Document of
The World Bank and the International Finance Corporation

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Report No: 79070-SN

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED INTERNATIONAL DEVELOPMENT ASSOCIATION PARTIAL RISK GUARANTEE IN THE AMOUNT UP TO US$ 40 MILLION

IN SUPPORT OF
THE REPUBLIC OF SENEGAL AND TOBENE POWER SA

AND ON

PROPOSED IFC FINANCING CONSISTING OF
AN A LOAN IN THE AMOUNT OF UP TO EUR 30 MILLION
A B LOAN IN THE AMOUNT OF UP TO EUR 55 MILLION
AN EQUITY INVESTMENT IN THE AMOUNT OF UP TO EUR 3.5 MILLION AND
AN INTEREST RATE SWAP REPRESENTING A LOAN-EQUIVALENT EXPOSURE OF UP TO US$ 5.5 MILLION

TO

TOBENE POWER SA

FOR THE

TAIBA NDIAYE INDEPENDENT POWER PRODUCER PROJECT

November 22, 2013

Energy Unit
Sustainable Development Department
Africa Region

Infrastructure Department
International Finance Corporation

CURRENCY EQUIVALENTS

(Exchange Rate Effective: October 31, 2013)

Currency Unit	=	XOF (West African CFA Franc)
480	=	US$1
655		EUR 1
US$	=	SDR 1

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

AfDB	African Development Bank
BOAD	Banque Ouest Africaine de Développement (West African Development Bank)
BOO	Build, Own, Operate
BVI	British Virgin Islands
CBAO	Compagnie Bancaire de l'Afrique de l'Ouest (Bank of West Africa)
COI	Conflict of interest
CO_2	Carbon dioxide
CPI	Consumer Price Index
CPS	Country Partnership Strategy
CRSE	Commission de Régulation du Secteur de l'Electricité (Electricity Regulatory Commission)
DEEC	Direction de l'Environnement et des Etablissements Classés (Environmental Directorate)
DFI	Development Finance Institution
DOTS	Development Outcome Tracking System
DSCR	Debt Service Coverage Ratio
EAIF	Emerging Africa Infrastructure Fund
EHS	Environment, Health and Safety
EIRR	Economic Internal Rate of Return
EPC	Engineering Procurement and Construction
EROIC	Economic Return on Invested Capital
ESIA	Environmental and Social Impact Assessment
ESSP	Electricity Sector Support Project
ESAP	Environmental and Social Action Plan
ESMP	Environmental and Social Management Plan
FMO	Netherlands Development Finance Company
FSA	Fuel Supply Agreement
FSE	Fonds de Soutien de l'Energie (Special Fund for Energy)
GDP	Gross Domestic Product
GoS	Government of the Republic of Senegal
GTi	Greenwich Turbine Inc
GWh	Giga Watt hour

HDI	Human Development Index
HFO	Heavy Fuel Oil
IEG	Independent Evaluation Group
IFC	International Finance Corporation
IDA	International Development Association
IMF	International Monetary Fund
INSEE	National Institute of Statistics and Economic Studies
IPP	Independent Power Producers
KEPCO	Korea Electric Power Corporation
LEQ	Loan Equivalent Exposure
L/C	Letter of Credit
LNG	Liquefied Natural Gas
MEF	Ministère de l'Economie et des Finances (Ministry of Economy and Finance)
MIGA	Multilateral Investment Guarantee Agency
MLA	Mandated Lead Arranger
MPG	Melec PowerGen Inc.
MPGS	MPG PowerGen Services
MW	Mega Watt
NPV	Net Present Value
OHS	Occupational, Health and Safety
ORAF	Operational Risk Assessment Framework
O & M	Operation and Maintenance
PPA	Power Purchase Agreement
PRG	Partial Risk Guarantee
RE	Renewable Energy
RFP	Request for Proposal
ROIC	Return on Invested Capital
RPM	Revolution per Minute
SAR	Société Africaine de Raffinage (African Refining Company)
SBLC	Standby Letter of Credit
SCADA	Supervisory Control and Data Acquisition
SENELEC	Société Nationale d'Electricité du Sénégal (National Electricity Utility of Senegal)
SNDES	Stratégie Nationale de Développement Economique et Social (National Strategy for the Economic and Social Development)
SPV	Special Purpose Vehicle
SSA	Sub-Saharan Africa
TP	Tobene Power
UPS	Uninterruptible Power Supply
WACC	Weighted Average Cost Of Capital
WBG	World Bank Group
XOF	West African CFA Franc

International Finance Corporation (IFC)

Regional Vice-President:	Jean Philippe Prosper
Regional Industry Director:	Bernard E. Sheahan
Regional Director	Yolande B. Duhem
Transaction Manager:	Alain Ebobisse
Regional Industry Manager:	Bertrand Heysch De la Borde
Global Industry Manager:	Morgan Landy
Regional Portfolio Manager:	Ramamohan Mahidhara
Investment Officers:	Koffi Mawusi Klousseh
	Dan Vardi
	Lamine Lo
	Bernadette Tabeko

International Development Association (IDA)

Regional Vice President:	Makhtar Diop
Country Director:	Vera Songwe
Sector Director:	Jamal Saghir
Sector Manager:	Meike van Ginneken
Guarantee Manager:	Pankaj Gupta
Task Team Leaders:	Demetrios Papathanasiou
	Manuel Berlengiero
Guarantee Task Team Leader:	Patrice Caporossi

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TAIBA NDIAYE INDEPENDENT POWER PRODUCER PROJECT

PROJECT APPRAISAL DOCUMENT

AFRICA

AFTG2

Basic Information

Date: November 22, 2013		Sectors: Power Generation Themes: Private Sector Development EA Category: A – Full Assessment
Country Director:	Vera Songwe	IDA Team Leader(s): Demetrios Papathanasiou / Manuel Berlengiero
Sector Manager/Director:	Meike Van Ginneken / Jamal Saghir	IFC Investment Officers: Koffi Mawusi Klousseh, Dan Vardi, Lamine Lo, Bernadette Tabeko
IDA Project ID:	P143605	
IFC Project ID	33841	
Industry Director	Bernard E. Sheahan	
Regional Director	Yolande B. Duhem	
Transaction Manager	Alain Ebobisse	
Regional Industry Manager	Bertrand Heysch De la Borde	
Global Industry Manager	Morgan Landy	
Regional Portfolio Manager	Ramamohan Mahidhara	
Lending Instrument:	IDA Guarantee, IFC A and B Loan, IFC Equity Investment and IFC interest rate swap	

Joint IFC: Yes

Borrower: Republic of Senegal

Responsible Agency: Tobene Power SA

Contact:	Mr. Samer Nasr	Title:	Managing Director
Telephone No.:	+9619620934	Email:	snasr@melecpowergen.com

Project Implementation Period:	Start Date: 19 December 2013	End Date:	31 January 2036
Expected Effectiveness Date:	30 April 2014		
Expected Closing Date:	31 January 2036		

Project Financing Data(US$M)

[ ] Loan	[ ] Grant	[X] Other: IFC Loan, Equity Investment and interest rate swap
[ ] Credit	[X] Guarantee	

For Loans/Credits/Others

Total World Bank financing (US$m.): up to 40.00
Proposed terms: PRG for a period of up to 22 years against defined risk coverage.

Total IFC financing up to approximately EUR 92.5 million equivalent
IFC Equity Investment: IFC will be investing up to EUR3.5 million as equity in the Project for up to 10% of the equity.
IFC Debt IFC will be providing an up to EUR 30 million A Loan and an up to EUR 55 million B Loan.
IFC Swap: IFC will provide the company with an interest rate swap with a Loan Equivalent Exposure of up to US$ 5.5 million.

Project Cost and Proposed Financing Plan (Indicative)

Sources of funds	**Euro million**	**%**	**Uses of funds**	**Euro million**	**%**
Equity:			*Hard costs:*		
MPG	28.5	22.5%	EPC	93.2	73.5%
IFC	3.2	2.5%	Construction Management	1.0	0.8%
Total Equity:	**31.8**	**25.0%**	Land and other set-up	0.8	0.7%
Senior Debt:			Import duties/taxes/stamp	3.1	2.4%
IFC A Loan	28.4	22.5%	*Soft costs:*		
IFC B Loan	50.0	39.6%	Development costs	4.2	3.3%
EAIF	25.0	19.8%	Financing costs	6.3	4.9%
FMO	25.0	19.8%	DSRA	5.5	4.3%
Parallel Loan –BOAD	16.4	12.9%	Working capital/fuel	7.7	6.0%
Total Senior Debt:	**94.9**	**75.0%**	Contingencies	5.0	4.1%
Total	**126.7**	**100%**	**Total**	**126.7**	**100%**

Expected Disbursements (in US$ Million)

Fiscal Year	14	15	16	17	18	19	20	21	
Annual	N/A								
Cumulative	N/A								

Project Development Objective(s)

The Project Development Objective is to increase the power generated by Independent Power Producers.

Project Description	**Cost (US$ Millions)**
This operation will support the construction of a new power plant by Tobene Power (TP), with an installed capacity of 96 MW (70 MW guaranteed capacity), to be located in Taiba Ndiaye, about 90km north east of Dakar. The proposed IDA PRG in the amount of up to US$ 40 million, will backstop a Standby Letter of Credit, which would ensure credit support	Equivalent to US$ 172 Millions

provided to the Project to enable its continuous operation. IFC will support the Project with an equity investment, an A and B Loan, and an interest rate swap	

Compliance

Policy

Does the project depart from the CAS in content or in other significant respects?	Yes [ ]	No [X]
Does the project require any waivers of Bank policies?	Yes [ ]	No [X]
Have these been approved by Bank management?	Yes [ ]	No [ ]
Is approval for any policy waiver sought from the Board?	Yes [ ]	No [X]
Does the project meet the Regional criteria for readiness for implementation?	Yes [ ]	No [ ]

Performance Standards (PS)	Triggered
PS 1. Assessment and Management of Environmental and Social Risks and Impacts	**YES**
PS 2. Labor and Working Conditions	**YES**
PS 3. Resource Efficiency and Pollution Prevention	**YES**
PS 4. Community Health, Safety and Security	**YES**
PS 5. Land Acquisition and Involuntary Resettlement	**YES**
PS 6. Biodiversity Conservation and Sustainable Management of Living Natural Resources	**NO**
PS 7. Indigenous People	**NO**
PS 8. Cultural Heritage	**NO**

Conditions of Effectiveness of the IDA PRG

- Firm commitment for proposed equity and debt financing for the Project.
- Execution, delivery and effectiveness of the PPA (other than in respect of the condition that the L/C has been issued), FSA, the PRG Support Agreement, and all other project financing agreements, in each case in form and substance satisfactory to IDA.
- Payment of the first installment of the Guarantee Fee, and payment of the Initiation and Processing Fees, if such amount is invoiced by IDA as due on or prior to the effectiveness.
- Conclusion of the Guarantee Agreement between the L/C Bank and IDA, the Reimbursement and Credit Agreement between the L/C Bank, the L/C Applicant, and the GoS, the PRG Support Agreement between the L/C Applicant, the GoS, and the L/C Beneficiary, the Project Agreement between the L/C Beneficiary and IDA, the Project Agreement between the L/C Applicant and IDA, GoS Guarantee of SENELEC PPA obligations, and the Indemnity Agreement between IDA and the Republic of Senegal, all in form and substance satisfactory to IDA.
- Provision of satisfactory legal opinions from: (i) the Minister of Justice of the Republic of Senegal relating to the Indemnity Agreement, the PRG Support Agreement, and the Reimbursement and Credit Agreement; (ii) counsel to the L/C Applicant relating to the PRG Support Agreement, the SENELEC Project Agreement, the Reimbursement and Credit Agreement, and the PPA; (iii) counsel to the L/C Beneficiary relating to the Tobene Power Project Agreement and the PRG Support Agreement.

Team Composition

IDA Staff

Name	Title	Unit
Demetrios Papathanasiou	Sector Leader/Task Team Leader (TTL)	AFTSN
Manuel Berlengiero	Senior Energy Specialist/ co-TTL	AFTG2
Mark Walker	Adviser	LEGSO
Patrice Claude Charles Caporossi	Sr. Infrastructure Finance Specialist	TWIFS
Teuta Kacaniku	Energy Finance Specialist	TWIFS
Salamata Bal	Sr. Social Development Specialist	AFTCS
Issa Maman-Sani	Environment Specialist	AFTG2
Seynabou Thiaw Seye	Project Assistant	AFTG2

Lu Ha	Sr. Program Assistant	AFTG2
IFC Staff		
Koffi Mawusi Klousseh	Team Leader	CN2IV
Dan Vardi	Transaction Leader	CN2S6
Bernadette Medefo Tabeko, Lamine Lo	Investment Officers	CN2S6, CN2IV
Belen Castuera	Global Expert	CNGPW
Rimas Puskorius	Credit Officer	CNVDR
Riad Khalil	Engineer	CNGPW
Helen Ibbotson/Patricia Sulser	Lawyers	CLEAF/CLENG
Wola Christopher Kosi Asase, Radhika Gupta	Syndication Officers	CSLSY
Seynabou Ba	Environmental Specialist	CESI2
Eusoph Deriza Kanyenda	Insurance Officer	CPMIS
Adriana Kado, Adama Badji	Assistants	CN2DR, CAFW3

Locations

Country	First Administrative Division	Location	Planned	Actual	Comments

I. STRATEGIC CONTEXT

A. Country Context

1. Senegal aspires to be a high middle income country by the next decade but has been in a low-growth equilibrium since 2006. With a population of about 13 million and a per capita GDP of about US$1,100, Senegal has not shared the rapid growth experienced by many other Sub-Saharan African countries over the last decade. Compared to an average growth rate of 6 percent in the rest of Sub-Saharan Africa (SSA), growth in Senegal averaged only 4 percent between 2000 and 2010, and only 3.3 percent since 2006, with population growth at 2.5 percent. On the fiscal front, the expansion of current spending over the last seven years (from 13.8 to 17.5 percent of GDP between 2005 and 2012) has significantly reduced the government's fiscal space. The deficit went from 3.0 percent in 2005 to 6.7 percent in 2011, while total debt is back to pre-Multilateral Debt Relief Initiative levels.

2. Senegal's democratic tradition has been strengthened by the March 2012 presidential elections. Overall the elections were characterized by effectiveness, integrity, transparency, and respect of the results by all candidates, resulting in a second effective democratic transition. The process was internationally praised and confirms Senegal's democratic maturity. Civil society involvement contributed to the electoral process and paved the way for enhanced integrity and transparency in political practices and governance. In addition, the legislative elections, held in July 2012, were generally considered to be fair, although there was weak popular participation with low turnout (36.6 percent). For the first time, gender parity was required in the candidate lists. Thanks to this new regulation, 43 percent of the members of the National Assembly are women.

3. President Sall faces huge challenges, such as restoring trust and confidence in the state while also meeting urgent popular demand for action on jobs and the high cost of living. Having run on a platform of lowering consumer prices and restoring good governance, transparency and accountability, the new president began with limited capacity to implement new programs due to a large fiscal deficit and food, energy and security crises.

4. Natural disasters such as droughts and flooding have slowed growth and increased the vulnerability of the whole economy. Like many other countries, Senegal is suffering from a rise in the incidence of natural disasters. Senegal is vulnerable to four main natural hazards: drought, locust invasion, flooding, often with associated epidemics, and a sea level rise associated with coastal erosion. The food crisis subsided in 2013 after a good harvest, but the security situation worsened due to the war in Mali, while the energy reform agenda is ongoing and resolution is only expected in the medium-term. Flooding during the 2012 rainy season, notably in the outer suburbs of Dakar, resulted in significant loss of life and temporary displacement of residents, creating a further challenge for the government.

5. Overall, the private sector's ability to stimulate the economy has been limited due to a weak investment climate and external shocks, underpinned by weak governance systems and poor implementation follow up. Senegal's private sector activity has struggled since the mid-2000s. Senegal is ranked 113 out of 144 countries in the 2013 Global Competitiveness Index[1] as

[1] World Economic Forum - http://www.weforum.org/reports/global-competitiveness-report-2013-2014

inadequate physical and human infrastructure, weak institutions (business environment), and governance continue to constrain the country's growth. Senegal urgently needs to restore the competitiveness of its economy to meet its growth objectives. The high costs and questionable reliability of electricity supply has been a key constraint to the country's competitiveness.

6. Senegal's Human Development Index (HDI) is 0.459, ranked 155 out of 187 countries with comparable data, compared to a SSA average of 0.463 in 2012. Overall, Senegal spends resources that are comparable to its peers as a share of GDP, but the intra-sectoral distribution of resources is inefficient, leading to poor outcomes. While the size of the government has grown from 24.1 percent of GDP in 2005 to 29.7 percent in 2011, access to improved services and the quality of services have not always increased. Overall, a lack of clear governance and accountability systems is undermining performance in the social sectors. Senegal needs to implement policies that improve governance, increase resilience to external shocks and are conducive to accelerating inclusive and sustainable growth, creating jobs, and improving service delivery to protect the poor and vulnerable.

7. The new Government has developed an ambitious program to escape the low equilibrium growth trap. The 2012 *Stratégie Nationale de Développement Economique et Social* (SNDES) is intended to address past short-comings by increasing the productivity of Senegal's whole economy, public and private. Recognizing the importance of the energy sector for Senegal's progress, the SNDES aims at reducing the costs of electricity production and expanding access to modern energy in the country.

B. Sectoral and Institutional Context

8. Senegal's electrification rate has doubled since 2000 and currently stands at approximately 50 percent. This is well above the average electrification rate of 30 percent for sub-Saharan Africa (SSA). Access remains uneven, however, with only about 25 percent of rural population benefiting from electricity.

Institutional framework

9. Responsibility for the sector lies with the Ministry of Energy which is assisted by the Permanent Secretariat for Energy. The national electricity utility (*Société Nationale d'électricité du Sénégal* – SENELEC) is a state owned enterprise which has a monopoly for transmission and distribution. It also owns about half of the generation capacity, with the remainder being owned by Independent Power Producers (IPPs) which generate electricity and sell it exclusively to SENELEC. An independent Electricity Regulatory Commission (*Commission de Régulation du Secteur de l'Electricité* – CRSE), was established in 1998; its responsibilities are to approve revenue requirements for the sector and overall regulation.

10. Senegal was among the first countries in SSA to introduce private sector participation in the power sector in the late 90s. The first IPP was GTi, a 52MW combined cycle oil-fired power plant commissioned in 2000. The second IPP was Kounoune, a 67.5MW power plant commissioned in 2008. The track record of IPPs in the country has been mixed, mainly as a consequence of variations in the quality of fuel delivered, grid instability and other technical difficulties which have reduced electricity output from these plants. Some of these issues have been resolved and the Government of the Republic of Senegal (GoS) remains committed to relying on private sector investment to bridge the generation gap.

11. About 90 percent of electricity in Senegal is generated using oil products. Imported crude oil is processed and refined by Senegal's only refinery, *Société Africaine de Raffinage* (SAR). Refined oil products are also imported directly, as SAR's processing capacity covers less than 40 percent of the market. Although majority owned by the private sector, SAR still operates like a public sector company. SAR is experiencing significant financial issues, largely due to SENELEC's (its largest client) financial situation, which often result in delayed payments to SAR for its fuel purchases. Over the past two years, the GoS had to step-in a few times and arrange for fuel imports directly from abroad to guarantee delivery of fuel due to SAR's shutdown.

Supply/demand analysis

12. Senegal experienced rapid electricity demand increase in the past decade due to economic growth. During 2012, peak electricity demand reached 466 MW, almost double the 234 MW of 2000. The power demand profile rises seasonally during the hot months of June to October.

13. Total installed generation capacity connected to the grid is 587 MW (see Table 1). Overall production in 2012 reached about 2,800 GWh, of which about 51 percent was provided by IPPs. The majority of this is based on diesel and Heavy Fuel Oil (HFO) power plants. SENELEC's total installed generation capacity is 371MW, of which only 294MW are fully functional. Total installed generating capacity owned by IPPs is estimated at 212MW, including 92MW consisting of emergency containerized rental diesel units.

14. Senegal imports approximately one tenth of its electricity from the Manantali and Felou hydro power plants in Mali through the interconnected regional network with Mauritania and Mali. Additionally, 47MW of non-grid connected installed capacity serves isolated centers in areas away from the main grid.

Table 1: Power generation installed capacity (2013)

Power Plants	**Installed Capacity (MW)**
SENELEC (functional)	294
IPPs	120
Emergency plants	92
Hydro (Regional imports)	81
Total grid- connected	**587**
Off-grid isolated centers	47
Total	**634**

15. Overall, electricity supply has not kept up with the demand growth. The main reasons for supply shortage are the sector financial challenges (as discussed below) and the limited success in planning and implementation of new power projects. In spite of discussions on many IPPs since 2005, only one domestic project IPP, Kounoune, has been built, another one is in progress (Sendou I), and one is in an advanced stage of development (Tobene Power Project, see below). Most of the others have exhibited slow progress or have been abandoned.

