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SURINAME

SUPPORT TO THE INSTITUTIONAL AND OPERATIONAL STRENGTHENING OF THE ENERGY SECTOR II

(SU-L1035)

MONITORING AND EVALUATION PLAN

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**ABBREVIATIONS**

CBA Cost Benefit Analysis

EA Executing Agency

EBS Energiebedrijven Suriname

EE Energy Efficiency

GoS Government of the Republic of Suriname

IDB Inter-American Development Bank

MF Ministry of Finance

MNH Ministry of Natural Resources

MW MegaWatt

MWh MegaWatt hour

PCR Project Completion Report

PBP Policy-Based Programmatic

PBL Policy-Based Loan

RE Renewable Energy

1. **Introduction**

The general objective of the Program is to increase the efficiency, transparency, sustainability and accountability of the power sector. The specific objectives are to; (i) develop an energy framework and (ii) strengthen the sustainability and corporate capabilities of the sector.

The proposed operation is the second tranche of three Policy-Based Loan under a programmatic modality (programmatic policy-based loan or PBP), which will support the GoS’s efforts to gradually design and establish the electricity sector framework and improve the utility´s strategic capacities to fulfill its duties efficiently. The three individual lending operations will be correlated with the expected progress in the reform process.

Each operation has specific institutional and policy goals to be met in 2012, 2013 and 2014, respectively. The three operations will be independent of one another though technically interlinked. The objective of this first operation is to initiate the process of policy and legislation formulation that will then be consolidated and implemented in reform commitments during the subsequent operations.

This monitoring and evaluation (M&E) plan presents: (i) monitoring indicators (ii) main indicators to follow-up on outcome achievements (described in Table 1: Impact and Outcome Indicators), and (iii) the evaluation methodology chosen for assessing medium and long term impacts, i.e. an ex-post cost benefit analysis (CBA) (see section III).

This document presents the methodology and the implementation of the evaluation processes for this particular program. Specifically, this document presents the logic of the intervention, the main indicators for outputs, outcomes and impacts, the hypotheses to be tested, the institutions responsible for each activity and the costs.

1. **Monitoring**

The purpose of this section is to describe the monitoring process.

## Indicators

For each output, an indicator was defined. These outputs correspond to the policy commitments that are detailed in the Policy Matrix and in the Verification Matrix. Given that this is a PBP, all outputs are accomplished once the disbursement is made. Thus this doesn’t require any monitoring activities and doesn’t involve any costs associated with this PBG. The project outputs described in this section are also found in the Policy Matrix and the means of verification in the Verification Matrix.

