2018/190/Approval (the “Appraisal Report”);

RECALLING :

- (i) Document ADB/BD/WP/2016/184/Rev.2 entitled “The Waiver of the Rule of Origin for Specific Cases” as well as the corrigendum thereto (the “Proposal”); and
- (ii) Resolution N°B/BD/2017/06 adopted by this Board on 8th March 2017 approving the Proposal and deciding, *inter alia*, that the procurement of goods, works and services using the resources of the Bank shall be open to countries that are not member states of the Bank, where the Bank agrees to the use of a borrower’s procurement system, for contracts with a value not exceeding the equivalent of: (a) One Million Units of Account (UA 1,000,000) for goods; (b) Six Million Units of Account (UA 6,000,000) for works; and (c) Three Hundred Thousand Units of Account (UA 300,000) for consulting services;

DECIDES as follows:

- 1. To award to the Republic of Senegal (the “Borrower”), from the ordinary capital resources of the Bank, a loan of an amount not exceeding Thirty-Six Million, Three Hundred and Twenty Thousand Euros (EUR 36,320,000) (the “Loan”) to finance part of the costs of the Project to Improve Access to Electricity in Peri-urban and Rural Areas (PAMACEL);
- 2. To authorize the President to conclude a loan agreement between the Bank and the Borrower (the “Loan Agreement”) on the terms and conditions outlined in the General Conditions Applicable to the African Development Bank Loan Agreements and Guarantee Agreements (Sovereign Entities), the FFL Policy, the Conversion Guidelines, the Appraisal Report and, in particular, the terms and conditions specified herein below:
 - (i) The duration of the Loan shall be twenty (20) years including a grace period of five (5) years (the “Grace Period”) commencing on the date of signature of the Loan Agreement. During the Grace Period, commitment charge and interest shall be payable;

- (ii) The Loan shall be amortized over a period of fifteen (15) years, in thirty (30) equal and consecutive semi-annual installments payable on 15 April and 15 October of each year (each a “Payment Date”), and the first of such installments shall be payable on the Payment Date immediately following the expiration of the Grace Period;
 - (iii) The Loan shall be a Fully Flexible Loan with a Floating Base Rate and an option to fix the base rate. Until the date of application of the fixed based rate (the “Fixing Date”), interest on the disbursed and outstanding balance of the Loan shall be, for each Interest Period, at a Floating Base Rate equal to the Euro Inter-Bank Offered Rate (EURIBOR) or its successor rate, for six (6)-month deposits in Euros, plus a lending spread of eighty (80) basis points and the Funding Cost Margin. Such interest shall be payable semi-annually on a Payment Date;
 - (iv) From the Fixing Date, interest on the disbursed and outstanding balance of the Loan, shall be, for each Interest Period, at a fixed base rate equal to the market swap rate calculated on the principal amortizing schedule of a particular tranche of the Loan, plus a lending spread of eighty (80) basis points and the Funding Cost Margin. Such interest shall be payable semi-annually on a Payment Date;
 - (v) A commitment charge at the rate of zero point twenty-five per cent (0.25%) per annum on the undisbursed portion of the Loan shall begin to accrue sixty (60) days after the date of signature of the Loan Agreement and shall be payable semi-annually on a Payment Date;
 - (vi) A front-end fee of zero point twenty-five per cent (0.25%) of the total amount of the Loan shall be payable on the earlier of: (a) Sixty (60) days after the Date of Entry into Force of the Loan; and (b) the date of first disbursement of the Loan; and
 - (vii) The principal, interest, commitment charge and front-end fee shall be expressed and payable in Euros or any other applicable Loan currency in accordance with the Conversion Guidelines;
3. The President may cancel the Loan if the Loan Agreement is not signed within ninety (90) days from the date of approval of the Loan by this Board; and
4. This Resolution shall become effective on the date above-mentioned.