Oil shocks and the financial status of the sector

16. The cost of electricity generation in Senegal is highly sensitive to the price of oil, as 90 percent of electricity in Senegal is generated using oil based products. As a result, the electricity sector has been facing major shocks in the past decade due to the dramatic surge in oil prices. Government budget slippages resulted in disruptions of fuel supply to SENELEC in 2009 and 2010. During 2010-2011, the supply crisis peaked - a result of capacity and fuel shortages - causing widespread load shedding and social unrest.

17. As a result, and despite several adjustments, tariffs have not kept up with the increase in costs of generation and are approximately 30 percent lower than what is needed to cover SENELEC's expenses and investment needs. Average electricity retail tariff is XOF 117/kWh (about US cents 24/kWh), which is nearly twice the average tariff in SSA (US cents 14/kWh). The tariff schedule for domestic consumers follows an increased block structure with a low tariff targeting the poor (XOF 62/kWh or US cents 12/kWh) for up to 47 kWh per month of consumption, and two further blocks of consumption at considerably higher tariffs.

18. The Government provides revenue compensation to SENELEC based on the difference between revenue requirements reviewed by the regulator and actual tariffs. In 2012 the direct state subsidy to the sector reached XOF105 billion (about US$207 million). This represents more than 1.5 percent of the country's GDP and contributes significantly to the GoS's deficit. In addition, further indirect subsidies to the sector in the form of unpaid taxes by SENELEC and support for power rental facilities and investments in capacity extensions brought the total cost to the state's budget in 2012 to XOF 181 billion (about US$360 million), or about 2.5 percent of GDP.

A new sector policy framework

19. The GoS policy framework for the energy sector is deemed adequate and the use of a PRG is appropriate and meets the requirements of World Bank Operational Policy 14.25 (Guarantees). To react to the power crisis, in 2010, the GoS carried out a diagnostic exercise of the sector, which highlighted an increasing gap between fast growing demand and insufficient, costly, and unreliable supply of electricity, as well as SENELEC's persistent financial difficulties, characterized by a significant operating deficit and high indebtedness. To tackle both technical and financial imbalances, the GoS developed a 2011 – 2015 electricity emergency plan, outlining the overall policy framework and strategy to steer the sector towards a sustainable path and ensure SENELEC's financial and operational sustainability over the long run.

20. The GoS also set up a special fund to support fuel provision for electricity generation (the Special Fund for Energy – FSE). The FSE became operational in July 2011 and it finances fuel supplies to SENELEC and co-finances investments in new infrastructure, particularly generation expansion. The Fund's revenues are financed through GoS budgetary transfers (including tariff compensation), charges on oil products, energy and telecommunications, and a contribution from SENELEC.

21. In October 2012, the GoS adopted a Letter of Development Policy for the Energy Sector. The Letter of Development Policy outlines the sector policy objectives of the newly elected government to improve the sector's performance in the medium term. The main axes of the

Letter of Development Policy for the Energy Sector are: (a) ensuring energy security and increasing the energy access for all; (b) developing a policy mix combining thermal generation, bio-energy, coal, gas, and renewables and seizing the opportunities of regional interconnections; (c) continuing and accelerating the liberalization of the energy sector by encouraging independent production and institutional reform of the sector; (d) improving the competitiveness of the sector in order to lower the cost of energy and reduce sector subsidies; and (e) strengthening regulation of the sector.

22. The paragraphs below summarize the GoS energy sector policy framework and progress on the reestablishment of the financial viability of the sector focusing on three main areas: i) increasing generation and diversifying the energy mix to reduce costs; ii) increasing revenues by reducing system losses and increasing collection rates; and iii) improving SENELEC's efficiency. As the GoS rolls out the implementation of its policy, subsidies to SENELEC are expected to decrease from XOF105 billion (about US$207 million) in 2012 to approximately XOF 80 billion (about US$160 million) in 2013 as a result of a number of short-term cost saving measures undertaken by SENELEC. Continued consistent implementation of the policy framework will help decrease subsidies over time with the aim of ending them by 2018 (see Annex 6 for further details).

Increasing generation and diversifying the energy mix to reduce costs

23. The GoS's policy is to increase its generation capacity and shift its energy generation mix, progressively reducing its share of expensive oil based thermal generation. This includes the rehabilitation of existing power plants, reducing its reliance on short-term rental capacity, new construction of efficient power plants, and imports of electricity in the medium to long term.

24. In 2012, the GoS added an additional 150MW of emergency rental diesel power plants, which significantly improved supply, albeit at a very high cost. In 2013, SENELEC has reduced the quantity of emergency power generation from 150 MW to 92 MW, replacing it with cheaper generation from rehabilitated or expanded HFO power plants.

25. As the sector is exiting its emergency state, the GoS has made progress on three front-runner projects that will diversify the energy generation mix and reduce generation costs going forward, from its current level of XOF 95/kWh (about US cents 19/kWh): i) the African Development Bank (AfDB)- Netherlands Development Finance Company (FMO) financed Sendou I, a 125MW coal power plant, with an estimated average cost of about XOF 68/kWh (about US cents 13/kWh); ii) electricity imports from Mauritania, from the IDA-MIGA supported Banda gas-to-power project at an estimated cost of XOF 70-75/kWh (about US cents 14-15/kWh); and iii) the Tobene Power Project (TP Project or the Project) with an estimated cost of about XOF 111/kWh (about US cents 22/kWh) [2]. These three projects are expected to reduce power generation costs as they gradually come on line beginning in 2015 (TP Project), 2016 (Mauritania) and 2017 (Sendou I).

[2] This is a levelized tariff, computed on the basis of (i) a HFO price of 535 EUR/ tons, which is equivalent to US$115 / barrel growing at an inflation rate of 2% per annum (pro-rata calculation considering current oil prices and Senegal's oil regulated prices); and (ii) fuel cost is pass-through.

26. The TP Project is the most advanced of these projects. It is expected to come on line in mid-2015 and will be replacing the remainder of the expensive rental emergency power generation. The TP Project is expected to generate power at a cost that would save about XOF 50/kWh compared to the emergency diesel units, realizing annual savings of about XOF 36 billion (about US$70 million). At the request of SENELEC, the plant's design will allow conversion to natural gas which provides an option value should gas become available in the country, contributing to the GoS's strategy for fuel diversification through future natural gas imports.

27. Negotiations are also at an advanced stage for electricity imports from Mauritania. The Banda gas-to-power project is expected to come to financial close in the first half of 2014 which would allow for 80MW of imports expected to start in 2016, with the potential to increase to 100-130 MW in the future.

28. The 125MW Sendou coal-based independent power producer is currently under construction with lenders making their first disbursement for the project on August 2013. The plant is expected to be commissioned in 2017.

29. A second tier of projects is less advanced but provides prospects for a continued shift towards cheaper generation sources. These include the 35MW Gouina hydropower plant and 60MW imports from the Kaleta hydropower project in Guinea. Senegalese authorities have also been discussing bilaterally a number of additional coal power plants, including a 250 MW plant with the Korean Electricity Corporation (KEPCO) and several other developers. In addition, the GoS is considering importing Liquefied Natural Gas (LNG). This will require signing a long term supply agreement and constructing a regasification terminal. Some existing HFO plants could be converted to run on gas, as will be the case for the TP Project, and new additional gas generation plants could be built as well, contributing to a further reduction of the country's power generation costs.

Increasing revenues

30. The GoS's policy to improve revenues includes a focus on reducing non-technical losses and improving bill collection as well as tariff adjustments. SENELEC's non-technical losses are estimated at more than XOF 20 billion (about US$39 million) per year. The GoS's policy recognizes that much can be done through decreasing losses and improving collections, a less politically sensitive solution than increasing tariffs – which are already amongst the highest on the African continent. In May 2013, the GoS and SENELEC signed a Performance Contract which sets specific targets for revenue improvements in SENELEC for the period 2013 to 2015. The Performance Contract was signed by the ministers responsible for finance and energy, as is the practice in Senegal, with support from the highest level of Government[3]. The Performance Contract calls for a reduction in distribution losses accompanied by increased recovery of bills. These two immediate measures can produce financial improvements in the short term.

[3] In particular the Council of Ministers of July 17, 2012 was fully devoted to the energy sector and chaired by the President, who delivered a speech that provides the strategic objectives and key measures for the Letter of Sector Policy, which were reiterated in the September 2012 "*Déclaration de Politique Générale*" by the then Prime Minister to Parliament.

31. Under the Performance Contract, SENELEC has taken measures that could result in about XOF 15 billion (about US$30 million) in additional revenues in 2013. These will contribute to reduce the cost of billing, increase billing collection and reduce commercial losses through a reduction in arrears. Key measures include the installation of pre-paid meters for residential customers and intelligent meters for large customers. Even under the current tariffs, intelligent meters will improve allocation and targeting of the subsidies, which in turn will help to improve SENELEC's commercial performance and cash position. The objective of SENELEC (and of the GoS) is to install 650,000 split meters over a period of 3 years.

32. As part of its strategy to revamp the financial fundamentals of the sector, the GoS has launched a process to revise the tariff setting mechanism, including: i) reducing the validity period of tariff conditions from five to three years; ii) paying subsidies on a quarterly basis; iii) evaluating SENELEC's revenue needs annually; and iv) reviewing SENELEC's revenues quarterly (to take into account the impact of inflation and fuel market changes to reflect price fluctuations of SENELEC's cost base).

Improving the efficiency of SENELEC

33. In addition to increasing revenues, the GoS's policy to improve SENELEC's operational and financial turnaround focuses on decreasing operational costs (e.g. maintenance and fuel), improving access to working capital, and reducing administrative costs.

34. In 2012, the GoS agreed to a settlement of all cross-debt owed to, and due from, SENELEC, as well as defining SENELEC's financial restructuring plan, including debt restructuring, treatment of arrears, recapitalization, and clearing of other financial items in SENELEC's books. The impacts of these measures on the overall financial situation of SENELEC are difficult to assess precisely as 2012 audited accounts have yet to be finalized.

35. The Performance Contract between the GoS and SENELEC stipulates specific targets to improve the governance of SENELEC. These include tangible results for financial management system enhancements and financial reporting as well as the separation of accounts between SENELEC's key segments of generation, transmission, distribution and retail/commercial operations. An inter-ministerial committee is monitoring the implementation of the Performance Contract based on an external technical and financial audit of the key performance indicators[4].

World Bank Group Support to the GoS Strategy

36. The proposed IDA and IFC operation is part of a suite of WBG instruments supporting the energy sector in Senegal, which is anchored in strong sector dialogue with the authorities. The WBG supports the GoS's goals to improve and implement its sector policy framework, to improve SENELEC's commercial performance, and to diversify its energy mix.

37. Policy support is provided through a series of IDA-financed programmatic budget support operations. These have led to the Letter of Development Policy for the Energy Sector

[4] The IMF program has a structural benchmark for March 2014 requiring the publication of the audit of the SENELEC Performance Contract as well as the report of the committee responsible for monitoring this contract, including an overview of the sector, its financial status, and the strategy for reform.

and the Performance Contract with SENELEC. Going forward, WBG support (in particular the next phase of budget support operations expected to be approved in the coming months) will focus on achieving key actions identified in these documents, among others, through the following two triggers: i) separation of accounts between SENELEC's key segments of generation, transmission, distribution and retail/commercial operations; and ii) update of the power generation investment plan.

38. The FY12 IDA financed Electricity Sector Support Project also supports the improvement of SENELEC's commercial performance through network investments that will reduce system losses, improved metering (pre-paid and intelligent devices), and modernize client management system. Additionally, the proposed IDA and IFC operation in support of the Project is part of the WBG support to bridge supply and reduce the cost of generation. Given the expected electricity supply/demand evolution in the country, the TP Project will be key to addressing Senegal's short-term need for additional generation and will represent a longer term insurance, for security of supply, in case other planned generation projects are delayed or new projects fall short in meeting growing demand. The proposed operation aims to crowd in private investment and contribute to restoring investors' confidence in the energy sector in Senegal. Other WBG support on diversification include MIGA and IDA support to the Banda gas-to-power project in Mauritania (with electricity exports to Senegal) which is on track to be presented to the Board in FY14 and an FY15 regional operation to support power trade and transmission interconnections between various countries in the Gambia River Basin Development Organization which will provide the infrastructure for future hydropower imports from Guinea.

C. Higher Level Objectives to which the Project Contributes

39. The central objective of the WBG's engagement in the energy sector in Senegal is to support the country in securing the affordable, reliable, and sustainable energy supply needed to end poverty and promote shared prosperity. In doing so, the WBG is assisting the GoS to pursue environmentally, financially, fiscally, and socially sustainable energy sector development. Energy shortages, high energy costs from inefficiency, or both, are slowing down economic development in many WBG client countries. Some have not been able to attract financing to maintain the existing infrastructure, let alone rehabilitate and expand it. Meeting the WBG's twin goals of ending poverty and building shared prosperity in a sustainable manner is not possible without reliable modern energy services.

40. The development of energy infrastructure represents a key component of the Government's strategy to support economic development. Electricity is a fundamental block for economic growth and the price, reliability and quality of electricity service affect most economic activities directly or indirectly. The proposed TP Project is aligned with the October 2012 "Letter of Development Policy for the Energy Sector" that aims at: increasing and ensuring reliable supply of power; replacing high-cost power plants; and increasing private sector investments. In addition, the proposed project forms part of SENELEC's emergency response plan for the electricity sector, it has been included in the GoS's recently approved generation investment least cost plans, and appears to be the only investment that can be brought on-line reasonably quickly to reduce the dependency on costly diesel-based emergency rental power generation.

41. The WBG Country Partnership Strategy (CPS) for Senegal, covering the 2013 – 2017 period, supports the National Social and Economic Development Strategy (SNDES) priorities and Senegal's efforts to engage in a recovery and a higher growth and shared prosperity path over the medium-term. This CPS is built upon one foundation and two pillars, as follows: i) foundation: strengthening the governance framework and building resilience; ii) pillar 1: accelerating inclusive growth and creating employment; and iii) pillar 2: improving service delivery. The proposed operation contributes to the second pillar of the CPS and its objective, to facilitate access to energy services and reduce average energy generation costs. In addition, the proposed Project is in line with the CPS's approach to mobilize substantial amounts of resources from across the World Bank Group.

42. The proposed operation is also aligned with the growth pillar of the World Bank's Africa Strategy, by contributing to reliable supply of electricity for growth and private investment, as well as with the guiding principles included in the recently approved WBG paper "Toward a Sustainable Energy Future for All: Directions for the World Bank Group's Energy Sector", in particular in seeking market solutions to leverage financial resources and help governments to foster private sector participation and investments.

II. PROJECT DEVELOPMENT OBJECTIVES

A. Project Development Objectives

43. The Project Development Objective is to increase the power generated by Independent Power Producers.

B. Project Beneficiaries

44. The proposed Project's direct beneficiaries are: i) SENELEC and the GoS who will benefit from replacement of the expensive diesel emergency rental power plants, with a cheaper source of electricity; and ii) the TP Project's owners and lenders, who will benefit from partial payment guarantees.

45. Indirect beneficiaries include all electricity users of the interconnected system of the country --including the poor who face unreliable service due to supply limitations. The proposed Project would also reduce the need for public investment in power generation and contribute to reducing the public deficit, releasing funds for poverty alleviation and other social needs.

C. PDO Level Results Indicators

46. Progress towards achieving the Project outcomes will be measured by the following indicators by IDA: i) Amount of electricity generated by the Project (GWh/year); and ii) Indirect Project beneficiaries[5] (number). IFC will be tracking a series of development impact indicators within IFC's Development Outcome Tracking System (DOTS). See Annexes 1a and 1b for more details.

[5] Direct Project Beneficiaries has been substituted with indirect project beneficiaries based on the nature of the proposed operation.

III. PROJECT DESCRIPTION

47. The proposed operation, which combines various WBG instruments, will benefit from the complementarity of IDA's and IFC's instruments. IDA will be providing a Partial Risk Guarantee (PRG) back-stopping certain payments under a Power Purchase Agreement (PPA) between SENELEC and Tobene Power SA (TP), the Project Company responsible for implementing the TP Project. The proposed IDA PRG (up to US$40 million) consists of a credit enhancement mechanism to mitigate the risks of the low creditworthiness of SENELEC as a sole power off-taker, thus enabling private investment in the Project. IFC, which has been developing the Project together with the Sponsor through IFC InfraVentures will (i) have the right to convert its development expenses into equity in TP prior to financial close and, on or after financial close, will have the right to invest additional equity under the same conditions as the Sponsor for a final shareholding of up to 10% in TP, for an amount of up to EUR 3.5 million; (ii) provide an up to EUR 30 million A Loan and an up to EUR 55 million B Loan to TP, (iii) mobilize an up to EUR 16.4 million equivalent in local currency in parallel loans to TP, and (iv) provide an interest rate swap with a Loan Equivalent Exposure of up to US$ 5.5 million.

The Tobene Power Project

48. The TP Project consists of the construction of a new power plant, with an installed capacity of 96MW (contractually 70MW guaranteed at 91 percent availability), to be located in Taiba Ndiaye, about 90km north east of Dakar. The Sponsor decided to design a larger plant to ensure it meets the rather high contractual required availability. The works will involve: i) the construction and installation of a combined cycle facility consisting of 5 X 18 V48/60 – 500rpm gensets (running on HFO with a provision for future conversion to operate on natural gas), and a steam turbine generator (adding about 7MW and allowing for higher fuel efficiency); ii) construction of network facilities to interconnect to the existing 220kV substation; and iii) fuel storage facilities. Commissioning is envisaged to take place about 18 months after the start of construction.

49. The TP Project will be developed as an IPP on a Build, Own, and Operate (BOO) basis, which will include design, finance, supply, construction, commissioning, operation, and maintenance. It will sell power to SENELEC under a 20-year PPA, which was signed in October 2011. Initially, the PPA was structured as a power availability (also known as tolling plant) arrangement, where SENELEC would be responsible for the supply of fuel and TP would undertake the obligation to supply energy at agreed efficiency rates. However, the PPA is currently being amended to reflect new fuel supply arrangements, and a new payment security structure. Under the new fuel supply arrangements, TP will undertake the responsibility of sourcing fuel and associated logistics responsibility, and pass related costs to SENELEC. Consequently, TP will enter into a Fuel Supply Agreement (FSA) with SAR. The financial closing of the Project is expected to take place by April 2014 with the full commissioning of the power plant expected in July 2015. In order to advance rapidly and meet the aggressive timetable, the Sponsor is expected to start construction before financial close.

50. The Project will be developed by TP, a special purpose vehicle incorporated under the laws of Senegal. At least 90 percent will be owned by Melec PowerGen Inc. (BVI) (MPG) an affiliated Company of the Matelec Group of Lebanon, and, subject to the completion of the

proposed IFC equity investment, up to 10 percent by IFC. IFC has been contributing to the development of the Project through IFC InfraVentures and has the right to convert the development costs incurred into equity in TP. At financial close, IFC has the option to subscribe for further shares enabling IFC to maintain up to 10% shareholding in TP. The Matelec Group is also the Sponsor for another IPP in Senegal: Kounoune Power (Board Report No: 30320-SN), which was also financed by IFC with a EUR 17 million A Loan in 2005. The Matelec Group is a fast growing South-South investor in the Africa region: in 2012, the World Bank Group (IDA, IFC and MIGA) supported the Thika power project in Kenya (Board Report No: 66363-KE) which was also sponsored by the Matelec Group. Annex 2 includes further details on TP and the Sponsor.

A. Project Costs and Financing

51. The TP Project's total cost is expected to be around EUR 126.7 million, (equivalent to US$172 million), and project financing will be structured on a limited recourse basis. The Project's cost breakdown is presented in Table 2. The majority of costs are related to the engines, steam turbines, transformers, installation, construction facility, and interconnection line, all of which will be implemented under a turn-key Engineering, Procurement, and Construction (EPC) contract. The Project's proposed debt to equity ratio is 75:25. The majority of the equity (90%) will be provided by Matelec through MPG with IFC having the right to invest the remaining 10%. The debt will be arranged by IFC, which is the Project's Mandated Lead Arranger (MLA).

Table 2: Project costs and financing sources (indicative)

Sources of funds	**Euro million**	**%**	**Uses of funds**	**Euro million**	**%**
Equity:			*Hard costs:*		
MPG	28.5	22.5%	EPC	93.2	73.5%
IFC	3.2	2.5%	Construction Management	1.0	0.8%
Total Equity:	**31.8**	**25.0%**	Land and other set-up	0.8	0.7%
Senior Debt:			Import duties/taxes/stamp	3.1	2.4%
IFC A Loan	28.4	22.5%	*Soft costs:*		
IFC B Loan	50.0	39.6%	Development costs	4.2	3.3%
EAIF	25.0	19.8%	Financing costs	6.3	4.9%
FMO	25.0	19.8%	DSRA	5.5	4.3%
Parallel Loan –BOAD	16.4	12.9%	Working capital/fuel	7.7	6.0%
Total Senior Debt:	**94.9**	**75.0%**	Contingencies	5.0	4.1%
Total	**126.7**	**100%**	**Total**	**126.7**	**100%**

B. World Bank Group Instruments – IDA Guarantee and IFC Investments

52. The GoS has requested an IDA PRG to support the private investments in the TP Project, which will sell power to SENELEC and will rely on payments by SENELEC for its operation. However, SENELEC's current financial situation poses a credit risk for the Project. The proposed IDA PRG in the amount of up to US$ 40 million would backstop a Standby Letter of

Credit which would ensure that there is enough credit support provided to the Project to enable its continuous operation. The current PPA provides for a payment security structure (cash collateral) which will be replaced by the proposed IDA PRG. This proposed structure is in certain ways similar to the structure provided for the Thika power project in Kenya, a project developed by the Matelec group, which recently reached its interim commissioning in less than 16 months from Board approval.