**Table 1. Programmatic Commitment for the Program**

| **Issues** | **Objective** | | **Policy Conditions**  **1st Operation** | **Policy Conditions**  **2nd Operation** | **Triggers 3rd Operation** |
| --- | --- | --- | --- | --- | --- |
| **I. Macroeconomic Stability** | | | | | |
|  | Maintain a stable general Macroeconomic Framework | Macroeconomic framework is consistent with the objectives of the program and with policy letter | | Macroeconomic framework is consistent with the objectives of the program and with policy letter | Macroeconomic framework is consistent with the objectives of the program and with policy letter |
| **II. Development of a Sustainable Power Sector Framework** | | | | | |
| Lack of an integrated policy and regulatory framework to regulate sector activity. | Define the regulatory and legal framework to contribute to a more effective power sector with increased efficiency, transparency and accountability. | | A diagnostic assessment that includes an identification of the main issues and initial proposals for sector reform has been developed and presented for stakeholders consultations. | The first draft of a Policy document that addresses the main guidelines for sector reform and the basic institutional structure for the power sector has been submitted to Cabinet. | The Power Sector Policy that establishes the basic principles for a sustainable growth of the energy sector, consistently with its new legal and institutional structure has been approved. |
| Guidelines to draft the legal framework that will regulate the energy sector have been developed and presented for stakeholder consultations. | Drafting of regulatory instruments that will regulate the organization and functioning of the Electricity Sector has been initiated. | The proposed draft legislation to regulate the Energy sector is presented to Parliament for its approval. |
| High level of subsidies from the government to the utility due to low electricity tariffs. Lack of proper price signals to consumers and inefficient operation of the utility. | Implement institutions with a view to having a commercially-based operation and clear social, economic and financial incentives to achieve efficiency. | | A specific office within the MNH has been created to serve as a focal point for sector dialogue and coordination of the reform process. | A specific office within the MNH to manage the energy sector affairs is presented for consideration of and approval by the Cabinet. | An Energy Sector entity to regulate and manage the sector affairs has been created. |
| A set of basic principles to establish a new tariff structure has been identified and a proposal of a new tariff schedule based on such principles has been prepared by EBS. | A Tariff structure proposal was submitted to the Cabinet for consideration. | Price setting principles are reflected in the tariff schedule implemented by EBS. |
| A significant increase in power demand due to new residential, commercial and industrial projects. | Update the expansion strategy of the sector to improve supply efficiency. | | The EBS has initiated the process to adopt a new mechanism to improve the economic and technical efficiency of its energy purchases through updated power purchase agreements (PPAs). | A revised draft model of PPA contract was developed by EBS as guideline | The new contract model has already been used for the purchase of additional power by EBS. |
| A decision to promote the incorporation of environmental and social sustainability principles in the sector has been adopted to support the initiation of sector assessments on environmental issues. | The sector expansion plan included basic environmental and social sustainability principles. | Environmental and social sustainability principles are being implemented throughout the project cycle (planning to execution). |
| A program to pilot the implementation of a sustainable electrification scheme using on-grid and off-grid Renewable Energies has been designed and endorsed by the Borrower. | The Government of Suriname has approved the financing for the implementation of the Program with Renewable Energy Technologies (RETs). | At least one feasibility study for the implementation of RETs to increase energy access has been completed. |
| **III. Strengthen sector corporate capabilities** | | | | | |
| EBS faces several operational and financial challenges including: (i) production costs; (ii) financial sustainability; (iii) electricity rates; and (iv) increase of electricity demand with new investments or through contracts for the purchase of reliable supply. | Strengthen utility’s capabilities to operate by contributing to improvements in technical tools and corporate governance, transparency and accountability. | | A review of the expansion plan of the Generation and Transmission System has been carried out by EBS to analyze alternatives and their technical and economic outcomes | EBS applies rigorous technical and economical criteria to evaluate alternatives within its expansion plan | The EBS expansion plan is being executed. |
| A corporate assessment of EBS has been completed to identify upgrade requirements and areas of improvement and a report has been issued with the corresponding results. | EBS has issued an action plan to implement fundamental technical recommendations from corporate assessment. | Fundamental technical recommendations from corporate assessment are being implemented. |
| Basic principles to strengthen EBS’s corporate structure to enhance its governance, transparency and accountability have been identified by EBS. | EBS is carrying out a study to strengthen its corporate structure to enhance its governance, transparency and accountability.  EBS is making public its operational statistics, preferably on the web. | EBS is undertaking an update of its corporate and operational instruments, codes and laws, according to findings from corporate internal assessments. |

1. **Evaluation**

The purpose of this section is to detail the evaluation methodology, the result and impact indicators, the data collection process, the work plan and the budget and the implementation of the evaluation.

## Main Evaluation Questions

The evaluation purpose is to assess the outcomes of the Program[[1]](#footnote-1), which aims to support of policy reform in the energy sector. The main evaluation questions of this Program are as follows:

1. Has EBS strengthened its transparency, governance and accountability?
2. Has the new policy and legal framework promoted the development of renewable energy sources? and
3. Have the energy generation capacity and demand increased due to the new energy framework?

## Existing Knowledge (previous evaluations, ex ante economic analysis)

An ex-ante economic analysis was carried out for the first operation of the Program (SU-L1022), which was updated for this second operation. The ex-ante economic analysis was prepared taking into account a scenario with and without Program. The general evaluation methodology applied was a Cost-Benefit Analysis of the expansion program of the Surinamese power system. Program benefits were estimated as the additional electricity supply, made possible with Program execution, valued at the consumers’ willingness to pay and consisting of the total surplus beneath the electricity demand curve less supply costs. Investment, fuel, operation and maintenance costs were determined through an indicative planning procedure aiming to determine future (2013 – 2025) generation and transmission project expansions to conform the Program that minimizes total costs providing an adequate reliability to supply the expected future power demand.