53. IFC is the MLA for all of the senior debt in the Project, and will provide an A Loan of up to EUR 30 million A Loan, alongside a B Loan of up to EUR 55 million and will mobilize parallel loans of up to EUR 16.4 million equivalent in local currency. Emerging Africa Infrastructure Fund (EAIF), The Netherlands Development Finance Company (FMO), and Banque Ouest Africaine de Développement (BOAD) have expressed interest in the Project and are performing their due diligence. In addition, IFC through InfraVentures role as co-developer, may participate in a 10% equity stake investing up to EUR 3.5 million. These amounts, for which approval is sought, are higher than the indicative amounts presented in Table 2 above, to provide flexibility in the finalization of the project documents.

54. Both the GoS and the Sponsor consider the WBG participation as critical to the successful Project development and realization

55. *Operational Conflicts of interests* – IDA and IFC recognize that real or perceived Conflicts of Interest (CoI) concerns may arise as a result of the multiple roles played by IFC and the Association in the Senegalese power sector. The initial role of IFC in the Project has been that of co-developer alongside the Sponsor with whom IFC through the IFC InfraVentures unit signed the Joint Development Agreement. IFC is proposing to become a shareholder in and lender to TP. On the IDA side, in addition to the proposed PRG, the Association is engaged with SENELEC and others in the sector through a Technical Assistance loan and budget support to the GoS. As the Project proceeds, staff from IFC and IDA will liaise with their respective Conflicts Offices as needed to ensure that any CoI issues arising in connection with the Project are managed in a timely and transparent manner in accordance with applicable IFC and IDA CoI management principles.

IDA Guarantee Structure

56. The proposed IDA PRG will cover the risks of: i) non-payment by SENELEC of its payment obligations under the PPA; and ii) non-payment by GoS of its payment obligations under the Government Guarantee, which relates to capacity charges, variable energy charges, fuel and logistics payments, and termination payments. The total coverage would be in the range of up to US$ 40 million and denominated in EUR. The WBG considers that the PPA and FSA are at an advanced negotiation stage for the WBG to form a view on the adequacy of these documents and on the extent of its cover.

57. The extent of the cover and its amount will be refined depending on the outcomes of the final negotiations of the PPA and the FSA. The types of risks which will be covered under the PRG based on the IDA's analysis of the draft Project Agreements, are the following:

a) Capacity payments to be paid by SENELEC under the PPA, in the range of US$ 2 million per month;

b) Variable energy charges (fuel excluded);

c) Fuel Supply Payments. These are payments due by SENELEC to be agreed under the amendment to the PPA, and which TP, the Project Company, is liable to pay to SAR, according to the terms of the FSA. The potential exposure of TP is expected to be 1 to 2 months of fuel supply (as TP's liability incurred with SAR before TP is entitled to interrupt power deliveries to SENELEC);

d) Termination Payments under the Government Guarantee due by GoS following SENELEC's event of default or uninsured Force Majeure events (including local political Force Majeure events) during the pre-completion period, and SENELEC/GoS's termination payment obligation during operation period. It is proposed that undisputed termination payments due to TP may be covered, provided that the PRG amount has not been used in full to cover the items (a), (b), and (c) above. This coverage corresponds to a request from Sponsor and potential lenders, given the financial situation of SENELEC.

58. The IDA PRG support will be in the form of the Standby Letter of Credit (SBLC). A revolving SBLC would be issued by a commercial bank to TP, on behalf of SENELEC. The SBLC facility would cover the payments obligations described above, once they become due and payable per the terms of the relevant agreement. In case SENELEC or the GoS, as the case may be, fails to make timely payments, TP will have the right to draw down on the SBLC for the corresponding amounts. Upon drawdown on the SBLC facility, the amounts drawn will be converted into a 12 month loan to SENELEC or GoS, as the case may be, from the L/C bank. SENELEC or GoS will have an obligation, under a Reimbursement and Credit Agreement (to be concluded between SENELEC, GoS and L/C bank) to repay such loan within a one year period. Once SENELEC or GoS has repaid the loan, the L/C facility would be reinstated in the amount repaid. However, in case SENELEC or the GoS fail to repay the loan, the L/C bank would have direct recourse to the IDA PRG for the drawn and unpaid amounts plus any accrued interest, under the Guarantee Agreement (to be concluded between IDA and L/C bank). In other words, PRG would backstop SENELEC's and the GoS's obligations towards the L/C bank. Should IDA be required to make a payment to the L/C bank, the IDA PRG support would be permanently reduced by the amounts paid by IDA under the PRG. In the event of disputed amounts, TP would be able to access the SBLC only once the dispute has been resolved in its favor.

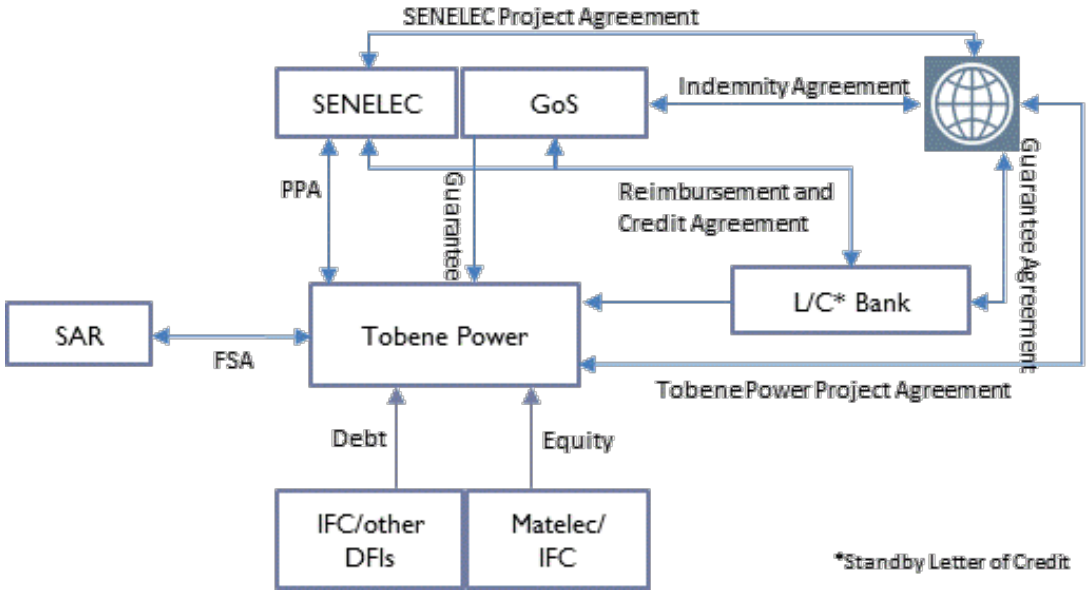
59. A payment under the PRG would trigger the obligation of GoS to repay IDA in accordance with the terms of the Indemnity Agreement (to be concluded between IDA and GoS). The Indemnity Agreement will require the GoS to repay IDA on demand, or as IDA may otherwise direct.

60. The term of the L/C is expected to be up to 22 years. However in case the L/C bank is not able to issue the L/C for the required period, a rollover provision could be included in the IDA PRG. The actual amounts available for drawing will be determined annually within the maximum PRG amount, and would be with respect only to the risks covered by the PRG. All L/C and PRG-related fees indicated would be payable jointly by TP and SENELEC.

61. The L/C structure envisioned for this Project is in certain aspects similar to the recently closed Thika Power project in Kenya. The TP Project's contractual structure and WBG structure

is given below. Annex 7 provides additional details on the proposed guarantee structure, and pricing.

Figure 1: Partial Risk Guarantee structure chart



62. **L/C bank Selection Process:** The L/C bank will be chosen on the basis of a competitive process, which will be handled jointly between SENELEC and TP. While the L/C bank selection will be made by both SENELEC and Tobene Power, the Bank's role will be to assist parties with qualitative evaluation of the competing banks, and ensure that the selected bank has the needed expertise and an experienced team to handle the transaction. The L/C bank will be selected from a shortlist of banks meeting the following criteria: (i) strong experience in the field of structured finance and trade finance activities; (ii) creditworthiness acceptable to address the long-term drawdown needs over the L/C tenure; and (iii) competitive pricing of the L/C. The bidding process is expected to start in December 2013. IDA expects the L/C bank selection to be made in January 2014, and financing documents signed shortly thereafter.

63. **Risks Allocation:** As is customary in project finance transactions, risks are allocated to the party best able to mitigate them. The allocation of key risks among the Sponsor, lenders, SENELEC and GoS, are summarized in the table below, as well as the risks that are expected to be backed by the IDA PRG. The Sponsor and lenders will assume the pre-construction and most of the construction and operations risks. The construction and operations risks will be mitigated by securing fixed price, turnkey contracts and O&M contracts with reputable companies. In addition, in the case of force majeure affecting TP, TP is expected to assume natural force majeure risks, which should be mitigated through insurance. However, if a natural force majeure impacts SENELEC, TP will continue to receive capacity payments, and (if SENELEC terminates the PPA), termination compensation. With regards to political force majeure risks, these are allocated between the GoS and SENELEC through the PPA and the Government Guarantee. In the case of a political force majeure event affecting TP's ability to deliver electricity, SENELEC would not be required to make full PPA payments. Instead it would make capacity payments only for the remaining available capacity, and energy and fuel charges for the electricity

delivered. For the portion of the capacity unavailable, TP would be entitled, under the Government Guarantee, to be paid for the shortfall of payments from the GoS. In addition, the GoS is directly responsible for the payment of termination compensation under the Government Guarantee in the event that the PPA is terminated for Local Political Force Majeure.

Table 3: Risks allocation

Phase	**Risk**	**Contractual Responsibilities**		**Risk Mitigation**
		Sponsor and Lenders	**GoS/SENELEC**	**PRG**
Pre-construction	Project design	X		
	Debt and Equity Funding	X		
Construction	Cost Overrun	X		
	Delays in Construction	X	X	
	Access to public infrastructure		X	
Operation	Operation & Maintenance	X		
	Performance Indicators	X		
	Fuel supply	X	X	X
	PPA payments (capacity, energy)		X	X
During PPA/FSA	Currency devaluation		X	
	Convertibility and Transfer	X		
	Political Force Majeure		X	X
	Change in Law		X	
	Expropriation		X	
	Natural Force Majeure	X	X	

Proposed IFC Investments

64. The proposed IFC investment consists of an A Loan of up to EUR 30 million and a B Loan of up to EUR 55 million to Tobene Power SA as well as an interest rate swap with Tobene Power SA for an estimated Loan Equivalent Exposure ("LEQ") for these transactions of up to US$ 5.5 million. IFC is also proposing an equity investment in Tobene Power SA for up to EUR 3.5 million.

IFC Economic Capital

65. The economic capital exposure for the proposed IFC investment is US$12.6 million. IFC's economic capital exposure in Senegal, as of November 2013, was US$23.3 million. Before this project, IFC's current economic capital exposure to the Matelec Group (IFC Client #1242) is approximately US$8.9 million.

Project Additionality

66. The TP Project is responding to an urgent need of Senegal and is one of the most advanced power projects currently being developed in the country. To fund it, the Sponsor has sought financial support from a group of multilaterals owing to the scarcity of international commercial bank resources with appropriate terms and conditions for such a project. Within this limited group, the WBG has experience in funding energy projects in the country. As such, IFC and IDA are playing an active leadership role through the sharing of their expertise in the market.

67. IFC expected forms of additionality in the Project and their timing and indicators are summarized below:

Type of Additionality	IFC's Expected Role	Description	Indicator	Timing
Financial	Long-term equity and project development	The Sponsor has asked IFC to help co-develop the Project. As such, it is expected to represent the first IFC InfraVentures project to reach Financial Close.	IFC will participate in the equity for up to EUR 3.5 million (10%)	At disbursement
	Longer tenor	Through its investment in this Project, IFC will be providing critical long-term funding in an environment where such funding tenor is otherwise unavailable in the commercial market. IFC and the B Loan/parallel lenders' long-term funding (EAIF, FMO and BOAD) will allow the Sponsor to develop this important Project while receiving an appropriate rate of return.	Up to EUR 30 million A Loan for IFC's account, and up to EUR 64 million in B Loan and Parallel Loans. The loans will have a tenor of up to 15 years and up to 18 months grace period.	At disbursement
	Partial Risk Guarantee	IDA PRG will cover capacity, energy and fuel payments as well as termination	IDA PRG to a local bank which will issue a standby LC to Tobene to backstop SENELECs payment obligation for up to EUR 40 million. The LC is expected to be issued for a maximum term of up to 22 years to match the term of the PPA	At commitment
Non-Financial	Political risk mitigation	In Senegal, the WBG is an important partner for the Company in assessing and mitigating political and regulatory uncertainties and take mitigation measures.	IFC participation as a shareholder and lender in the Company	Over the Life of the Project
	Environmental and Social issues expertise	IFC supports the Company in its adoption and compliance with IFC's Performance Standards.	Compliance with IFC Performance Standards	Over the Life of the Project

C. Lessons Learned and Reflected in the Project Design

68. Lessons learned and incorporated in this operation design reflect the WBG's worldwide experience with IPP projects, as well as lessons learned from the WBG's extensive engagement in the energy sector in Senegal.

69. Recent relevant experience on IPPs includes projects in Kenya, Nigeria, Jordan, Bangladesh, Côte d'Ivoire, and Pakistan. The PRG for the latter two IPP projects, the Azito IPP in Cote d'Ivoire and the Uch Power Project in Pakistan have been successfully concluded without any instances of default, or a call on the PRG, while the PRG on the Bangladesh IPP is close to expiry. The design for the proposed operation not only incorporates best practice experience from these projects but further builds on this experience through the harmonization of the risk mitigation package and minimizing support to the extent appropriate for Senegal. Several lessons can be derived from the past experiences, as outlined below. Any PPP-type intervention needs to take place in the context of a sound and transparent sector policy and regulatory framework in order to create sustainable access to private finance for investments in the electricity sector. The ongoing IDA Electricity Sector Support Project (ESSP) focuses on providing capacity building to most electricity sector stakeholders in order to improve the execution of their statutory mandates and increase planning capacity, transparency and governance in the sector. In particular, the ESSP is providing TA for the GoS to finalize its strategy of private sector participation in the energy sector and strengthening the sector governance (by improving the sector's efficiency, transparency and accountability). The proposed operation builds on the longstanding 15-year WBG involvement in the power sector in Senegal to support its reform.

70. A high quality Sponsor is an important determinant of the long-term success of an IPP. Sponsor needs to have the technical and financial strength and capability to successfully manage and implement the Project. The Matelec Group is a growing power company which has garnered over time significant experience in electricity generation in Sub-Saharan Africa. Its experience with the technology, its established presence in Senegal, and familiarity with the sector in Senegal, in particular managing costs and plant operation, signals long-term commitment to the Project.

71. Guarantees are an efficient use of limited IDA resources in light of limited donor financing for infrastructure investment and large investment needs. Where possible, rather than using IDA lending for direct on-lending to public-private utilities, guarantees are the most efficient use of limited IDA resources to help attract private finance. Leveraging WBG instruments, this project can be realized relatively quickly to reduce the dependency on such emergency power arrangements, even if other projects are further delayed.

72. The proposed payment guarantees through the PRG structure has a proven record of mobilizing private investment (e.g. Cote d'Ivoire, Kenya, Nigeria, Albania, Uganda, and Romania) through efficient mitigation of the payment risks due to failure to meet ongoing payment obligations. The PRG with a L/C facility puts in place a cost efficient security instrument to lower the counterparty credit risks. In the case of a payment delay, the L/C structure provides valuable time to sort out the irregularities while still being able to serve the debt and avoid a payment default. In this way, the L/C PRG structure ensures the continuous operation of the power plant to provide electricity supply during an otherwise possible disruption period.

73. The World Bank Group has adjusted its approach to support to the energy sector in Senegal, based on lessons learned from the past decade of engagement. As pointed out by a recently-concluded Independent Evaluation Group (IEG) assessment of energy projects, proper sequencing of sector policy dialogue and WBG operations is fundamental for success, in

particular when the two are closely connected. The viability and sustainability of WBG's operations strongly depended on the sector policy and strategy as well as the financial restructuring of the utility. The IEG assessment stresses the importance of realistic policy requirements and consistent messages. Over the past decade, IDA's stance has fluctuated between a sometimes overly demanding agenda combined with an accommodating position when it came to the government delivering on its key commitments. For instance, the Energy Sector Recovery Development Policy Credit, which closed in December 2010, was ambitious regarding the expected timeline for key reform steps, including the enactment of needed tariff increases and the elimination of budgetary transfers to the sector. It attempted to achieve too many things at the same time instead of focusing on key actions required to address the core roots of the sector crisis - and following up on their actual implementation.

74. The WBG has agreed on an agenda focused on a combination of decreasing generation costs, improving sector efficiency (especially for SENELEC), and increasing revenues through improvements in billing and tariff revisions. This agenda is fully harmonized with the International Monetary Fund (IMF) position and consistently communicated and supported through a combination of policy dialogue, investment lending and IDA, IFC and MIGA support to private sector transactions. An important lesson learned is that the WBG has an important role in ensuring that investment decisions are made based on technical, financial, and economic merits. This is particularly true for generation investments in a country like Senegal, which has limited options given its relatively small system size and the absence of sizeable domestic energy resources.

75. A lesson learned across the globe, but also specifically in Senegal, is that energy sector reforms depend on political will. The new government has shown a strong political commitment rooted in decisions and guidance at the highest levels of the Government. The GoS has taken important reform steps, including increasing SENELEC's accountability, establishment of a clear separation of sector functions, strengthening institutions, and a prioritization of generation investments. This creates a different environment of WBG-engagement compared to previous IDA-supported sector reform efforts in the late nineties and throughout 2000s. Embedded in a broad suite of WBG support, PRGs can be a powerful instrument in mitigating the power sector's financial and institutional risks for investors in the sector. While the PRG does not directly address the financial viability of the energy sector, it can contribute to restoring investors' confidence in a country and a sector.

76. Previous experience in Senegal has shown how appropriate risk sharing between government and the private sector is necessary for the sustainable development of PPPs. Each party should take the risks it controls and knows how to manage best. There are currently only two longer-term thermal IPPs operating in the country, one of which (Kounoune) has the same project Sponsor as the TP Project. However, Senegal’s track record with IPPs has been mixed. Several issues on IPPs have emerged related to grid reliability, availability of fuel meeting contractual specifications, and network disruptions, often resulting in reduced plant availability, together payment delays and disputes. For instance, the fuel supply arrangements under GTi and Kounoune IPP were handled by SENELEC, directly or through SAR, and fuel risk was allocated ultimately to the GoS. As such the IPPs did not have control over the quality of fuel being supplied, which in turn caused technical difficulties in the power plant operation, resulting in reduced electricity output. Under the proposed Project, TP is considered to be a party better

positioned to manage fuel risk by entering into a direct FSA with SAR and taking responsibility for fuel transportation and quality control.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

77. The Project will be implemented through TP, a special purpose vehicle set to undertake the Project. TP will have overall responsibility for the design, finance, construction, operation, and maintenance of the plant for the duration of the PPA.

78. *Power Purchase Agreement (PPA)***:** TP has entered into a PPA with SENELEC, for a period of 20 years from the power plant commissioning date. Under the PPA, TP undertakes to sell the electricity it generates to SENELEC and SENELEC undertakes to buy the electricity that is generated by TP based on 91% availability of the guaranteed capacity of 70MW. The PPA provides for the payment of capacity charges, energy charges, and fuel payments. The capacity and energy charges are split into local currency component and foreign currency component, indexed to the Senegalese Consumer Price Index (CPI) (as published by Ministry of Economics, Statistics department) and the French CPI (as published by the National Institute of Statistics and Economic Studies (INSEE) in France), respectively.

79. Per standard market practice, capacity payments cover fixed O&M costs, insurance, as well as reimbursement for debt service and part of the equity returns. These charges are payable on the basis of contracted capacity and irrespective of power plant dispatch. However, in case the Project's available monthly capacity is below the guaranteed level, SENELEC is entitled to penalty payments from TP.

80. Energy payments cover variable O&M and are directly related to the electricity delivered, and are based on kWh of electricity produced.

81. Fuel payments are based on costs incurred by TP to buy the fuel and arrange for its transportation and storage to the power plant subject to guaranteed heat rate.

82. *Engineering Procurement and Construction (EPC):* TP will enter into an EPC Contract with a consortium composed of MAN Diesel and MPG PowerGen Services (MPGS) – an affiliate of MPG. Both parties will be jointly and severally liable: MPGS will be the subcontractor for civil/electrical works, and MAN will be the main counterpart under the EPC contract, so there will be a single point of liability. MAN will concentrate on the technical aspects, while MPGS (under the umbrella of MPG) will handle all local aspects (shipping, customs, logistics, taxes, local manpower and project management). This structure is aimed at leveraging Matelec's project management capabilities in Africa, and Senegal in particular. MAN will be responsible for the basic design of the power plant and will supply the power engines and steam turbine, while MPGS will be responsible for the civil works and electrical installation. MAN will provide supervision for the installation of key components and conduct the plant commissioning under the EPC. This will be the second time the two parties work together as a consortium on a power project (the first one being the Thika IPP in Kenya).