It was estimated that the existing Generation/Transmission system could provide the power service until 2012, when it is estimated that total generation demand will reach 1,525 GWh. After this year, without the Program it would not be possible to supply the demand increase with an acceptable reliability. In this way, the increase of electricity sales after 2012 will be directly associated to the Program.

The CBA’s results indicate that, with the Program, the EBS expansion plan would produce US$497 million of net benefits (present value estimated at 12% discount rate). The economic return would be 23.3%. A sensitivity analysis for the CBA was carried out considering variations in the main assumptions.

In addition, a sensitivity analysis was carried out for the Cost - Benefit evaluation main aspects as: a) the expansion program geographical coverage, b) the demand forecasts, c) the fuel prices, c) the investment costs, and d) the benefits estimations. The sensitivity analysis indicates that the high cost of the transmission expansions required to supply the Newmont load and of the Wageningen – Nickerie interconnection may offset the benefits that could be obtained from the supply of the demand of the new gold mines and from low cost bagasse generation.

The results also illustrates that a lower demand forecasts (with 5% yearly growth), 20% increase in fuel prices, 20% increase in investment costs or 20% decrease in the benefits estimations will still permit significant net economic benefits from the G-T expansion program required to guarantee the electricity supply in the country. Opposite changes in those parameters will improve significantly its economic indicators.

## Key Outcome Indicators

The expected outcomes of the project would be: i) Suriname has a long term policy and regulation to support a sustainable energy framework; ii) the GoS has a long term strategy and studies to develop a Sustainable Energy Matrix; and iii) EBS has strengthened its transparency, governance and accountability.

Table 2: Impact and Outcome Indicators

| **Impact** | **Indicator** | **Baseline** | **Target (2015)** | **Verification Means** |
| --- | --- | --- | --- | --- |
| Increased electricity coverage | Percentage of the population with access to electricity (%) | *Baseline (2010): 85* | 90 | Report EBS |
| Increased financial sustainability of power supply in isolated systems in the Hinterland. | Percentage of cost recovery for electricity supply to isolated systems in the Hinterland (%) | *Baseline (2011): 0* | *40* | MNH |

| **Objectives** | **Results** | **Indicators** | **Baseline** | | **Target (2015)** | | **Verification Means** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **I. Macroeconomic Stability** | | | | |  | |  | |
| I.1. Maintain a stable general Macroeconomic Framework | 1. Macroeconomic framework is consistent with the objectives of the program and with policy letter. | Technical opinion IMF | Stable macroeconomic framework (2011) | | Stable macroeconomic framework | | IMF Article IV Consultation report | |
| **II. Development of a Sustainable Energy Framework** | | | | |  | |  | |
| II.1. Define the regulatory and legal framework to contribute to a more effective power sector with increased efficiency, transparency and accountability. | 1. Suriname has policy and legal framework in place to implement Sustainable Energy Framework | Electricity Law or equivalent instrument approved by Parliament | Baseline (2011): 0 | | 1 | | Report MNH | |
| II.2. Implementation of institutions with a view to having a commercially-based operation and clear social, economic and financial incentives to achieve efficiency. | 1. Tariff structure is based on price setting principles for electricity implemented by EBS improves cost recovery allowing positive operating results | *EBS Net operating results* | *Baseline (2010):Negative*  *SRD 118 million* | | *EBS Net operating results positive* | | Report EBS | |
| 1. The Energy Sector has planning and supervision capacities | An Energy Sector agency is in place | *Baseline (2012):* No energy sector agency that plans, supervises and oversees energy regulatory issues | | An energy sector agency that plans supervises and oversees regulatory issues of the sector in place. | | MNH report presents public records stating the existence and operation of the energy agency | |
| II.3. Update the expansion strategy of the sector to improve supply efficiency. | 1. Suriname has technical capacity to implement the Sustainable Energy Framework, including alternative power sources. | New model of contract used for the purchase of additional power. | *Baseline (2012):* No model of contract used for the purchase of additional power | | One power purchased contract is based on reviewed PPA model | | Report EBS | |
| **III. Strengthen sector corporate capabilities** | | | | | | | | |
| III.1 Strengthen utility’s capabilities to operate by contributing to improvements in technical tools and corporate governance, transparency and accountability. | 1. EBS has strengthened its transparency, governance and accountability improving productivity | Energy sold per employee | *Baseline (2011): 1-GWh/employee* | *1.27-GWh/employee* | | Report Annual Report EBS | |
| 1. Suriname has increased its generation capacity | Generation Capacity (MW) | *Baseline (2012): 274* | 440 | | Report MNH | |