83. *Operation and Maintenance (O&M):* TP will also enter into an O&M agreement with MAN Diesel & Turbo France SAS for a period of 6 years or 36,000 maintenance hours. The

agreement will consist of: i) Maintenance and Coordination of the Operation of a Power Plant; and ii) Spare Parts Supply. MPGS will be in charge of the local manpower that will be trained by and work under the supervision of MAN.

84. *Fuel Supply Agreement (FSA):* The Fuel Supply Agreement is currently being negotiated between TP and SAR. Under the FSA, the fuel will meet the sulfur content requirements of 2% to meet WBG environmental standards. TP will be responsible for fuel orders from SAR, fuel quality control and storage and transportation logistics to the plant. SAR will be responsible to deliver fuel at pre-agreed quality parameters. The cost of fuel incurred by TP for electricity production will be passed-through to SENELEC; this will be facilitated through an amendment to the existing PPA.

85. *Government Guarantee*: The GoS will issue a government guarantee to TP (similar to the one signed for the Kounoune IPP) in which it undertakes to guarantee SENELEC's performance and adherence to its contractual obligations under the PPA. In addition, the GoS will guarantee all of SENELEC's PPA payment obligations (ongoing and termination payments). Under the guarantee, the GoS is also responsible for certain payments to TP should certain political force majeure events affect the Project. It should be noted that only undisputed amounts can be claimed under the GoS's Guarantee. In addition, as was the case in Kounoune and GTi, the GoS has refused to waive immunity in respect of its assets in Senegal.

B. Results Monitoring and Evaluation

86. Information for the monitoring of results will be obtained from SENELEC and Tobene Power. SENELEC prepares detailed annual reports describing the supply and demand situation of its network[6], along with information regarding dispatching of individual power plants and their average costs of production. Key project performance indicators on the amount and costs of electricity generated by the TP Project will be therefore provided as part of SENELEC's normal reporting procedures. In addition, detailed information can be made available from both TP and SENELEC on the basis of PPA invoicing and payments records. The Project's intermediate outcomes will be monitored through project reports prepared by TP during the construction and commissioning phases of the Project.

C. Sustainability

87. The GoS has a clear objective to increase the contribution of the private sector in the country's power generation and has included the TP Project in the sector's investment plan that was approved in March 2013 by the Council of Ministers. Given the Project's high thermal efficiency, the plant is likely to take precedence in the dispatching schedule and contribute to reducing average generation costs in the short term, as long as final fuel costs are close to parity with SENELEC's fuel prices. Nevertheless, the GoS has also developed an ambitious plan to attract significant private sector investment for coal power generation in the short and medium term, along with an ambitious deadline for introducing imported natural gas in the country's energy mix. The actual timing, production volumes, and final costs of introducing coal power generation to Senegal may affect the use of the TP Project by shifting its function from a base-

[6] *Rapport Annuel Mouvements d'Energie*, prepared by the Transport and Energy Procurement Dept., SENELEC

load plant towards shoulder, or peaking, power functions. The TP Project represents the response to an urgent need in the short term, and will cover the risk of supply gaps in the longer term should some of the other power plants not come online as planned. On the other hand, the GoS's plans to also introduce sufficient quantities of affordable natural gas in Senegal and the Project would then be adapted to use natural gas, which would improve its overall economics and strengthen its value within the power system, and enhance its longer-term sustainability.

V. KEY RISKS AND MITIGATION MEASURES

A. Risk Ratings Summary Table

Risk Category	**Rating**
Project Stakeholder Risk	Moderate
Implementing Agency Risk	
- Capacity	Low
- Governance	Moderate
Project Risk	
- Design	Moderate
- Social and Environmental	Moderate
- Program and Donor	Moderate
- Delivery Monitoring and Sustainability	Low
- Loss in competitiveness of TP Project	Substantial
Overall Implementation Risk	Substantial

B. Overall Risk Rating Explanation

88. The implementation risk is rated Substantial due to the risks associated with the sector and the long term sustainability of the Project. The Operational Risk Assessment Framework (ORAF) in Annex 4 summarizes the key risk and mitigation measures. The main risk to the Project is the timing of its commissioning compared to the commissioning of other cheaper power plants. A longer time between the TP Project's commissioning date and the date of commissioning of other plants increases its economic rate of return, but at the same time also negatively impacts the financial viability of the power sector, and thus increases the risk for the Sponsor and the Government.

89. The Project will use similar technology to several of SENELEC's plants and its cost of production will depend on its efficiency and the cost of fuel. It is estimated that the TP Project's efficiency is 2.5 to 10 percent better than SENELEC's HFO plants. The negotiations of the PPA and FSA are advanced but a number of key aspects are still being discussed. The cost of fuel is still under final negotiation, including on certain surcharges that will be passed through to SENELEC. Since negotiation on the PPA amendment and FSA are already in an advanced stage, only small variations of the final fuel cost are expected (up to approximately 5%). The

economic analysis shows that the Project remains economically viable with such increase in fuel cost, but that there is a risk of the EIRR substantially dropping below 12% for higher fuel costs or a combination of higher costs and Project delays or construction cost overruns (see annex 6). Lastly, discussions are also ongoing regarding the inclusion of a provision in the legal agreements for TP and SENELEC to negotiate in good faith for the plant to be converted to run on natural gas, should Senegal succeed in introducing gas in the country's fuel mix (at that point the fuel cost will be the same for all plants and therefore the Project's efficiency should be a key competitive advantage and a benefit to the country's power sector).

90. The PPA between SENELEC and Tobene Power also includes a fixed component payable if the plant is not dispatched. The analysis of the EIRR is thus based on an assumption that the generation capacity is dispatched close to its availability level, in other words there is always a demand for it. While it is estimated that the TP Project is one of the most attractive marginal cost plants and would replace costlier diesel power generation in the short term, its place in the dispatch merit order is more difficult to predict in outer years as it depends on when other power plants, using lower costs fuels, will come on line. As such, the Project has an important "insurance" role in the system: should new larger coal plants come on line, the TP Project will not be used as much and become a peaking plant, but the sector will be overall better off, benefiting from cheaper generation options. But should these large and complex projects be delayed, the plant will be able to provide relatively cheap and reliable power to meet demand.

91. Fuel unavailability also represents a risk for the Project, given SAR past performance and financial situation. However, since almost 90 percent of the country's thermal power plants rely on fuel acquired from SAR, the GoS is expected to step in and likely arrange fuel imports from abroad directly (as already happened during SAR's shutdowns in 2012 and 2013). It would also be in SENELEC's interest to procure fuel for the TP Project given its high efficiency.

92. The PRG instrument mitigates the risk associated with SENELEC's payment to the IPP. The amount of the PRG is being sized to reflect it. However, a PRG never mitigates the full risk of a utility not paying its PPA obligations. SENELEC has been operating at a loss since 2005, as average tariffs are lower than its operating costs. SENELEC relies on government subsidies for its day-to-day operation. The Project is one part of a larger program of generation diversification developed by SENELEC and the GoS that is expected to reduce generation costs in the medium and longer term. The pace at which SENELEC's costs, including its generation costs, will be reduced will depend on when imported LNG and/or new coal power plants will come on line, when other regional power generation alternatives are implemented, and the pace at which SENELEC carries out the other restructuring measures described above.

93. The GoS's estimates SENELEC will return to profitability in 2016 while more prudent WBG estimates predict a return to a financial equilibrium in 2018. The sector will also continue to be vulnerable to international oil price shocks in the next few years. SENELEC will continue to depend on the GoS's continued subsidies or its willingness to adjust tariffs. The GoS is largely expected to continue subsidizing the sector, as the level of tariffs is already quite elevated and tariff increases are perceived to be unaffordable to the population.

VI. APPRAISAL SUMMARY

A. Economic and Financial Analyses

Project Economic Analysis

95. *Rationale for public sector provision/financing*. This Project will provide public sector financing to support the GoS's efforts to address huge financing gaps between investment needs for poverty reduction and sustainable development and the limited funding available from its own sources. The WBG investment and risk mitigation framework for this Project is designed with complementary and efficient use of IDA PRGs and IFC investments to support the GoS's agenda of increasing electricity generation and private sector participation in the sector. In addition, the PRG structure would help to conserve scarce IDA resources through the provision of minimal amounts of security to lenders and investors, while at the same time making the IPP project bankable.

96. *Value added of World Bank Group's support.* Senegal is facing major challenges to mobilize private sector financing for development purposes due to a variety of reasons, including lack of commercial viability of the sector, slow sector reforms, and perception of high risk from SENELEC's non-performance of its contractual obligations. The WBG's support is critical to provide confidence to investors in the sector, as proven by the fact that a limited amount of IDA support will leverage about US$ 172 million of private capital that would be unwilling to commit without proper risk mitigation. This Project is an example of how a suite of complementary WBG instruments can be deployed. Not only is the Project crowding in much needed private capital, but it is also aligned and embedded in a strong sectoral dialogue with the authorities. The role of IFC InfraVentures has been key in engaging early on with the Sponsor on structuring the key Project documents. IFC is now mobilizing the necessary long term debt by presenting a "bankable" project to other lenders.

97. *Project Developmental Benefits.* The TP Project is justified economically under various scenarios on the development of the energy sector in Senegal. The economic rate of return of the Project will depend on the pace other new power plants will come on line, if they will be cheaper than the TP Project, and whether its available power will be fully or only partially dispatched. The TP Project's place in the merit order will depend on the final fuel price for the HFO at 2.0% sulfur. Due to the advanced stage of negotiation on the PPA amendment and FSA, only a small variation in final fuel cost and related charges to be passed through to SENELEC is expected (less than 5 percent). For this reason, two scenarios have been considered to assess the Project economic internal rate of return (EIRR), according to the different assumptions on the dispatching of the Project as follow:

a) *Scenario 1- Fuel Cost Parity* - assumes that the TP Project obtains fuel at par with the other plants in the system (currently c. XOF 390,000 per ton) and, therefore, due to its higher efficiency, it would be dispatched before the great majority of SENELEC's power plants. Under this scenario, 100% of the Project's available power would be dispatched for the duration of the PPA – this scenario corresponds to being dispatched as a base-load plant (equivalent to 558 GWh/year);

b) *Scenario 2- Fuel Premium* - assumes that the TP Project pays fuel at premium price compared to SENELEC power plants (a XOF 18,000 premium) and therefore it will only be partially dispatched between 2017 and 2020. Under Scenario 2: i) fuel costs are

estimated to be overall 5 % higher than in Scenario 1; and ii) the Project would fall down the merit order behind some of SENELEC's plants but still being dispatched in the foreseeable future at high levels given the country's increasing electricity demand.

98. For each scenario, a cost-benefit analysis has been carried out and the results are summarized in the tables below. Results show a strong economic rationale to proceed with the Project. However, for Scenario 2, the higher fuel costs (and consequently lower merit order and dispatching amount) considerably reduce the Project Net Present Value (NPV) and EIRR.

Table 4: Economic Analysis Results

Scenario	NPV (XOF million)	NPV (US$ million)	EIRR (%)
Scenario 1: Fuel Cost Parity	102,982	233	30.5
Scenario 2: Fuel Premium	72,357	143	24.5

99. The robustness of the economic justification has been assessed by adopting more pessimistic assumptions for the major economic and technical parameters. These include: increased Project costs (5%) and delays in Project commissioning (1 year). The following key messages could be inferred from the sensitivity analysis results (presented in greater detail in Annex 6):

a) Under Scenario 1 – the Project remains highly economically viable including in the case of delays in construction or increase in Project costs.

b) Under Scenario 2 – close monitoring of construction time and ensuring that the commissioning of the plant is carried out as expected (mid-2015) is key to ensure Project viability. One year of delay or a 5% cost increase would further drop the rate of return of the Project. While the Sponsor will mainly bear the cost associated with the increase in Project costs, in the case of delays in commissioning, costs will be shared by both the Sponsor (in terms of missed/delayed capacity and energy charges) and SENELEC (in terms of missed/delayed benefits).

100. A "switching value" analysis (e.g. the NPV equal to zero) has also been carried out to estimate the lowest possible dispatching which would make the Project non-economically viable. This corresponds to the TP Project dispatching only about 45% of available power for the duration of the PPA, (from the first year of operations). However, given the higher visibility of other generation plants coming online over the next five years, a switching analysis has also been carried out for dispatching after 2020, when uncertainty is higher. In this case, the lowest possible dispatching that keeps the Project economically viable drops to 15% (corresponding to the Project being used as a peak-plant). Annex 6 provides further details on the Project economic analysis, its assumptions, relative position into SENELEC's generation options merit order, and sensitivity analysis.

Project Financial Analysis

101. The Project's financial projections have been prepared according to the terms specified in the PPA and in accordance with the terms being negotiated under the PPA Amendment, the EPC Contract, O&M Agreement and the FSA. The Project's operating cash-flows are expected to be sufficient to cover debt service and allow for regular dividend payment. Results of the analysis have not been included due to confidentiality requirements.

SENELEC's Financial Analysis

102. As mentioned in the sector background, the electricity sector in Senegal has been characterized by a considerable financial disequilibrium. Increases in oil prices, demand growth, and delays in implementing low-cost generation investments have resulted in high operating costs. SENELEC had to resort to emergency rental diesel generation to meet rising demand and while it has significantly reduced power shortages, its customer revenues - despite relatively high tariffs -- have not been able to cover the costs. It is only through significant Government subsidies that SENELEC manages to limit its losses and it continues to face cash-flow shortages.

103. Despite XOF 150 billion (about US$ 300 million) of GoS's direct and indirect subsidies to the sector, the company finished 2012 with a loss of XOF 6 billion (about US$ 12 million), and arrears to various providers of about XOF 33 billion (about US$ 66 million). Moreover, SENELEC estimates continuing losses of XOF 3 billion (about US$ 6 million) and 40 billion (about US$ 80 million) for 2013 and 2014[7]. It should be noted that cash-flow problems have also been a recurring difficulty for SENELEC and they are projected to be negative by more than XOF 30 billion (about US$ 60 million) for the same period.

104. SENELEC's financial projections indicate continued challenges in the short-term. SENELEC estimates a return to profitability from 2016 and beyond. This estimate is mainly based on a projected 30 percent reduction in power generation costs due to new coal and gas power generation (projected by the GoS to come online in 2015). A more conservative WBG analysis projected that SENELEC's cash-flow will become positive in 2018. Annex 6 presents further details on SENELEC's financial situation and projections.

B. Technical

105. *Technical Design and Layout of Power Plant:* The technical appraisal of the proposed plant design by Melec PowerGen Inc. in consortium with MAN Diesel SAS was found to be appropriate and in accordance with international norms and standards. The configuration is complete for a well-functioning system and the power plant would have the capacity to supply 96 MW at 220 kV. Moreover, the proposed layout and arrangement would not pose any major challenges. The proposed HFO power plant of 96 MW is comprised of: a combined cycle facility consisting of power generation equipment based on 5 MAN diesel engine generators and steam turbine generator complete with plant balance of plant equipment/systems including fuel oil storage facility and a high 15 kV/220 kV voltage substation.

106. *Generation Equipment:* The engine family MAN 18V has a well-proven service record in stationary power generation and has an advantage in terms of stability and performance due to its lower engine speed of 500 rpm and the generator sets would be suitable for a base load operation. The exhaust gas emission is in accordance with the Pollution Prevention and Abatement Handbook, Part III, the World Bank, 1998.

107. *Electrical System and Substation:* The proposed electrical system is equipped with proven technology, including: (i) SCADA (Supervisory Control And Data Acquisition); (ii) automated equipment (PLC) for managing among others start/stop sequence interlocking

[7] Higher losses in 2014 are due to increasing demand and continuing use of diesel powered emergency generation for several months, as well as a projected decrease of GoS direct subsidy to the sector.

function, parallel operation, fast decoupling in case of grid failure to ensure safe power plant operation; and (iii) UPS (uninterruptible power supply) to secure the voltage supply for control and protection system. The proposed substation would be equipped with two step-up transformers. The installation would also include appropriate civil works and structures, necessary lifting equipment such as overhead crane and the power plant is secured by fire water and earthing systems.

108. *Operations and Maintenance:* The proposed methodology for operations and maintenance is deemed to be appropriate to ensure reliability. The EPC and O&M contracts between Tobene Power and Matelec are expected to be signed by December 2013.

C. Financial Management

109. There are no traditional financial management issues as there will be no IDA-financed procurement or procurement-related disbursements under the Project. Should the PRG be called, IDA would disburse to the L/C bank and the Government would then be obligated to repay IDA in accordance with the terms of the Indemnity Agreement between GoS and IDA. TP will be the primary responsible party for managing the finances of the proposed projects. It will install and maintain adequate financial management systems, including the system of accounting, reporting, auditing, and internal controls, and relevantly qualified staff. The annual financial statements will be prepared using internationally accepted accounting principles. In addition, they will be audited in accordance with international standards on auditing. The performance of the proposed Project will be monitored through, inter alia, regular progress reports and audited annual financial statements to be submitted by Tobene Power to IDA and IFC. Overall the proposed financial management risk for this operation is assessed as moderate.

D. Procurement

110. The procurement guidelines applicable to guarantees are defined in “World Bank’s Guidelines: Procurement under IBRD Loans and IDA Credits" dated January 2011, para 3.18. This requires that goods and services must be procured with due regard to economy and efficiency. IDA´s review concluded that the overall procurement of the TP Project met general principles of industry-wide standards of economy, efficiency and transparency for this scale and timing of procurement. The prices obtained for the proposed IPP compare well with those from the existing thermal IPPs, adjusted for inflation, and are in line with projects of this type elsewhere in Africa.

111. In 2008 SENELEC issued a Request for Proposals (RFP) to two prequalified candidates for a power plant located in Taiba Ndiaye. The RFP was a comprehensive document including Instructions to Bidders, Procedure for Making Proposals, Description of the Projects, Contractual Arrangements (including a draft Lease and a draft Power Purchase Agreement), the Legal Framework, and various annexes (mostly forms for tender presentation/submission). The RFP included specific qualification requirements and required bidders to submit a technical proposal and a financial proposal, the latter to be broken down as: (a) Base Energy Charge Rate to cover the variable O&M cost component; and (b) Base Capacity Charge Rate comprising a component to cover debt servicing and return on equity, and a component to cover fixed O&M costs, insurance and administration. TP was the only bidder to submit a complete and responsive proposal. Therefore the Project was awarded to the MPG/Man Diesel consortium. The process

was later canceled because of the GoS's decision to explore alternative sources of production particularly gas and coal that would in the GoS's view mitigate increasing fuel prices.

112. Later in 2011, given the non-availability of gas and delays in coal projects implementation, SENELEC decided to reengage on the Project and submitted an application to the Direction in Charge of Public Procurement monitoring ("DPPM") to conclude the PPA by mutual agreement between TP and SENELEC based on an exception included in the Public Procurement Code.

E. Environmental and Social (including Safeguards)

113. The proposed Project is classified as Category A due to its scale and nature. An Environmental and Social Impact Assessment (ESIA) has been prepared, consulted upon, and disclosed, in accordance with Senegalese Laws and the World Bank Performance Standards. A draft detailed scoping report of the ESIA was prepared for the Project in January 2012, which was discussed in public consultations in the Taiba Ndiaye area. The ESIA was disclosed locally on July 8, 2013 and at the IFC InfoShop on June 11, 2013 and the World Bank InfoShop on July 23, 2013. The Environmental and Social Review Summary and Environmental and Social Action Plan were prepared by IFC and the Association and disclosed on June 11, 2013. A summary of the Performance Standards applicable to the Project is presented in the table below.

Performance Standards (PS)	**Triggered**
PS 1. Assessment and Management of Environmental and Social Risks and Impacts	**YES**
PS 2. Labor and Working Conditions	**YES**
PS 3. Resource Efficiency and Pollution Prevention	**YES**
PS 4. Community Health, Safety and Security	**YES**
PS 5. Land Acquisition and Involuntary Resettlement	**YES**
PS 6. Biodiversity Conservation and Sustainable Management of Living Natural Resources	**NO**
PS 7. Indigenous People	**NO**
PS 8. Cultural Heritage	**NO**

Social

114. The Project will contribute to increasing the reliability of supply of electricity in Senegal and to a reduction of average costs of generation in the country. The Project will therefore indirectly support social objectives related with the availability and access to electricity in the country.

115. The Project is located in a sparsely populated area about 90 km north of the country's capital. The process for acquisition of parcels of land, including the 4.5ha for the power plant, was managed by SENELEC starting in 2011, as part of the acquisition of a total area of 50ha earmarked for development. SENELEC's land acquisition resulted in economic displacement for 140 affected people engaged in agricultural activities on the site – no persons resided on the properties. A compensation committee established the value of cultivated land and SENELEC carried out a consultation process with affected people. Full compensation to affected people was carried out in 2012 and no grievances have been received since. An audit to verify livelihood restoration for the economically displaced people is planned as part of project supervision.

Environment

116. The Project is a greenfield project located in a pre-determined rural area close to SENELEC's existing functional substation and transmission network which will not be expanded since it has they have sufficient capacity to support the Project; as such, these are not considered associated facilities. The ESIA has determined that there are unlikely to be physical cultural resources that will be encountered; however, as per standard practice, construction contracts will include chance finds procedures. There are no vulnerable and marginalized ethnic groups in the proposed Project sites. Screening has occurred, and no groups classified as Indigenous Peoples are on or near the Project sites.

117. The key environmental impacts include air quality, noise, traffic management, hazardous material, solid and liquid waste management, and fuel transport. The ESIA addresses the potential risks and impacts from the Project and outlines proposed mitigation measures. Tobene Power has presented information on its planned policies and practices that will seek to address environmental and social risks and impacts to ensure that the proposed Project will, upon implementation of specific additional agreed measures, comply with host country laws and regulations and the World Bank Performance Standards on Social and Environment Sustainability. Additional actions to be undertaken by Tobene Power are listed in the ESAP, which is complementary to the Environmental and Social Management Plan (ESMP) included in the ESIA. Please see Annex 3 for additional information; and the disclosed Environmental and Social Review Summary for more detailed narrative on each applicable Performance Standard.

118. It is noteworthy to mention the environmental and social performance issues and lessons learned related to the Kounoune Power Plant, which has the same Sponsor as the TP Project. The latest IDA visit to Kounoune revealed some deficiencies with regards to failure of the wastewater and used oil management system which are being addressed by Kounoune, and recent failure of the air quality monitoring equipment; these issues are well-addressed in the ESMP for the TP Project. Furthermore, there are issues outside the fence of the power plant, such as: (a) the 500m buffer zone required by the GoS which was not secured as the Decree regulating such area has expired and has not been renewed by relevant authorities; and Kounoune could not stop the anarchic building of residential properties within this buffer zone; (b) the installation by the SENELEC of approximately 100MW of emergency generation leased which resulted in considerable air pollution within the Kounoune plant beyond WBG guidelines; noting that prior to these generators, the power plant air emission were well within WBG air quality limits. Although these issues have been escalated to the GoS, by the Sponsor and Kounoune's Lenders, no concrete actions have been undertaken. IFC informed the Sponsor at a very early stage that the situation with the encroachment of the buffer zone will not be acceptable for the proposed TP Project and that at a minimum, the required buffer zone from the hazard assessment, which is approximately 379m, will need to be secured. Tobene Power has agreed to this and has beacons to demarcate the 500m buffer zone (Evidence of demarcation was visible during IFC Broad community support verification in September 2013); and will also have a second demarcation for the 379m. The community was also informed that no residential properties could be built within the buffer zone and that only economic activities could take place.

Annex 1a: IDA Results Framework and Monitoring

SENEGAL: TAIBA NDIAYE INDEPENDENT POWER PRODUCER PROJECT

Project Development Objective (PDO): The project development objective is to increase the power generated by Independent Power Producers

PDO Level Results Indicators*	Core	Unit of Measure	Baseline	Cumulative Target Values				Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition etc.)
				2014	2015	2016	2017				
Amount of electricity generated by the project	☐	GWh/year	0	0	230	558	558	Quarterly	Progress Report	Tobene Power, SENELEC	Based on Tobene Power and SENELEC Reports.
Indirect Project Beneficiaries[8]	X	Number (million)	0	0	1.08	1.12	1.17	Annual	SENELEC annual reports;	SENELEC	Based on SENELEC estimated number of consumers.
INTERMEDIATE RESULTS											
Commissioning Test Completed	☐	Y/N	N	N	Y	Y	Y	Quarterly	Progress Reports	Tobene Power, SENELEC	Commissioning of the Project expected in August 2015.
Generation Capacity of Conventional Generation constructed under the project	X	MW	0	0	70	70	70	Annual	SENELEC annual reports; Tobene Power	SENELEC, Tobene Power	Guaranteed generation capacity.
Private capital mobilized	X	US$ million	0	172	172	172	172	Quarterly	Progress Report	Tobene Power, SENELEC	Capital mobilized for the construction of the Project.

[8] Direct Project Beneficiaries has been substituted with indirect project beneficiaries based on the PRG nature of the proposed operation.

Annex 1b: IFC Development Impact Indicators

The project will track the following development impact indicators for the Project within IFC's DOTS system (Development Outcome Tracking System).

Development Impact Indicators

	Detailed Impact Description	Indicator	Baseline 2012	Final Target in 2016
Financial Viability	Returns to all capital providers	US$ ROIC	Annual US$ ROIC > Annual US$ WACC over life of the Project	
	Project Cost Completion on Time and Within Budget	Project Completed on Time and Within Budget	Project completed by August/2015, Within a range of +10 / -10% of the Project cost of US$ 172 million	
Economic Sustainability	Returns to all capital providers and to society	US$ EROIC	Annual US$ EROIC > Annual US$ WACC over life of the Project	
	Transfers to Government	Taxes, royalties and concessions paid (US $Millions)	0	Cumulative of US$79 million over the life of the Project
	Employment	Permanent jobs (#) (total)	0	63
		Permanent jobs (#) (women)	0	6
		Construction jobs (#) (total)	0	600
	Power Generation and Customers Reached	Power Generation and Customers reached	0	558 GWh in 2016 which corresponds to approximately 1.551 million individual residential people reached
Environmental and Social Performance	Occupational Injuries	Frequency (per million man-hours)	0	5
	Water Consumption and Efficiency	Water Consumption Ratio (m3/#))	0	200m3/day
	CO_2 emissions (or reductions if RE)	CO_2 Equivalent Emissions	0	353, 333 tons of CO2 equivalent per year during operational phase

Annex 2: Detailed Project Description

SENEGAL: TAIBA NDIAYE INDEPENDENT POWER PRODUCER PROJECT

1. The project development objective is to increase the power generated by Independent Power Producers.

2. The proposed operation, which combines various WBG instruments, will benefit from the complementarity of IDA's and IFC's instruments. IDA will be providing a PRG back-stopping the electricity payments under a Power Purchase Agreement (PPA) between SENELEC and Tobene Power SA (TP), the Project Company responsible for implementing the Project. The proposed IDA operation consists of a credit enhancement mechanism to mitigate the risks of the low creditworthiness of SENELEC as a sole power off-taker, thus enabling private investment in the Project. IFC, which has been developing the Project together with the Sponsor through IFC InfraVentures will (i) have the right to convert its development expenses into equity in TP prior to financial close and after financial close, will have the right to invest additional equity under the same conditions as the Sponsor for a final shareholding of up to 10% of TP, expected to be up to EUR 3.5 million; (ii) provide an up to EUR 30 million A Loan and an up to EUR 55 million B Loan, (iii) mobilize up to EUR 16.4 million equivalent in local currency of B Parallel Loans, and (iv) provide an interest rate swap with a Loan Equivalent Exposure of US$ 5.5 million.

3. This section starts with describing the Tobene Power Project that the proposed WBG operation will support. It will then describe Project costs and financing, after which the World Bank Group Instruments are outlined. The section ends with a paragraph on lessons learned.

The Tobene Power Project

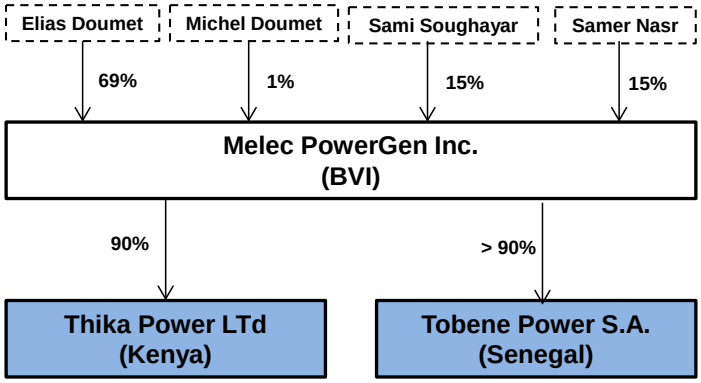
4. The TP Project consists in the construction of a new power plant, with an installed capacity of 96MW (70MW guaranteed availability), to be located in Taiba Ndiaye, about 90km north east from Dakar. The works will involve: i) the construction and installation of a combined cycle facility consisting of 5 X 18 V48/60 – 500rpm gensets (running on HFO with a provision for future conversion to operate on natural gas), and a steam turbine generator (adding about 7MW and allowing for higher fuel efficiency); ii) construction of network facilities to interconnect to the existing 220kV substation; and iii) fuel storage facilities. Commissioning is envisaged to take place about 18 months after the start of construction.

5. The Project will be developed as an IPP on a Build, Own, and Operate (BOO) basis, which will include design, finance, supply, construction, commissioning, operation, and maintenance. It will sell power to SENELEC under a 20-year PPA, which was signed in October 2011. Initially, the PPA was structured as a power availability (also known as tolling plant) arrangement, where SENELEC would be responsible for the supply of fuel and TP would undertake the obligation to supply energy at agreed efficiency rates. However, the PPA is currently being amended to reflect new fuel supply arrangements, and a new payment security structure. Under the new fuel supply arrangements, TP will undertake the responsibility of sourcing fuel and associated logistics responsibility, and pass related costs to SENELEC. Consequently, TP will enter into a Fuel Supply Agreement (FSA) with SAR. The financial closing of the Project is expected to take place by April 2014 with the full commissioning of the

power plant expected in August 2015. In order to advance rapidly and meet the aggressive timetable, the Sponsor is expected to start construction before financial close.

6. The Project will be developed by TP, a special purpose vehicle incorporated under the laws of Senegal. It will be owned at least 90 percent by Melec PowerGen Inc. (BVI) (MPG) an affiliated Company of The Matelec Group of Lebanon, and, subject to the completion of the proposed IFC equity investment, up to 10 percent by IFC. IFC has been contributing to the development of the Project through IFC InfraVentures and has the right to convert the development costs incurred into equity in TP. At financial close, IFC has the option to subscribe for further shares enabling IFC to maintain it's up to 10% shareholding. The Matelec Group is also the Sponsor for another IPP in Senegal: Kounoune Power (Board Report No: 30320-SN), which was also financed by IFC with a EUR 17 million A Loan in 2005. The Matelec Group is a fast growing south-south investor in the Africa region; most recently in 2012, the World Bank Group (IDA, IFC and MIGA) supported the Thika power project in Kenya (Board Report No: 66363-KE and IFC/R2011-0336) which was also Sponsored by the Matelec Group.

7. Investment Structure: MPG is a British Virgin Islands (BVI) incorporated corporation and is owned by Elias Doumet, Sami Soughayar, Samer Nasr and Michel Doumet, each of whom are resident in Lebanon and are members of The Matelec Group senior management team. In addition to its shareholding in TP, MPG owns 90% of the shares in Thika Power Limited (the project company owning the Thika IPP in Kenya). The group structure is as follows:



8. IFC has been satisfied with its integrity due diligence on all relevant persons involved in the transaction in line with IFC's Integrity Due Diligence guidelines.

9. As the Sponsor intends to develop its global power generating business under one holding company, BVI was selected as the appropriate jurisdiction to: (i) take advantage of the legal and business infrastructure available given that it is relatively simple and cost efficient to add operating subsidiaries; and (ii) to mitigate the risk of double taxation of proceeds repatriated from its subsidiaries.

10. The revenues of the Project will be subject to taxation in Senegal and distributions made by TP to MPG will be subject to a withholding tax in Senegal. Dividends received by MPG from TP are not subject to taxation in the BVI. In addition, dividends received by the ultimate beneficial shareholders of MPG are not subject to taxation in Lebanon as dividends received from off-shore activities are exempt of income tax in Lebanon, for Lebanese residents.

IFC Policy on Tax Transparency

11. This proposed investment was subject to the policy on the use of intermediate jurisdictions in IFC operations recently approved by the Board (IFC/R2011-0287) (the "OFC Policy"), and was found to be acceptable.

12. Under the OFC Policy, IFC first performed its standard enhanced due diligence with emphasis on the business and tax planning rationale for the structure. Based upon the information available to IFC and the analysis conducted, IFC is satisfied that, from a transactional stand point, the structure was put in place for legitimate reasons and not for tax evasion, tax abuse or other illegitimate purposes.

13. Next, after examination of the status of the BVI vis-à-vis the Peer Review Process of the Global Forum on Transparency and Exchange of Information for Tax Purposes and the provisions of the OFC Policy, the BVI was found to be an eligible Intermediate Jurisdiction for this Project, as follows: (i) On 26 October 26 2011, a Supplemental Phase 1 Peer Review Report was issued for the BVI which reported no elements "not in place" and the BVI was allowed to proceed to Phase 2. (ii) The mandate letter for IFC's investment in the Project was signed on September 19, 2013. On the date of the mandate letter, the BVI was, for purposes of the OFC Policy, eligible as an Intermediate Jurisdiction. (iii) On 22 November 2013, a Phase 2 Peer Review Report was issued, giving BVI a rating of "non-compliant." Under the OFC Policy, the relevant date to determine whether a jurisdiction has met international norms for tax transparency is to be determined at the date of the mandate letter for a project. Because the mandate letter for IFC's investment in the Project was signed before the Phase 2 rating was published, under the provisions of the OFC Policy, notwithstanding the BVI's now published Phase 2 rating, the BVI is still an eligible Intermediate Jurisdiction for the purposes of IFC's investment in this Project.

The Matelec Group

14. The Matelec Group was formed in Lebanon by Mr. Elias Doumet in 1975 for the manufacturing of electrical products such as transformers, switchboards, control panels and packaged substations. It is affiliated with a larger, more diversified group controlled by the Doumet family. Mr. Doumet and his brothers (together with other family members) own 58.5% of the share capital of Matelec S.A.L., the main company in the Matelec Group; the Moretti family owns 31.5%; and Mr. Sami Soughayar (the Group CEO) owns the remaining 10%. At present, the Matelec Group is one of the larger manufacturers of transformers in the Arab countries and a leader in its line of business at a regional level.

15. The group's electrical business has traditionally had three lines of activities: (a) Industry: produces cables, transformers and related power equipment, manufacturing high quality products. In Lebanon, it is considered to be a large concern in this field, with manufacturing facilities consisting of two cable factories and four manufacturing transformers, medium and low voltage switchboards and other equipment factories; (b) Engineering and contracting: renders these services and executes purchase orders for electrical equipment; (c) Services: renders telecom services such as fiber optic contracting, data transfer, networking and telecommunications, automated teller installation for banks, electronic archiving and bar coding. To these traditional lines, Matelec has added a fourth, Independent Power Producers, focused on SSA.

16. The Matelec Group as a whole is managed by a Board of Directors formed by six members: three appointed by the Doumet family, two by the Moretti family, and Mr. Sami Soughayar. Decisions are adopted by majority vote of the members of the Board. Since its founding, Mr. Elias Doumet has been the Chairman of the Board and President of the Matelec Group. The Matelec Group's markets are Lebanon (10%), and the rest of the Middle East, Africa (80%) and Europe (10%). It sells products to electricity utilities and to the private sector in Egypt, France, Ghana, Iraq, Jordan, Kingdom of Saudi Arabia, Lebanon, Morocco, Nigeria, Portugal, Qatar, Senegal, Syria, Yemen, Switzerland, Bahrain and Cyprus.

17. Matelec S.A.L., the main company in the Matelec group, has been profitable over the past three years, although it is highly leveraged due to reliance on short-term facilities in order to keep up with a growing order book. Given that Melec PowerGen, the formal shareholder of TP, will disburse all its equity in the Project up front and ahead of any disbursements of the senior debt, Matelec S.A.L.'s leverage is not expected to directly affect the construction of the Project.

Project Costs and Financing

18. The Project's total cost is expected to be around EUR 126.7 million, (equivalent to US$172 million), and it will be structured on a limited recourse basis. The Project's cost breakdown is presented in Table 2. The majority of costs are related to the engines, steam turbines, transformers, installation, construction facility, and interconnection line, all of which will be implemented under a turn-key Engineering, Procurement, and Construction (EPC) contract. The TP Project's proposed debt to equity ratio is 75:25. The majority of the equity (90%) will be provided by Matelec through MPG with IFC having the right to invest the remaining 10%. The debt will be arranged by IFC, which is the Project Mandated Lead Arranger (MLA).

Table 4: Project costs and financing sources (indicative)

Sources of funds	**Euro million**	**%**	**Uses of funds**	**Euro million**	**%**
Equity:			*Hard costs:*		
MPG	28.5	22.5%	EPC	93.2	73.5%
IFC	3.2	2.5%	Construction Management	1.0	0.8%
Total Equity:	**31.8**	**25.0%**	Land and other set-up	0.8	0.7%
Senior Debt:			Import duties/taxes/stamp	3.1	2.4%
IFC A Loan	28.4	22.5%	*Soft costs:*		
IFC B Loan	50.0	39.6%	Development costs	4.2	3.3%
EAIF	25.0	19.8%	Financing costs	6.3	4.9%
FMO	25.0	19.8%	DSRA	5.5	4.3%
Parallel Loan –BOAD	16.4	12.9%	Working capital/fuel	7.7	6.0%
Total Senior Debt:	**94.9**	**75.0%**	Contingencies	5.0	4.1%
Total	**126.7**	**100%**	**Total**	**126.7**	**100%**

Annex 3: Implementation Arrangements

SENEGAL: TAIBA NDIAYE INDPENDENT POWER PRODUCER

Project Institutional and Implementation Arrangements

1. The Sponsor and co-developer is Melec PowerGen (MPG), an international company incorporated in the British Virgin Islands, and part of the Matelec Group of Companies. IFC is the other co-developer and has the right to acquire a minority equity stake in the Project through the JDA signed by IFC InfraVentures. Matelec was formed in Lebanon in 1975 for the manufacturing of electrical products such as transformers, switchboards, control panels and packaged substations. It is one of the larger manufacturers of transformers in the Arab countries and a leader in its line of business at a regional level. The share ownerships of MPG and Matelec are privately owned by common shareholders.

2. MPG is controlled by: Elias Doumet (70%); Sami Soughayar – Matelec S.A.L General Manager (15%); and Samer Nasr – IPP Business Development Director of Matelec Group (15%). Since 2008, MPG has acquired solid experience in the development, construction and operation of power plants in Africa: this Project would be the 3rd IPP developed by MPG and the 2nd in Senegal.

3. In January 2008, MELEC completed the construction of the Kounoune Power Plant (through Kounoune Power, its SPV in Senegal), a 67.5MW diesel power. The plant is running on HFO, under a 15-year BOO contract with SENELEC. The project was completely developed, financed, and realized by MPG (30% equity/shareholder loans, 70% long term loans, arranged by IFC, with the participation of ADB, BOAD, Proparco, and CBAO – Board Report No: 30320-SN), and realized in partnership with Mitsubishi, through MHI Equipment Europe, who supplied the gensets and contributed to the EPC and O&M. In June 2012, MPG reached financial closing to proceed to the construction of the 87MW Thika power project in Kenya, with KPLC (Kenyan local utility being the off taker); the World Bank Group (IDA, IFC and MIGA) supported that project in 2012 (Board Report No: 66363-KE and IFC/R2011-0336). The project has passed the construction and has reached interim commissioning in August 2013.

4. SENELEC will be the off-taker of all the energy produced by the Project under the provisions of the PPA. SENELEC is the state-owned national power utility of Senegal. SENELEC is vertically integrated and holds the electricity generation, transmission, distribution and commercial activities in Senegal. Starting in 1998, Senegal has opened electricity generation activities to independent power producers and in 2012 just over 50 percent of the electricity generated for SENELEC came from non-SENELEC power plants. In addition, the GoS has established a concession system to expand electrification and has recently awarded such concessions to several entities other than SENELEC.

Financial Management, Disbursements and Procurement

Financial Management

5. There are no traditional financial management issues as there will be no IDA-financed procurement or procurement-related disbursements under the Project. Should the PRG be called, IDA would disburse to the L/C bank and GoS would then be obligated to repay IDA in accordance with the terms of the Indemnity Agreement between Senegal and IDA.

6. The Tobene Power will be the primary responsible party for managing the finances of the proposed Project. It will install and maintain adequate financial management systems, including the system of accounting, reporting, auditing, and internal controls, and relevantly qualified staff. The annual financial statements will be prepared using internationally accepted accounting principles. In addition, they will be audited in accordance with international standards on auditing. The performance of the proposed Project will be monitored through, *inter alia*, regular progress reports and audited annual financial statements to be submitted by Tobene Power to IDA and IFC. Overall, the financial management risk is assessed as moderate.

Procurement

7. IDA is not financing directly any part of this Project, as procurement and contractual arrangements for the construction, supply and installation of the power plant and associated facilities will be carried out by the Project's Sponsor. The awarding of this IPP took place before IDA was asked for its support through a PRG. The Association therefore assesses the economy and efficiency of the awarding of this particular IPP by the Government a posteriori.