## Evaluation Methodology

Once each operation has been completed and disbursed, the IDB Project Team and the MF will prepare a progress report, showing the evolution of results, with the objective of identifying progress and required additional support to fulfill the conditions.

A Project Completion Report (PCR) funded by the IDB, will be prepared six months after the last phase of the Program has been fully disbursed and will be done through a before and after methodology. The PCR will evaluate results obtained by the Program and will include an ex-post cost benefit analysis (CBA) of the three PBP Programs. It is important to note that the economic evaluation will be based on the costs and benefits of the programs supported by the PBP, and not on the amount of the grant, contrary to investment operation given that PBPs are a fungible resource which is not related directly to the programs it supports. However, in many cases, the implementation of policy plays a crucial role in facilitating the execution of specific programs and projects and therefore has an economic value in its own right.

The objective of the ex-post CBA will be to develop an economic evaluation of the Generation / Transmission expansion program of Surinam. The evaluation will compare total investment, operation, maintenance and fuel costs of this Program with total associated benefits related to the increase of electricity consumption in the country.

The ex-post CBA will follow the same methodology and model (SDDP) used for the ex-ante CBA. The base scenario, sensitivities and variables associated will be updated based on the information provided in the progress reports.[[2]](#footnote-2)

The SDDP model will be used to simulate future Generation -Transmission system operation and expansion, to verify both the expansion requirements as well as the reliability of power supply (on monthly basis and in each of the buses attending local demands). To determine the investment, operation, maintenance and fuel costs related to a reliable supply of the increment of electricity consumption in Suriname, the planning procedure of the expansion program will mainly focused to: a) identify the most efficient generation and transmission projects required to supply demand, and its execution itinerary in order to estimate the flow of investment costs, and b) estimate the future power dispatch in the power systems from to support the fuel and O&M costs estimations. SDDP simulations also will allow obtaining future dispatch of power plants and load flows in the transmission links from which transmission losses, fuel and O&M costs are obtained.

The SDDP model will be applied in a sequential manner to identify the required expansion itinerary of new power plants an lines and a final run will verify the adequacy of the future demand/supply balance on monthly basis and considering optimal power dispatch with transmission losses and constraints imposed by the transmission links (represented by maximum transmission capacities in each link and load flow Kirchhoffs Laws through DC simplified load.

## Data Collection and Instruments

The analysis proposed in this section will replicate the ex-ante cost benefit analysis presented in Economic Analysis prepared for the Program. The information to be used for the CBA will be updated from the progress reports prepared by the IDB Project Team and the MF at the end of each operation as well as from the EBS and MNH reports, that according to the Results Matrix. IDB will prepare Terms of Reference (ToRS) for the development of the ex-post CBA and a check list with the basic information needed for the ex-post CBA to be included in the EBS and MNH reports.

And independent consultant will be hired by the IDB for the period from January 2016 to March 2016, who will prepare the ex-post CBA. ToRs for the ex-post CBA will be prepared at the end of the last operation of the Program, and the Check list by the end of 2012.

## Reporting Evaluation Results

The Project Completion Report (PCR) and the CBA will be post on the IDB website by June 2016, while progress reports will be post confidentially in IDBDOCSs.

## Evaluation Coordination, Work Plan and Budget

The total cost of the evaluation plan is US$140.000. The IDB will hire an independent consultant (economist) for preparing the Project Completion Report (PCR) (ex-post cost benefit analysis), which will be validated by the Executing Agency (EA) MF.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activity** | **2014** | | **2015** | | **2016** | | **Responsable** | **Costs** | **Funding** |
| **Jun** | **Dec** | **Jun** | **Dec** | **Jun** | **Dec** |
| Progress Reports |  |  |  |  |  |  | BID/MF | $100,000.00 | MF |
| Check list |  |  |  |  |  |  | BID | $10,000.00 | BID |
| Ex-post CBA |  |  |  |  |  |  | BID | $20,000.00 | BID |
| Project Completion Report (PCR) |  |  |  |  |  |  | BID | $20,000.00 | BID |
| **Total** |  | | | | | | | **$140,000.00** |  |

The borrower is responsible for cooperating with the IDB team and the consultant(s) hired by the IDB in all the matters related with the Evaluation of this program.

The IDB Project Team will be from the Energy Division based in Washington, DC (INE/ENE) and the Country Office in Suriname (CCB/CSU), which will be responsible for the follow-up of the Program.

**ANNEX I**

**TERMS OF REFERENCE**

**ENERGY DIVISION (INE/ENE)**

**SURINAME**

**(date)**

**(DRAFT)**

**Background**

Suriname has an area of approximately 165,000 km2, and an estimated population of 515,000. About 90% of the population lives on the country's north coast, where the capital Paramaribo is located, the rest of the population lives in the Interior (the Hinterlands), and also in the Amazonic Jungle. The country is rich in terms of its natural resources, principally gold, oil and bauxite. Moreover, Suriname basin is ranked 2nd for undiscovered oil resources potential and 6th in the world with respect to fresh water availability. Alumina, gold and oil account for 80% of export receipts and 50% of GDP. The Energy Sector is characterized by a large participation of the Government of Suriname (GSU), both in the Electricity and in the Oil sectors.

The Ministry of Natural Resources (MNH) has the primary responsibility for the sector including rural electrification; with very limited resources to effectively undertake regulatory tasks. The tariff policy and the tariff adjustments are under its responsibility. The Energy Advies Commissie (EAC) is involved in the development of electricity tariffs but it only has an advisory role.

Relations among the main players for the purchase of electricity in Suriname are contractual. Some of the most relevant contracts in effect are: (i) between the Suriname State and Suralco regarding the purchase of the electricity produced by the Afobaka dam ; (ii) between the Surinam State and EBS regarding the supplying to EBS of the electricity bought by the State from Suralco ; (iii) between the State and EBS regarding the concession of supply and distribution of electricity to the public in Surinam . However, concession activities do not cover production, transmission and distribution of electricity which today require specific regulations and standards to be effective.

Self-generation is permitted but not regulated. The Afobaka dam supplies about a half of the national electricity demand under the self-generation regime in the framework of a mining concession.

There is no specific Electricity Act or similar instrument adopted by the Parliament. The only regulation in force at present is the “Algemene voorwaarden voor aansluiting en/of levering van elektrische energie door de N.V. Energie Bedrijven Suriname (E.B.S.) anders dan volgens bijzonder kontrakt, vastgesteld bij Besluit van 11 januari 1973 en goedgekeurd bij resolutie d.d. 7 september 1973 n°9277”.

**Mining subsector.** The GSU initiated a process to diversify this activity and to take additional measures to increase part of the State income.

**Oil subsector:** The State Oil Company of Suriname (Staatsolie Maatschappij Suriname N.V) is involved in all aspects of exploration, production, refining and marketing of crude oil and refined products. The company’s oil production in 2009 totaled 5.9 million barrels, with an average daily production of 16,000 barrels per day (bpd). The limited refining capacity determines that 80% of diesel is imported.

Staatsolie reflected healthy financial indicators in 2009 with a gross turnover of US$ 425 million, an EBITA of US$ 181 million and a Return on Equity (ROE) of 28%. In the same year. Staatsolie ratified its position as one the largest tax contributors with US$ 124 million. In its planning period (2008-2012), Staatsolie included and investment program of US$ 1 billion to be supported with own resources up to US$680 million and US$320 million from external financing. Two of Staatsolie´s key projects in the following years is the completion of the expansion of the refinery (from 7,000 bpd to 15,000 bpd) and the development of new capacity with renewable, mainly hydropower.

Staatsolie also has a participation in the power sector, with a 15 MW thermal power plant that supplies energy to the state’s electrical company, Energy Bedrijven Suriname (EBS). Staatsolie changed its business focus from oil production to that of an energy company in 2007. Staatsolie plans to supply 5 to 10 MW of electricity to the grid through cogeneration with bagasse from its $163 million planned ethanol plant in Nickerie. In order to implement these initiatives, Staatsolie created the Renewable Energy Unit.