8. In 2008 SENELEC issued a Request for Proposals (RFP) to two prequalified candidates for a power plant located in Taiba Ndiaye. The RFP was a comprehensive document including Instructions to Bidders, Procedure for Making Proposals, Description of the Projects, Contractual Arrangements (including a draft Lease and a draft Power Purchase Agreement), the Legal Framework, and various annexes (mostly forms for tender presentation/submission). The RFP included specific qualification requirements and required bidders to submit a technical proposal and a financial proposal, the latter to be broken down as: (a) Base Energy Charge Rate to cover the variable O&M cost component; and (b) Base Capacity Charge Rate comprising a component to cover debt servicing and return on equity, and a component to cover fixed O&M costs, insurance and administration. TP was the only bidder to submit a complete and responsive proposal. Therefore, the Project was awarded to the MATELEC/Man Diesel consortium. The process was later canceled because of the GoS's decision to explore alternative sources of production particularly gas and coal that would in the GoS's view mitigate increasing fuel prices.

9. Later in 2011, given the non-availability of gas and delays in coal projects implementation, SENELEC decided to reengage in the Project and submitted an application to the Direction in Charge of Public Procurement monitoring ("DPPM") to conclude the PPA by mutual agreement between TP and SENELEC based on an exception included in the Public Procurement Code.

Environmental and Social (including safeguards)

10. The TP Project is a private sector project supported by the WBG and therefore World Bank Performance Standards are applicable to this investment. The WBG's environmental and social due diligence indicates that the investment will have impacts which must be managed in a manner consistent with the following Performance Standards: (i) PS 1 – Assessment and Management of Environmental and Social Risks and Impacts; (ii) PS 2 - Labor and Working Conditions; (iii) PS 3 - Resource Efficiency and Pollution Prevention; (iv) PS 4 – Community Health, Safety and Security; and (v) PS5 –Land Acquisition and Involuntary Resettlement. The Performance Standard PS6, - Biodiversity Conservation and Sustainable Management of Living Natural Resources - is not applicable to this Project which is located in a modified habitat previously utilized for agricultural activities and surrounded by other agricultural land,

residential properties, and a SENELEC substation. In addition, the project site is not considered of high biodiversity value, however three partially-protected plant species will require specific authorization prior to land clearance activities and two protected bird species have been identified on the site, noting that they are found within a 10km area. In order to limit potential impacts, land clearance activity will be avoided during the nesting period of July through September. The Performance Standard PS7- Indigenous People (IP) - is not applicable as there are no IP identified in the region. The Performance Standard PS8 - Cultural Heritage - is not applicable as the area is not identified as archeologically sensitive, nor have affected people indicated any cultural heritage of interest on the Project site. However, as a precautionary measure, a chance find procedure will be required as part of the construction contractor's Environmental and Social Management Plans.

11. The Project will have limited environmental and social impacts that can be managed through existing project design and/ or readily available mitigation measures as defined in the management plans to be applied to the Project. The key environmental and social impacts include air quality, noise, employee and other onsite workers' health and safety, traffic management, hazardous material and waste management, fuel transport, community health, and safety. Tobene Power has presented information on its planned policies and practices that will seek to address environmental and social risks and impacts to ensure that the proposed Project will, upon implementation of specific additional agreed measures, comply with host country laws and regulations and World Bank Performance Standards. Additional actions to be undertaken by Tobene Power are listed in the Environmental and Social Action Plan (ESAP), which is complementary to the environmental and social management plan included in the ESIA. The ESAP and Environmental and Social Review Summary have been prepared by IDA and IFC and disclosed at the InfoShop on June 11, 2013.

12. The Project's ESIA has been subject to a technical review by the "*Direction de l'Environnement et des Etablissements Classés*" (DEEC), and by the WBG safeguards experts. The ESIA addresses the potential risks and impacts from the Project and outlines proposed mitigation measures. In addition, stakeholder engagement was conducted during the ESIA process.

13. TP will develop and implement management programs to address ESIA-identified risks and impacts. The ESMP in the ESIA should be the basis of developing the thematic points of the management programs, key E&S issues to be addressed include management of: (i) local environmental, health and safety requirements; (ii) construction phase waste; (iii) occupational health and safety practices and training during construction and operation phases; (iv) labor and working conditions including hygiene and food safety; (v) air emissions; (vi) noise; (vii) emergency preparedness and response including first aid; (viii) drainage and storm water runoff; (ix) hazardous material storage and handling; (x) traffic safety (onsite and offsite) including transportation of fuel; (xi) solid and liquid waste handling, treatment, storage and disposal; (xii) equipment maintenance;(xiii) auditing of contractors implementation of the construction phase ESMP (included in the EIA); (xiv) community engagement with regards to labor, health/communicable diseases and safety; and (xv) environmental and social performance monitoring and internal reporting including verification of monitoring data by a qualified third party consultant.

14. The successful implementation of the actions outlined in the ESIA and ESAP will require close collaboration between Tobene Power, the EPC and O&M contractors, and suppliers. The

EPC contractor should have an Environment, Health and Safety (EHS) supervisor on the site. Tobene Power will hire or designate an experienced EHS professional as well as community liaison person (if the role cannot be handled by the same person) to develop and implement Tobene Power's E&S management programs and review those of the EPC Contractor for preconstruction, construction, operation and decommissioning phases ensuring compliance with the requirements of host country laws and the World Bank Performance Standards. The EPC contractor's EHS site supervisor and the Company's EHS team will ensure proper training of employees, contractors and subcontractors, ensure implementation of Occupational, Health and Safety (OHS) standards on the construction site, have joint meetings on OHS and share lessons learned, and jointly investigate any incidents/accidents on the site. Transport of the HFO, as well as storage, handling and use of HFO at the facility can present potential hazard in relation to accidental spills and fire. Both the EPC contractor and Tobene Power will develop an emergency preparedness and response plan for the construction and operational phase respectively. The Plan should describe the procedures to follow when handling an emergency situation such as fire, hazardous material or waste spills, injuries, transportation accidents, and natural disasters. This will include establishment of a communication network between the EPC contractor, the O&M Contractor, Tobene Power and emergency services such as fire departments, traffic police, and local medical services. Furthermore, the system will be tested through a mock drill to confirm effectiveness of the system or rectify any identified oversight. Finally, a key lesson learned from Kounone power plant is the importance of establishing and maintaining an effective buffer zone around the power plant to minimize hazards, pollution and other environmental and social impacts. A 300m buffer zone will be secured around the plant, and Tobene Power has further agreed to mark a 500m zone.

15. The land acquired by SENELEC falls under the national domain category allowing expropriation to take place for public utility services. The land acquisition (50 hectares), which took place prior to WBG involvement in the Project, resulted in economic displacement for 140 affected people engaged in agricultural activities (fruits trees, manioc, peanuts, beans, millet etc.) on the site. The Project site is 4.5 ha representing less than 10% of the total acquired land. There were no persons physically residing on the acquired land, however, there were four very early stage constructions with basic foundations. A special government committee sanctioned by order was put in place in to work on the land acquisition process and evaluate compensation amounts. The committee - in consultation with the affected people -, reviewed the official compensation scale which was dated 1994 to bring it into line with current market prices. Additional compensation of roughly US$ 600 per person, corresponding to approximately 8 months of minimum agricultural wage was awarded as compensation for the temporary loss of income due to the loss of land. Compensation was also provided for the loss of standing assets. Alternative land and monetary compensation was provided by the rural authorities for the four affected people that had begun foundation works on the Project site. The compensation process by SENELEC was carried out in consultation with the affected populations, while public consultations indicate communities' wishes for complementary compensation from Tobene Power for the loss of cultivated land. Full compensation to affected people was provided between March and April 2012. An audit in 2014 to verify livelihood restoration is included in the ESAP. Based on stakeholder consultations, the Project is welcomed by the community for benefits such as for job creation, development of the region, and increased access to electricity

16. Tobene Power will monitor the indicators established in the ESIA and additional ones, as necessary, in conjunction with the EPC and O&M contractors. These indicators monitored

during construction include: vehicles accidents, erosion control and water quality, noise and dust generation, waste disposal, employees health and safety practices including near misses, accidents, lost time incident, root cause analysis, and job creation within local communities. During operation, monitoring should include: point source and ambient air emissions, noise, occupational health and safety of employees and contractors, quality of effluent discharge, water and fuel consumption, sulfur content in fuel, greenhouse gas emissions, and job creation within the local communities. Specific parameters will be allocated to each of the activities above in order to track, monitor, analyze EHS and Social performance and ensure compliance with Senegalese laws and the World Bank Performance Standards.

Monitoring & Evaluation

17. SENELEC prepares detailed annual reports describing the supply and demand situation of its network[9], along with information regarding dispatching of individual power plants and their average costs of production. Key Project performance indicators on the amount and costs of electricity generated by the Project will be therefore provided as part of SENELEC's normal reporting procedures. In addition, detailed information can be made available from both TP and SENELEC on the basis of PPA invoicing and payments records. The Project's intermediate outcomes will be monitored through project progress reports prepared by TP during the construction and commissioning phases of the Project.

Role of Partners

18. Three Development Finance Institutions (FMO, EAIF and BOAD) will provide long-term financing to the TP Project alongside IFC. They will share construction and operation risk with IFC.

[9] Rapport Annuel Mouvements d' Energie, prepared by the Transport and Energy Procurement, SENELEC

Annex 4: Operational Risk Assessment Framework (ORAF)

SENEGAL: TAIBA NDIAYE INDEPENDENT POWER PRODUCER PROJECT

Project Stakeholder Risks	**Rating**	**Moderate**		
Description: Tobene Power, SENELEC and SAR will delay significantly in negotiating and finalizing the PPA and FSA. The Sponsor for the IPP fails to secure the financing for the Project on time.	**Risk Management:** GoS has declared its commitment to this Project, as demonstrated by its request for the PRG. IFC and the Association are actively following up on various issues and could –if requested—mediate and facilitate these negotiations. The negotiations on the PPA and FSA are in an advanced stage and fast resolution of the outstanding issues will mitigate this risk. The Sponsor is experienced in developing such projects and is currently securing the debt financing, with the help of IFC as Lead Arranger.			
	Resp: GoS and TP	**Stage: Implementation**	**Due Date : December 2013**	**Status: Ongoing**
Implementing Agency Risks (including fiduciary)				
Capacity	**Rating:**	**Low**		
Description : Delays in the Project implementation due to limited capacity of the Sponsor.	**Risk Management :** Matelec has acquired experienced in this type of projects, while a well-known generation manufacturer (MAN) will provide the equipment. Matelec has a strong track record of operating in Africa and is well equipped from technical, contractual and financial standpoints to undertake the Project.			
	Resp: Sponsor	**Stage: Implementation**	**Due Date : Recurrent**	**Status: On-going**
Governance	**Rating:**	**Moderate**		
Description : Weak governance mechanisms may delay Project preparation and implementation.	**Risk Management :** As implementing agency, Tobene Power SA has appropriate internal governance mechanism deemed adequate to implement the Project. IDA and IFC have been in close dialogue with the developer, Tobene Power, and the GoS to ensure a transparent decision- making process and governance structure during Project preparation and implementation. The existing Kounoune Power project of the same Sponsor in Senegal has not been subject to any governance issue.			
	Resp: Sponsor, GoS and WBG	**Stage: Implementation**	**Due Date : Recurrent**	**Status: Ongoing**

<table>
<tr><td>Project Risks</td><td colspan="4"></td></tr>
<tr><td>Design</td><td>Rating:</td><td colspan="3">Moderate</td></tr>
<tr><td rowspan="2">Description :
Technical Risk: Risk that Project will not be implemented properly because of technical reasons or capacity constraints.

Operation Risk:
• The Project costs of fuel and variable energy charges may erode the plant’s technical efficiency advantage and reduce its dispatching schedule
• Poor operation and maintenance of the plant resulting in low availability
• Market demand and prices of Heavy Fuel Oil may increase significantly, no longer making it a cost-effective option for electricity generation.</td><td colspan="4">Risk Management:
The construction of the power plant is done through a turn-key EPC contract, which allows for the control and management of risks. In addition, an experienced contractor, and Sponsor, and use of a proven technology, help reduce any unforeseen risks.

FSA and PPA agreements are in advanced stage of negotiations and will include provisions to result in overall variable energy and fuel charges that ensure the TP Project is dispatched before the majority of SENELEC’s fuel plants. WBG will seek to include in the legal agreements a provision that requires conversion of the plant to natural gas be done, if and when, natural gas is available in the country, provided that this can be done on reasonable terms.

The TP Project will have dual fuel capability and the ability to switch to gas as needed.

The operation risk is mitigated through the contracting of the O&M company, which will be an experienced and reputable company.</td></tr>
<tr><td>Resp: Sponsor, GoS, WBG</td><td>Stage: Implementation</td><td>Due Date : Recurrent</td><td>Status: Ongoing</td></tr>
<tr><td>Social & Environmental</td><td>Rating:</td><td colspan="3">Moderate</td></tr>
<tr><td rowspan="2">Description: The risk that EMPs related to the selected sites are not adequately implemented by the private developers.</td><td colspan="4">Risk Management: IDA, IFC and other senior lenders will be supervising the Project, ensuring the EMP is followed and implemented by the SPV.</td></tr>
<tr><td>Resp: WBG and Sponsor</td><td>Stage: Implementation</td><td>Due Date : Recurrent</td><td>Status: On-going</td></tr>
<tr><td>Program & Donor</td><td>Rating:</td><td colspan="3">Moderate</td></tr>
<tr><td rowspan="2">Description: The risk that delays from the financing partners side can delay financial closure, and hence the completion of the Project.</td><td colspan="4">Risk Management
IFC has been mandated to mobilize the debt financing through other DFIs. All these lenders have an ability to negotiate the loan for the benefit of the project company, hence avoiding any delays.</td></tr>
<tr><td>Resp: WBG</td><td>Stage: Implementation</td><td>Due Date : April 2014</td><td>Status: Pending</td></tr>
</table>

<table>
<tr><td>Delivery Monitoring & Sustainability</td><td colspan="4">Rating: Moderate</td></tr>
<tr><td>Description :

Weak capacity to monitor Project implementation and sustain the efforts beyond Project execution.

In particular, the TP Project is using HFO, a fuel subject to international oil price fluctuations.

Fuel unavailability represents a risk for the Project, given SAR past performance and financial situation.</td><td colspan="4">Risk Management:

Information for the monitoring of results will be obtained from SENELEC and Tobene Power. SENELEC prepares detailed annual reports describing the supply and demand situation of its network, along with information regarding dispatching of individual power plants and their average costs of production. Key project performance indicators on the amount and costs of electricity generated by the Project will be therefore provided as part of SENELEC’s normal reporting procedures. In addition, detailed information can be made available from both TP and SENELEC on the basis of PPA invoicing and payments records. The Project’s intermediate outcomes will be monitored through project reports prepared by TP during the construction and commissioning phases of the Project. While relaying mainly on the Project developer for this specific Project, other IDA’s operations in the sector are increasing SENELEC’s monitoring and reporting mechanisms

The WBG will seek to include in the legal agreements a provision that requires conversion of the plant to natural gas be done, if and when, natural gas is available in the country, provided that this can be done on reasonable terms

Since almost 90 percent of the country’s thermal power plants rely on fuel acquired from SAR, the GoS is expected to step in and likely arrange fuel imports from abroad directly in case of SAR failure to deliver fuel to the Project (as already happened during 2012 and 2013). It would also be in SENELEC’s interest to procure fuel to the TP Project given its high efficiency.</td></tr>
<tr><td></td><td>Resp:
GoS and Sponsor</td><td>Stage: Implementation</td><td>Due Date :Recurrent</td><td>Status:
Ongoing</td></tr>
<tr><td colspan="5">Overall Risk Following Review</td></tr>
<tr><td colspan="5">Implementation Risk Rating: Substantial</td></tr>
<tr><td colspan="5">The implementation risk is rated Substantial due to the risks associated with the sector and the long term sustainability of the Project. The main risk to the Project is the timing of its commissioning compared to the commissioning of other cheaper power plants. A longer time between the TP Project commissioning date and the date of commissioning of other plants increases its economic rate of return, but at the same time also negatively impacts the financial viability of the power sector, and thus increases the risk for the Sponsor and the Government.</td></tr>
</table>

Annex 5: IDA Implementation Support Plan

SENEGAL: TAIBA NDIAYE INDEPENDENT POWER PRODUCER PROJECT

Strategy and Approach for Implementation Support

1. The electricity sector in Senegal has been characterized by a considerable financial disequilibrium, as significant delays in implementing low-cost generation investments have resulted in extremely high operating costs, along with increases in oil prices and demand growth. SENELEC had to resort to emergency diesel rental generation to meet rising demand and while it has mitigated significantly power shortages in 2012, its customer revenues – despite relatively high tariffs-- have been significantly lower than required revenues. It is only through significant Government subsidies that SENELEC manages to limit its losses and it continues to face cash-flow shortages.

2. IDA's implementation support for the TP Project therefore is oriented towards assisting the Government in developing and implementing strategic approaches to: (i) improve SENELEC's commercial performance (through the on-going Electricity Sector Support Project), and (ii) to diversify its energy mix. The Association has introduced prior actions in various DPOs that resulted in a Letter of Development policy for the Energy Sector that clearly lays out the diversification of the energy mix as a priority.

3. The Association is working with the GoS to advance electricity imports from Mauritania, where off-shore natural gas is to be developed for power generation. In addition, IDA, together with other development partners is assisting the GoS to introduce renewable energy in its energy mix. The Association is also working with the GoS towards attracting private sector investment for Liquefied Natural Gas. The GoS is separately pursuing activities to secure coal power plant investments.

Implementation Support Plan

4. At the project level, given the private sector nature of the Project and the Sponsor's good capacity, technical, or fiduciary support activities will be limited. The IDA team –in cooperation with the IFC-- will focus on ensuring the implementation of the provisions under the World Bank Performance Standards and on monitoring the financial status of the sector.

5. The tables below map out the proposed Implementation Plan, Skills Mix and other Inputs required.

Implementation Plan

Time	Focus	Skills Needed	Resource Estimate	Partner Role
First twelve months	Team leadership, legal supports and PRG technical support to ensure PRG signature, effectiveness and achievement of condition precedents.	TTL, energy and sector specialists, PRG specialists and lawyer.	US$225,000	Ongoing exchanges of information as required for the finalization of any outstanding signature and condition precedents (including missions)
Rest of the Project duration	Project overall supervision in line with the PRG nature of the operation.	TTL, energy and sector specialists, PRG specialists, legal support (LEGSO), safeguards support.	$75,000 per annum	Ongoing exchanges of information as required per standards legal covenants to PRGs

Skills Mix Required

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
TTL/sector specialist	6 SWs (until effectiveness, then as needed)	N/A	Dakar based
PRG Specialist	6 SWs (until effectiveness, then as needed)	2 (until effectiveness, then as needed)	Washington DC based
Legal Counsel	4 SWs (until effectiveness, then as needed)	2 (until effectiveness, then as needed)	Washington DC based
Safeguard Specialists	As needed	As needed	

Partners

Name	Institution/Country	Role
TBC	Tobene	Project Sponsor
TBC	SENELEC	Project monitoring and recipient

Annex 6: Project Economic and Financial Analysis and SENELEC Financials

SENEGAL: TAIBA NDIAYE INDEPENDENT POWER PRODUCER PROJECT

Project Economic Analysis

1. *Rationale for public sector provision/financing.* This operation will provide public sector financing to support the GoS's efforts to address huge financing gaps between investment needs for poverty reduction and sustainable development and the limited funding available from its own sources. The WBG investment and risk mitigation framework for this Project is designed with complementary and efficient use of IDA PRGs and IFC investments to support the GoS's agenda of increasing electricity generation and private sector participation in the sector. In addition, the PRG structure helped to conserve scarce IDA resources through the provision of minimal amounts of security to lenders and investors, while at the same time making the IPP projects bankable.

2. *Value added of World Bank Group's support.* Senegal is facing major challenges to mobilize private sector financing for development purposes due to a variety of reasons, including lack of commercial viability of the sectors, slow sector reforms, perception of high risk from SENELEC's non-performance of its contractual obligations. The WBG's support is critical to provide confidence to investors in the sector, as proven by the fact that a limited amount of IDA support will leverage about US$ 172 million of private capital that would be unwilling to commit without proper risk mitigation. This operation is an example of how a suite of complementary WBG instruments can be deployed to meet GoS's needs. Not only it is helping crowding in much needed private capital, but it is also aligned and embedded in a strong sectoral dialogue with the authorities. The role of IFC InfraVentures has been key in engaging early on with the Sponsor on structuring and project documents. IFC can now mobilize the necessary long term debt by presenting a "bankable" project to other lenders.

3. *Forecast Electricity Demand and Supply Balance.* The following table summarizes the demand and supply situation of the electricity sector in Senegal. The supply is based on SENELEC's supply projections (July 2013), adjusted by WBG staff on the basis of international experience regarding construction times and to reflect delays with some of the projects. As can be seen from the table, from 2016/2017 the system should have ample capacity and a comfortable reserve margin, as imports from Mauritania and the Sendou I coal project come on-line. However the reserve margin includes expensive peaker plants. The TP Project is critical to reduce costs and provide reliability of supply especially in 2015.

Table 1. Demand and Supply summary of Senegal's interconnected system (existing and WBG projections)

Year	Demand (MW)	Growth	Additional Units	Supply (MW) Capacity	Fuel	Avge Var. Cost (FCFA/kwh)	Cum. Av. Capacity Installed	Reserve Margin MW	Reserve Margin %	Comments
2012	466						494	28	6.1%	
2013	494	*6.0%*	C6 & C7 Ex	60	HFO	86.9	565	71	14.4%	*Retirement of 50MW of Diesel rental and Rehabilitation of some units (Tag, C3)*
			Felou	15	Hydro	26.9	575	575	16.5%	
2014	524	*6.1%*								
2015	555	*5.9%*	Tobene IPP	70	HFO	88.4	639	84	15.2%	
2016	588	*5.9%*	Mauritania Imports	80	Gas	64.0	703	115	19.6%	*Costs to be agreed. Assumed One off commissioning on gas in 2016*
2017	624	*6.1%*	Sendou I	125	Coal	29.7	803	179	28.7%	
2018	661	*5.9%*								
2019	701	*6.1%*	Gouina	35	Hydro	25.7	819	118	16.8%	
2020	743	*6.0%*	Kaleta	60	Hydro	26.3	846	103	13.8%	

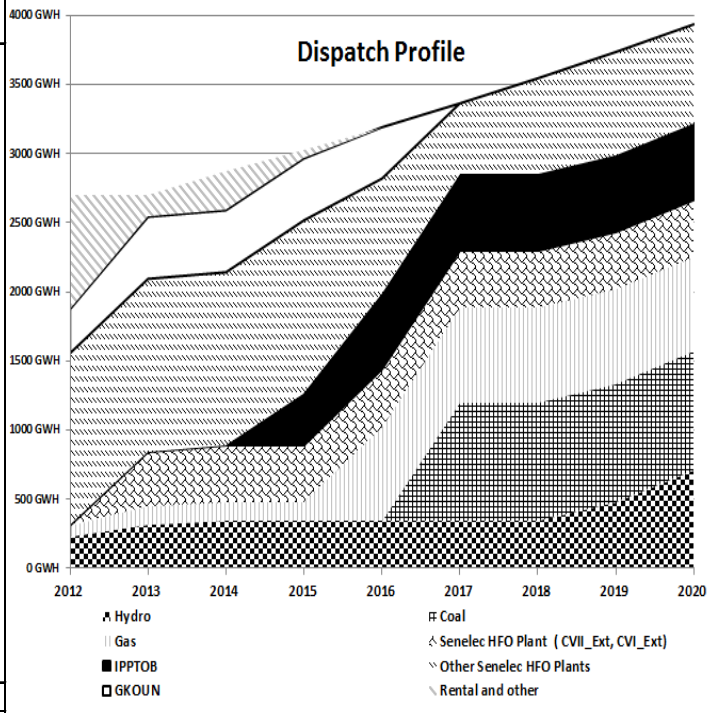
4. Table 1 reflects the WBG's best estimates in terms of availability for the country's generation plan. The Sendou I project is expected to come on-line in 2017 and it could reduce significantly the costs of production. The commissioning timing of this Project is quite relevant for its economic evaluation, as it is expected that when substantial coal generation comes on-line, HFO plants may be dispatched less. In addition, thanks to its ability to be converted to run on gas with a small investment, the TP Project is expected to remain high in the merit order should gas become available at competitive prices and sufficient quantities in the country.

5. *TP Project's position in SENELEC's generation options merit order and scenario analysis for dispatching.* Given negotiations are still ongoing on the final FSA, the Project position within SENELEC's generation options merit order, and therefore whether it will be fully or partially dispatched, hinges on key assumptions on the final fuel costs. To model this uncertainty, two scenarios have been considered to assess the Project economic internal rate of return (EIRR), according to the different assumptions on the TP Project final fuel costs as outlined below.

6. *Scenario 1*- Fuel Cost Parity - assumes that the Project obtains fuel at par with the other plants in the system (currently c. XOF 390,000/tons). Therefore, due to its higher efficiency and lower overall generation costs, the TP Project will be dispatched before the great majority of SENELEC's power plants. To be more specific, the PPA sets an efficiency rate of 191 g/kWh, while SENELEC's best plant is at about 196 g/kWh (60 MW) while other range from 204 g/kWh (120MW) and 211 g/kWh (84MW). In other words, the Project would use 2.5 to 9 percent less fuel than SENELEC's others HFO plants. Based on this assumption, the Figure below outlines the Project's projected position within SENELEC merit order of generation options (around 2020) for Scenario 1. Under this scenario, therefore, due to its higher efficiency and lower costs of generation compared to other SENELEC's plants, the TP Project will dispatch about 100% of available power for the duration of the PPA (equivalent to 558 GWh/year).

Figure 1: Scenario 1- Fuel Parity Cost –Project's Load Factor and merit order in 2020

Load Factor			2014	2015	2016	2017	2018	2019	2020
				61.25%	90.65%	90.65%	90.65%	90.65%	90.65%
	Fuel	CoD	Installed MW	Total Variable Cost					
GOUINA	HYDRO	2019	35	23.7					
KALETA	HYDRO	2020	60	24.2					
Manantali	HYDRO	in operation	60	26.5					
FELOU	HYDRO	in operation	15	26.9					
CES SENDOU 1	Coal	2017	125	29.7					
MAURITANIA Gas	Gas	2016	80	55.4					
SOCOCIM II	Gas	in operation	4	58.0					
SOCOCIM I	Gas	in operation	15	66.5					
CVII_Ext	Fuel oil	in operation	30	84.0					
CVI_Ext	Fuel oil	in operation	30	84.1					
			454						
TOBENE	Fuel oil	2015	88	84.6					
CIV Centrales Propres	Fuel oil	in operation	84	84.8					
CVII_DIESEL	Fuel oil	in operation	60	85.5					
CVI_DIESEL	Fuel oil	in operation	60	85.7					
KOUNOUNE	Fuel oil	in operation	65	90.2					
LOC50MWDO	Diesel oil	in operation	50	130.6					
LOC100MW	Diesel oil	in operation	100	134.8					
CIII_VAPEUR	Fuel oil	in operation	50	143.7					
GTI	Gasoil	in operation	45	191.6					
TAG4	Diesel oil	in operation	28	197.1					
CIII_TAG	Diesel oil	in operation	18	224.6					
TOTAL MW			**1,102**						



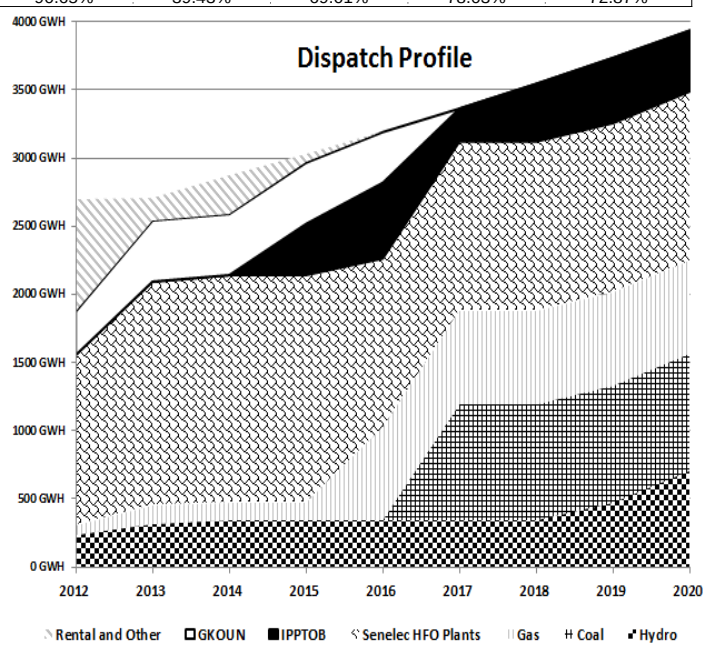
7. *Scenario 2*- Fuel Premium, assumes that the Project will pay fuel at a premium price compared to SENELEC's power plants (a XOF 18,000 Premium) and therefore it will only be partially dispatched between 2017 and 2020. Under this more conservative scenario, assumptions include: i) fuel costs are estimated to be overall 5 % higher than in Scenario 1; and ii) the Project will fall down the merit order behind some SENELEC's plants but being dispatched in the foreseeable future at high level with the increasing demand as shown in Figure 2.

Figure.2: Scenario 2- 18,000 CFA Fuel Premium -Project Load Factor and merit order in 2020

Note: New plants to be commissioned are highlighted in blue on the left. TP Project is represented in green on the right.

Load Factor	2014	2015	2016	2017	2018	2019	2020
		61.25%	90.65%	39.43%	69.01%	78.03%	72.87%

	Fuel	CoD	Installed MW	Total Variable Cost
GOUINA	HYDRO	2019	35	23.7
KALETA	HYDRO	2020	60	24.2
Manantali	HYDRO	in operation	60	26.5
FELOU	HYDRO	in operation	15	26.9
CES SENDOU 1	Coal	2017	125	29.7
MAURITANIA Gas	Gas	2016	80	55.4
SOCOCIM II	Gas	in operation	4	58.0
SOCOCIM I	Gas	in operation	15	66.5
CVII_Ext	Fuel oil	in operation	30	84.0
CVI_Ext	Fuel oil	in operation	30	84.1
CIV Centrales Propres	Fuel oil	in operation	84	84.8
CVII_DIESEL	Fuel oil	in operation	60	85.5
CVI_DIESEL	Fuel oil	in operation	60	85.7
TOBENE	Fuel oil	2015	88	88.0
KOUNOUNE	Fuel oil	in operation	65	90.2
LOC50MWDO	Diesel oil	in operation	50	130.6
LOC100MW	Diesel oil	in operation	100	134.8
CIII_VAPEUR	Fuel oil	in operation	50	143.7
GTI	Gasoil	in operation	45	191.6
TAG4	Diesel oil	in operation	28	197.1
CIII_TAG	Diesel oil	in operation	18	224.6
TOTAL MW			1,102	



8. A costs-benefits analysis has been performed for each of these scenarios. The table below summarizes other key assumptions for the analysis (common to the two scenarios).

Table 2: Key Assumptions for the Project Economic Analysis

Discount Rate	12 %
Project's availability (based on existing PPA)	91 %
Yearly Increase in Electricity Demand	5.6%
Yearly Rate of Deterioration of SENELEC diesel units	3 %
Improvement of Grid Stability due to the TP Project (as percentage of dispatched power)	0.5%
Yearly increase in fuel costs	2%
Project life	20 years

9. *Project Costs*. The following costs have been considered in the analysis: i) fuel costs as mentioned above under Scenario 1 and Scenario 2; and ii) fixed operation and maintenance (based on existing PPA), iii) variable operation and maintenance (based on PPA). Yearly values are outlined in Table 4 and 5 below.

10. *Project Benefits.* The Project's economic value in the system is very high in the short-term as it will be replacing expensive emergency power generation. In particular, under Scenario 1, the TP Project is expected to generate power at a cost that would save about XOF 50/kWh compared to the emergency gensets, realizing annual savings of about XOF 36 billion (about US$70 million).

11. In addition, the Project will increase the overall reliability of supply by providing additional installed capacity located at an important network node and therefore improving power flows in the Senegalese system. For the purpose of the analysis, this increased network reliability has been quantified as an additional 0.5 percent of the Project's installed capacity available to the grid.

12. The Project will also bring a series of potential other benefits which have not been taken into account for this economic analysis. SENELEC has requested that the TP Project can be easily converted to run on natural gas, to be available as capacity for natural gas imports in the country and TP has agreed to construct the plant under specifications that will permit a future conversion to natural gas, creating an option value for the development of the sector in the future (as well as positive environmental externalities associated with the switching from HFO to natural gas).

13. *Results.* For each scenario, a cost-benefit analysis has been carried out and the results are summarized in the tables below. Results show a strong economic rationale for the Project to go ahead. However, for Scenario 2, the higher fuel costs (and consequent lower merit order and dispatching amount) considerably reduce the Project's Net Present Value (NPV) and EIRR. It is also worth mentioning that most of the economic benefits will accrue during the initial two years of operations (before the coming on-line of the Sendou I project).

Table 3: Economic Analysis Results

Scenario	NPV (XOF million)	NPV (US$ million)	EIRR (%)
Scenario 1: Fuel Cost Parity	102,982	233	30.5
Scenario 2: Fuel Premium	72,357	143	24.5

Table 4: Scenario 1: Cost-Benefit Analysis

		Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y15	Y20
COST													
capex													
a. Investments Costs	XOF Mill	81,147	-	-	-	-	-	-	-	-	-	-	-
opex													
Variable													
b. Fuel Cost and variable O&M	XOF Mill		28,915	42,794	42,794	42,794	42,794	42,794	42,794	42,793	42,793	42,793	47,207
Fixed													
d. O&M Charge	XOF mill	3,141	3,141	3,141	3,141	3,141	3,141	3,141	3,141	3,141	3,141	3,141	3,141
Total project costs	XOF mill	84,288	32,056	45,935	45,935	45,935	45,935	45,935	45,935	45,934	45,934	45,934	50,348
BENEFIT													
Power dispatched by TNP	(GWh)	0	342	506	506	506	506	506	506	506	506	506	558
Grid Improvement (less losses)		*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*
Net		0	343	508	508	508	508	508	508	508	508	508	561
f. Opportunity Costs (Fuel Cost Alternative APR)		-	50,150	74,222	74,222	74,222	74,222	74,222	74,222	74,220	74,220	74,220	81,875
Total Project Benefits		-	50,150	74,222	74,222	74,222	74,222	74,222	74,222	74,220	74,220	74,220	81,875
Net Benefits		(84,288)	18,094	28,287	28,287	28,287	28,287	28,287	28,287	28,286	28,286	28,286	31,528
NPV (XOF million)	102,982		EIRR		30.5%								

Table 5: Scenario 2: Cost-Benefit Analysis

		Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y15	Y20
COST													
capex													
a. Investments Costs	XOF Mill	81,147	-	-	-	-	-	-	-	-	-	-	-
opex													
Variable													
b. Fuel Cost and variable O&M	XOF Mill		30,077	44,514	19,362	33,887	38,317	35,783	44,514	44,513	44,513	44,513	44,513
Fixed													
d. O&M Charge	XOF mill	3,141	3,141	3,141	3,141	3,141	3,141	3,141	3,141	3,141	3,141	3,141	3,141
Total project costs	XOF mill	84,288	33,218	47,655	22,503	37,028	41,458	38,924	47,655	47,654	47,654	47,654	47,654
BENEFIT													
Power dispatched by TNP	(GWh)	0	342	506	220	385	435	407	506	506	506	506	506
Grid Improvement (less losses)		*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*
Net		0	343	508	221	387	438	409	508	508	508	508	508
f. Opportunity Costs (Fuel Cost Alternative APR)		-	50,150	74,222	32,284	56,503	63,889	59,664	74,222	74,220	74,220	74,220	74,220
Total Project Benefits		-	50,150	74,222	32,284	56,503	63,889	59,664	74,222	74,220	74,220	74,220	74,220
Net Benefits		(84,288)	16,932	26,567	9,781	19,475	22,431	20,740	26,567	26,566	26,566	26,566	26,566
NPV (XOF million)	72,357		EIRR		24.5%								

14. *Sensitivity Analyses*. The robustness of the economic justification has been assessed by adopting more pessimistic assumptions for the major economic and technical parameters. This includes: increased Project costs (5%) and delays in Project commissioning (1 year). Results are presented below. The following key messages could be inferred from the sensitivity analysis results:

a) Under Scenario 1, the Project remains highly economically viable despite delays in construction or increase in Project costs.

b) Under Scenario 2, close monitoring of construction time and ensuring that the commissioning of the plant is carried out as expected (mid-2015) is key to ensure Project viability. A one year delay in Project commission would drop the EIRR to 21.3% while a 5% cost increase would result in an EIRR of 23.5%. While the Sponsor would mainly bear the cost associated with the increase in Project costs, in the case of delays in commissioning, costs would be shared by the Sponsor (in terms of missed/delayed capacity and energy charges) and SENELEC (in terms of missed/delayed benefits).

Table 5: Sensitivity Analysis

Sensitivity Analysis	NPV (XOF million)	NPV (XOF million)	EIRR (%)
Reference Case			
Scenario 1	102,982	233	30.5
Scenario 2	72,357	143	24.5
Increased Investment Costs			
Scenario 1	99,359	200	29.2
Scenario 2	68,734	140	23.5
Delays in Project Commissioning			
Scenario 1	82,344	164	26.1
Scenario 2	55,459	105	21.3

15. *Switching value analysis on the TP Project dispatching*. A "switching value" analysis (e.g. the NPV equal to zero) has also been carried out to estimate the lowest possible dispatching which would make the Project non-economically viable. This corresponds to the Project dispatching only about 45% of available power for the duration of the PPA (from the first year of operations). However, given the higher visibility of other generation plants coming online over the next five years, a switching analysis has also been carried out for dispatching after 2020, when uncertainty is higher. In this case, the lowest possible dispatching that keeps the Project economically viable drops to 15% (corresponding to the Project being used as a peak-plant). The lowest dispatching may be due to several factors, such as the Project falling further down SENELEC's merit order (either because of final negotiated costs significantly higher compared to other SENELEC and IPP generation options, or commissioning of other cheaper power plants) or other external causes, such as natural disasters. It is worth noting, however, that this scenario is unlikely and represents a limit case for the Project.

Project Financial Analysis

16. The Project's financial projections have been prepared according to the terms specified in the PPA and in accordance with the terms being negotiated under the PPA Amendment, the EPC Contract, O&M Agreement and the FSA. The projections relate to assumptions about the following key operating drivers: (i) investment and financial plan; (ii) load factors, which are assumed to exhibit a downwards trend as production from the plant is gradually substituted with cheaper alternatives like coal and gas as they come on-stream. The load factors are based on the analysis carried out by the WBG team appraising the off-taker (SENELEC); (iii) PPA tariff structure and their escalation indices; and (iv) operating costs based on the O&M contract being negotiated.

17. The Project's operating cash-flows are expected to be sufficient to cover debt service and allow for regular dividend payment.

SENELEC Financials[10]

Historical performance

18. Despite several tariff adjustments between 2007 and 2009, tariffs have not kept up with the increase in costs of generation. Tariffs are currently approximately 30 percent below what is needed to cover SENELEC's expenses and investments needs. The Government provides revenue compensation to SENELEC based on the difference between revenue requirements reviewed by the regulator and actual tariffs

19. SENELEC's financial performance over the last years has been characterized by negative EBITDA and net loss since 2005, with the exception of 2009, when a decrease in oil price. SENELEC experienced the worst financial performance in 2010, which was a record year in terms of load shedding and losses. A 10% increase in revenues was not sufficient to offset the increase in fuel and energy costs, estimated at 55%. As a result, the increase in fuel cost led in large part to a deterioration of the gross margin from 40.8% in 2006 down to -10.2% in 2012 (see table 8 below).

20. Despite a year by year increase in subsidies, these are still not sufficient to cover SENELEC's financial deficit.

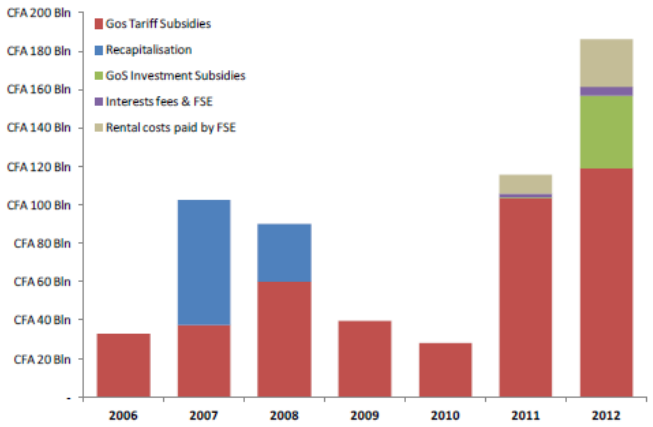
[10] Data from 2011 and 2012 are based on SENELEC and IFC estimates, since financial statements for 2011 were not accepted by auditors, and 2012 statements are not yet available.

Table 6: Summary of SENELEC's income statements over 2006-2012

	Actual					Estimates[1]	
FCFA Mln	2006	2007	2008	2009	2010	2011	2012
Income Statement							
Revenues	157,183	180,526	209,744	221,459	243,465	241,974	279,380
		14.9%	*16.2%*	*5.6%*	*9.9%*	*-0.6%*	*15.5%*
(-) Fuel & energy costs	(93,064)	(123,691)	(188,831)	(144,332)	(223,196)	(248,052)	(307,944)
Gross Margin	64,119	56,835	20,913	77,127	20,270	(6,078)	(28,564)
	40.8%	*31.5%*	*10.0%*	*34.8%*	*8.3%*	*-2.5%*	*-10.2%*
(-) Others operating	(83,386)	(57,853)	(44,704)	(56,469)	(43,869)	(44,428)	(68,112)
(-) Staff expenses	(20,912)	(22,116)	(22,779)	(26,534)	(28,032)	(28,388)	(25,783)
EBITDA	(40,178)	(23,135)	(46,570)	(5,876)	(51,631)	(78,894)	(122,459)
	-25.6%	*-12.8%*	*-22.2%*	*-2.7%*	*-21.2%*	*-32.6%*	*-43.8%*
(-) D&A	(16,609)	(18,240)	(15,397)	(21,013)	(28,837)	(20,898)	(8,403)
(-) Financial charges	(10,220)	(2,311)	(4,974)	(6,739)	(2,619)	(9,080)	(1,079)
(-) Taxes	(1)	(1)	(1)	(1)	(1)	(1)	(1)
NI Bef. tariff Subs.	**(67,008)**	**(43,687)**	**(66,942)**	**(33,629)**	**(83,088)**	**(108,873)**	**(131,941)**
(+) Tariff Subsidies	32,881	37,339	60,000	39,535	28,070	103,371	118,717
Net Income	**(34,127)**	**(6,348)**	**(6,942)**	**5,905**	**(55,018)**	**(5,503)**	**(13,224)**

22. In this difficult environment, it is not surprising to see that SENELEC's financial situation has been worsening for the past years. Due to poor cash collection, short term assets have increased, representing about 50% of total assets. This is best illustrated by looking at days of receivables, which have almost doubled between 2006 and 2012, from 122 to 413 (more than a year), respectively. In 2007 and 2008, SENELEC was recapitalized by GoS (36 billion XOF) and the French Development Agency (30 billion XOF). SENELEC has managed to continue operations because of continuing high levels of GoS's support and increasing recourse to debt. It should be noted that direct subsidies to SENELEC are expected to decrease from XOF105 billion in 2012 to approximately XOF 80 billion (about US$ 160 million) in 2013 (not included in Figure 2).

Figure 3: Cash injection from GoS

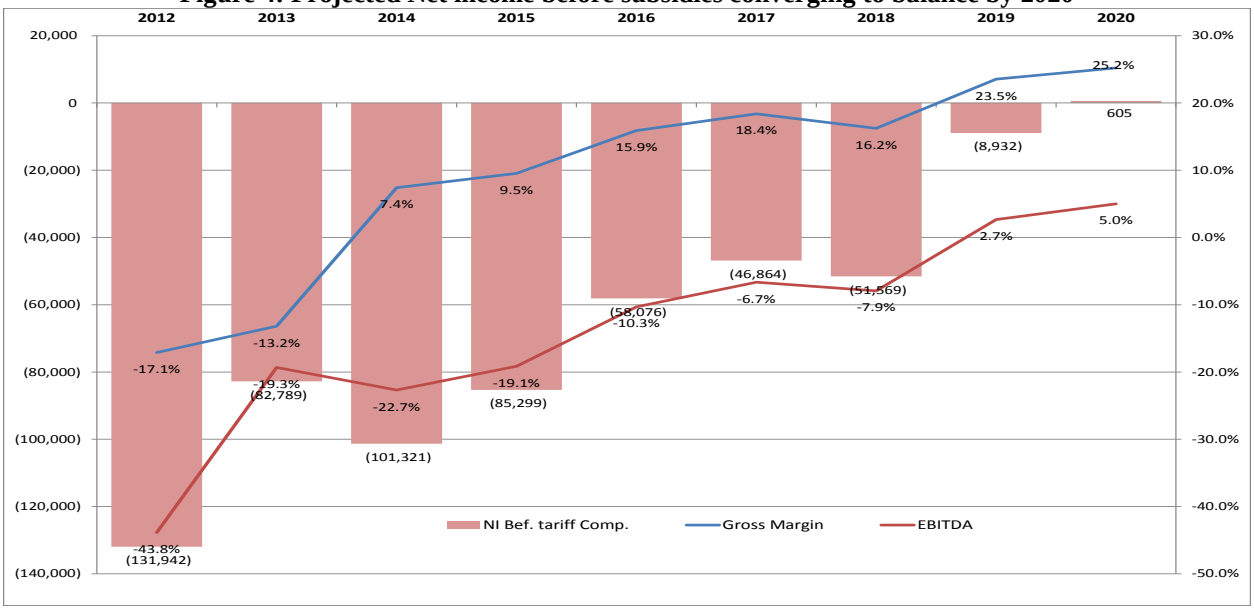


SENELEC's prospects

23. As mentioned earlier, with the commissioning of the Project, the rehabilitation of existing plants, power imports from Mauritania, the commission of Sendou I, and increased regional hydropower and other operational measures, the financial position of SENELEC is expected to improve. The return to profitability is expected to occur in 2018.

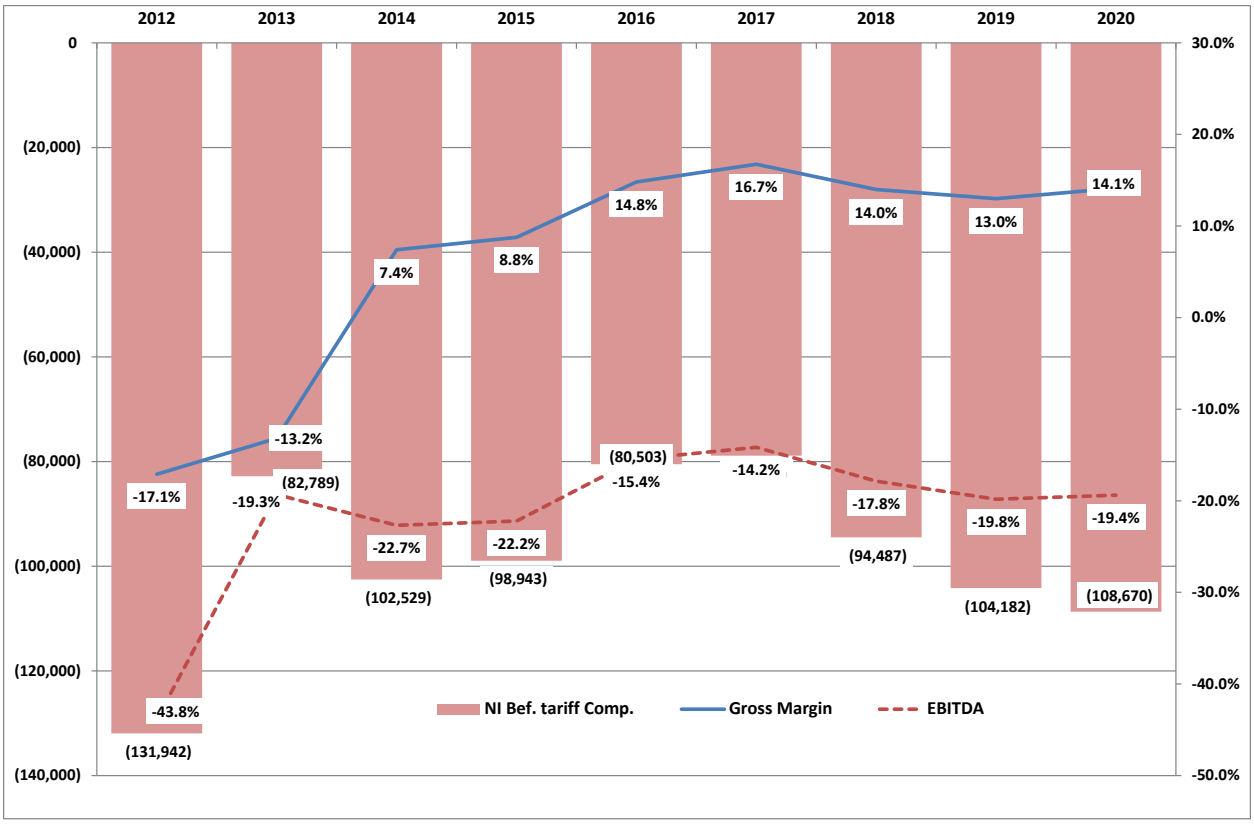
24. Over the coming years, the GoS will still have to provide subsidies, though at a declining level. The revenue gap for 2014 is estimated at about XOF 101 billion (US$ 200 million), and about XOF 85 billion (US$ 170 million) to XOF 47 billion (US$ 93 million) for the following three years 2015-2018 (see chart below).

Figure 4: Projected Net income before subsidies converging to balance by 2020



25. A worse-case scenario has also been considered, corresponding to GoS/SENELEC failing to successfully implement the recovery measures outlined in the Section II, both in terms of bringing lower cost generation capacity online as planned and in terms of the non-generation related recovery measures. In this case, SENELEC will not be able to return to financial balance by 2018. For example, the table below shows the impact of a failure to implement the non-generation related recovery measures (cash injection; improvement of working capital; reduction of total losses; and reduction of operational costs) on SENELEC's income statement. Under this scenario, SENELEC could continue to require as much as about XOF 108 billion (US$ 216 million) in 2020 of Government subsidies to show a positive net income. It is worth mentioning, however, that this scenario is unlikely given the GoS commitment to the reform and represents a limit case for the sector.

Figure 5: Impact of failure to implement non-generation related recovery measures on SENELEC's net income



Annex 7: Partial Risk Guarantee (PRG) Term Sheet

SENEGAL: TAIBA NDIAYE INDEPENDENT POWER PRODUCER PROJECT

PRELIMINARY SUMMARY OF INDICATIVE TERMS AND CONDITIONS OF PROPOSED IDA PARTIAL RISK GUARANTEE IN SUPPORT OF TOBENE POWER SA AND THE REPUBLIC OF SENEGAL

This draft term sheet contains a preliminary general summary of indicative terms and conditions of a potential IDA Partial Risk Guarantee (the Guarantee) for the Tobene Power Project (Project) with respect to which SENELEC is in discussion with IDA.

L/C Applicant:	SENELEC
IDA Guaranteed L/C:	Revolving, standby letter of credit (L/C) issued in favor of the L/C Beneficiary by the L/C Bank at the request of the L/C Applicant to backstop certain payment obligations of the L/C Applicant and GoS. Obligations of the L/C Applicant or GoS, as the case may be, to repay the L/C Bank amounts drawn under the L/C would be guaranteed by the International Development Association (IDA). Amounts drawn by the L/C Beneficiary under the L/C that are repaid by the L/C Applicant or GoS, as the case may be, to the L/C Bank within the L/C Reimbursement Period would be reinstated as further described below.
L/C Beneficiary:	The Project Company (SPV)
L/C Bank:	A commercial bank acceptable to IDA, the L/C Applicant and the L/C Beneficiary, selected through a competitive bidding process.
L/C Form:	The L/C would be issued in a form satisfactory to the L/C Beneficiary, the L/C Applicant, and IDA.
Purpose:	The IDA Guarantee would backstop the obligation by the L/C Applicant and GoS, as the case may be, to repay the L/C Bank for amounts drawn by the L/C Beneficiary under the L/C following the occurrence of any of the Guaranteed Events.
Guaranteed Events for a Draw on the L/C:	i) The L/C Applicant's failure to comply with its ongoing payment obligations under the PPA, and GoS's failure to comply with its ongoing payment obligations under the Government Guarantee (including, but not

	limited to, amounts determined by final Expert or arbitral dispute resolution proceedings to be payable by SENELEC or GoS, as the case may be) in respect of Capacity Payments, Energy Charges, Fuel Charges, for the period of i) L/C Validity Period; or ii) achievement of a SENELEC's credit rating acceptable to the Project Company , whichever is earlier; ii) The GoS's failure to comply with undisputed termination payment under the Government Guarantee throughout L/C Validity Period In both events, as further described in the PRG Support Agreement to be concluded by SENELEC, GoS and the L/C Beneficiary.
Maximum L/C Amount:	Up to US$ 40 million
Annual L/C Amount:	The actual amount available will take into account amounts drawn under the L/C which will have been reimbursed by the L/C Applicant, or GoS, as the case may be.
Currency of the L/C:	XOF/US$/Euro
Validity Period of the L/C:	Up to a maximum term of 22 years from effectiveness of the L/C.. Should the L/C Bank not be able to issue the L/C for the required term, there could be roll-over provisions in the IDA Guarantee.
L/C Applicant's obligation to Replenish the L/C under the PRG Support Agreement:	The L/C Applicant will undertake under the PRG Support Agreement to maintain at all times, regardless of any claim payments under the PRG, a minimum balance of EUR 15 million to be available for drawing under the L/C; provided that a failure to maintain such balance will not constitute a L/C Applicant's Default under the PPA as long as (i) the L/C Applicant is current on its payment obligations under the PPA, and (ii) the L/C Applicant or GoS, as the case may be, repays the L/C Bank and replenishes any amount drawn under the L/C within 12 months after the date of the drawing (see also L/C Reimbursement Period under the L/C Reimbursement and Credit Agreement below).
L/C Reimbursement Period under the Reimbursement and Credit Agreement:	Following a drawing under the L/C by the L/C Beneficiary, the L/C Applicant or GoS, as the case may be, would be obligated to repay the L/C Bank the

	amount drawn under the L/C together with accrued interest thereon within a period of 12 months under the Reimbursement and Credit Agreement to be concluded between the L/C Applicant, the GoS, and the L/C Bank (the "**L/C Reimbursement Period**"). If the L/C Applicant or GoS, as the case may be, has repaid the said amounts to the L/C Bank on or before the expiry of the L/C Reimbursement Period, then the L/C would be reinstated to such extent. If the amount remains unpaid after the expiry of the L/C Reimbursement Period, then the L/C Bank would have the right to call on the IDA Guarantee for the principal amount (equal to the amount drawn under the L/C) plus accrued interest due from the L/C Applicant. Any amount paid by IDA to the L/C Bank under the IDA Guarantee would be deducted from the IDA Guaranteed Amount and would not be reinstated, even if the payment default by the L/C Applicant is subsequently remedied after the payment under the IDA Guarantee.
Interest Rate Charged by the L/C Bank under the Reimbursement and Credit Agreement:	An appropriate 'spread' above LIBOR/EURIBOR, as applicable, to reflect IDA risk, and acceptable to the L/C Applicant and IDA, and payable by the L/C Applicant to the L/C Bank.
Maximum IDA Guarantee Period:	Up to 22 years plus 14 months.
Maximum IDA Guaranteed Amount:	Up to US$ 40 million (the Maximum IDA Guaranteed Principal Amount) plus accrued interest charged by the L/C Bank
Annual IDA Guaranteed Amount:	The actual amount made available for drawing under the L/C and guaranteed by IDA would be determined annually within the Maximum IDA Guaranteed Principal Amount, pursuant to a schedule to be attached to a formula to be included in the PRG Support Agreement and the Project Agreement (see also Annual L/C Amount above).

IDA Related Guarantee Fees

IDA Guarantee Fees:	IDA will charge a guarantee fee of 0.75% per annum on the Annual IDA Guaranteed Amount, payable semi-annually in advance by the L/C Beneficiary from the Commissioning Date.

IDA Front-end Fees:	IDA will charge the following front-end fees for guarantees: (a) An Initiation Fee of 0.15% of the Maximum IDA Guaranteed Principal Amount (but not less than US$l00,000) for internal Project preparation, payable by the L/C Beneficiary. (b) Processing Fee of up to a maximum cap of 0.50% of the Maximum IDA Guaranteed Principal Amount to cover IDA's reimbursable expenses and third party costs, payable by the L/C Beneficiary.
L/C Bank Fees:	To be determined through a competitive bidding process and payable by the L/C Beneficiary to the L/C Bank.

Conditions Precedent to the IDA Guarantee:

Conditions Precedent:	IDA's effectiveness conditions for the IDA Guarantee would include the following: (a) Firm commitment for proposed equity and debt financing for the Project. (b) Execution, delivery and effectiveness of the PPA (other than in respect of the condition that the L/C has been issued), FSA, the PRG Support Agreement, and all other project financing agreements, in each case in form and substance satisfactory to IDA. (c) Payment of the first installment of the Guarantee Fee, and payment of the Initiation and Processing Fees, if such amount is invoiced by IDA as due on or prior to the effectiveness. (d) Conclusion of the Guarantee Agreement between the L/C Bank and IDA, the Reimbursement and Credit Agreement between the L/C Bank, the L/C Applicant, and the GoS, the PRG Support Agreement between the L/C Applicant, the GoS, and the L/C Beneficiary, the Project Agreement between the L/C Beneficiary and IDA, the Project Agreement between the L/C Applicant and IDA, GoS Guarantee of SENELEC PPA obligations, and the Indemnity Agreement between IDA and the Republic of Senegal, all in form and substance

	satisfactory to IDA. (e) Provision of satisfactory legal opinions from: (i) the Minister of Justice of the Republic of Senegal relating to the Indemnity Agreement, the PRG Support Agreement, and the Reimbursement and Credit Agreement; (ii) counsel to the L/C Applicant relating to the PRG Support Agreement, the SENELEC Project Agreement, the Reimbursement and Credit Agreement, and the PPA; (iii) counsel to the L/C Beneficiary relating to the Tobene Power Project Agreement and the PRG Support Agreement.

IDA Documentation:

Guarantee Agreement:	The terms and conditions of the IDA Guarantee would be defined in a Guarantee Agreement between the L/C Bank and IDA with respect to the L/C facility.
Tobene Power Project Agreement:	The L/C Beneficiary would enter into a Project Agreement with IDA, under which the L/C Beneficiary would provide relevant Project information, and make warranties, representations and covenanted undertakings, including in respect of compliance with applicable Republic of Senegal environmental laws and IDA environmental and social safeguard requirements and World Bank requirements relating to Sanctionable Practices.
SENELEC Project Agreement::	The L/C Applicant would enter into a Project Agreement with IDA governing its responsibilities related to provision of relevant Project information, make warranties, representations and covenanted undertakings, including regarding corporate governance, financial sustainability, and World Bank requirements relating to Sanctionable Practices.
PRG Support Agreement:	The L/C Applicant and GoS would enter into a PRG Support Agreement relating to the L/C with the L/C Beneficiary, under which the L/C Applicant would undertake to provide an L/C under which the L/C Beneficiary would be entitled to draw for the failure by the L/C Applicant or GoS, as the case may be, to pay an amount due to the L/C Beneficiary resulting from the

	occurrence of a Guaranteed Event. Following a drawing by the L/C Beneficiary, the L/C Applicant or GoS, as the case may be, would undertake to repay to the L/C Bank the amount drawn, as soon as practicable and in no event later than 12 months after the date of drawing; provided that the L/C Applicant will at all times maintain a minimum balance of EUR 15 million to be available for drawing, and will immediately replenish the L/C as necessary to maintain such minimum balance.
L/C Reimbursement and Credit Agreement:	The L/C Applicant and GoS would enter into a Reimbursement and Credit Agreement with the L/C Bank, under which the L/C Applicant or GoS, as the case may be, would undertake to repay the L/C Bank the amounts drawn under the L/C, together with accrued interest, within a period of twelve (12) months from the date of each drawing.
Indemnity Agreement:	The Republic of Senegal would enter into an Indemnity Agreement with IDA. Under the Agreement, the Republic of Senegal would undertake to indemnify IDA on demand, or as IDA may otherwise direct, for any payments made by IDA under the terms of the IDA Guarantee. The Indemnity Agreement would follow the legal regime, and include dispute settlement provisions, which are customary in agreements between member countries and IDA.

Annex 8: Statement of IFC's Committed and Outstanding Portfolio in Senegal

MIS

International Finance Corporation

Report Run Date: 11/06/2013

Statement of IFC's Committed and Outstanding Portfolio

Amounts in US Dollar Millions

Accounting Date as of : 10/31/2013

Page 1

Region(s):Sub-Saharan Africa
Country(s) : Senegal

Commitment Fiscal Year	Institution Short Name	LN Cmtd - IFC	ET Cmtd - IFC	QL + QE Cmtd - IFC	GT Cmtd - IFC	RM Cmtd - IFC	ALL Cmtd - IFC	ALL Cmtd - Part	LN Out - IFC	ET Out - IFC	QL + QE Out - IFC	GT Out - IFC	RM Out - IFC	ALL Out - IFC	ALL Out - Part
2012/ 2013/ 2014	CBAO Attijari	0	0	0	0.24	0	0.24	0	0	0	0	0.24	0	0.24	0.00
2010	COMASEL St Louis	0	0.68	0	0	0	0.68	0	0	0.63	0	0	0	0.63	0.00
2008	Chain Hotel	5.62	0	0	0	0	5.62	0	5.62	0	0	0	0	5.62	0.00
2011	Comasel de Louga	0	0.80	0	0	0	0.80	0	0	0.22	0	0	0	0.22	0.00
2009/ 2010/ 2012/ 2013/ 2014	Ecobank Senegal1	0	0	0	7.64	0	7.64	0	0	0	0	7.64	0	7.64	0.00
2011/ 2014	FIDES Senegal	0	0.52	0	0	0	0.52	0	0	0.52	0	0	0	0.52	0.00
2010	GRIMAS	1.30	0	0	0	0	1.30	0	0.83	0	0	0	0	0.83	0.00
2006	Kounoune	8.70	0	0	0	0	8.70	0	8.70	0	0	0	0	8.70	0.00
2010/ 2011/ 2013	MC Senegal	2.78	1.63	0	0	0	4.41	0	2.78	1.63	0	0	0	4.41	0.00
2013	Matelec	0	0	1.00	0	0	1.00	0	0	0	0	0	0	0	0.00
2012	Patisen	0	3.24	11.61	0	0	14.85	0	0	3.24	11.61	0	0	14.85	0.00
2011	SENAC	16.43	0	13.66	0	5.52	35.61	0	12.26	0	11.65	0	2.96	26.87	0.00
Total Portfolio		**34.83**	**6.88**	**26.27**	**7.88**	**5.52**	**81.38**	**0**	**30.19**	**6.25**	**23.26**	**7.88**	**2.96**	**70.54**	**0.00**