**The power sector**. Suriname´s power sector consists of a number of individual power systems:

the EPAR system, covering Paramaribo and the surroundings, the ENIC system, for New Nickerie in West Suriname and other smaller systems. These systems operated by EBS receive electricity from diesel thermal and hydro power generation from the Afobaka Hydro Power Plant (HPP) (180-MW); EBS (82-MW); Staatsolie (15-MW); Suralco (78-MW). EBS (Energie Bedrijven Suriname) is a statutory corporation under the policy direction of the MNH and with the monopoly in transmission and distribution of electricity. EBS shares its responsibility with the Department of Rural Energy of the Ministry of Natural Resources (DEV). Due to an increase in residential demand and production activities, the electric power growth rate in Suriname is one of the highest in the region and the demand of electricity is expected to increase in 155 MW (44 percent) by 2023, posing additional pressure on EBS to cope with the growing demand in the short and medium-term. The level of power losses of EBS is approximately 10%, which is not critical.

EBS faces several operational and financial challenges which require Government’s intervention with adequate regulations and management practices to: (i) reduce production costs from US$0.20/kWh to US$0.11/kWh; (ii) address financial sustainability issues with the review of the tariff structure; (iii) increase the average electricity rate from US$0.07/kWh to about US$0.16/kWh ; (iv) address the issue of supply of electricity with new investments and through the establishment of an adequate model of contract for the purchase of reliable electricity, and (iv) reflect adequate financial indicators, including the Cash Recovery Index and the Free Cash Flow (FCF) .

**Rural electrification:** In Hinterland, the GoS has heavily subsidized energy access (driven by political motives) to keep electricity and fuels within reach of the poor, inducing inefficiencies, increasing cost per unit of electricity and difficulties to meet demand. In coastal zone, the same political driver together with sufficient hydropower capacity combined with favorable hydrocarbon prices had delayed the decision to establish the adequate tariff rate to cover operational and maintenance costs of the service. In the last decade, this situation has represented a burden to new investments due to the low financial capacities of the Utility and to the Government to cover operational and maintenance costs of the service both in coastal zone and in the Hinterlands.

**Objective**

The overall objective of this consultancy is to obtain an ex-post Cost Benefits Analysis (CBA) for the Program to “Support to the institutional and operational strengthening of the energy sector”.

The ex-post CBA will follow the same methodology and model (SDDP) used for the ex-ante CBA carried for the preparation of the program. The base scenario, sensitivities and variables associated must be updated based on progress reports provided by the Ministry of Natural Resources and IDB.

To this extend the IDB expects the contribution of a highly specialized international consultant to perform a technical and economical assessment of development and expansion plans; advise on proper planning tools and practices and to evaluate the economical merits of engaging in a sector reform program.

**Characteristics of the consultancy**

**Type of consultancy:** Individual.

**Starting date and duration:** TBD (2016)

**Place of work:** Place of residence and Suriname. The consultant is expected to travel twice to Suriname.

**Qualifications:** Masters degree in engineering. International expert on policy, institutional and regulatory issues related to the energy sector. 15 years of relevant experience in public functions related to formulation or implementation of sector policies and specialized knowledge of economic analysis of energy projects. Extensive knowledge of the energy sector in Latin America, particularly electricity, is also required.

**Consultant Activities**

The Consultant shall perform the following activities:

* Analyze the development and expansion provision of the EBS business plan and provide technical analysis to support observations and recommendations to amend it or improve it.
* Prepare an economic evaluation of the PBL program to Suriname based on the ex-ante CBA of the operation. This evaluation should follow the IDB standard template for economic analysis.
* Participate in discussions with government officials of the GSU as well as IDB project team, providing technical advice.

**Outputs and Reporting**

The consultant will prepare the following reports:

After contract signature the consultant will present a work program including the main activities to be performed.

Thirty (30) days after contract signature: a preliminary Final Report outlining: (i) the main findings on EBS development and expansion provisions; and (ii) preliminary draft of the economic evaluation of the PBL.

Sixty (60) after contract signature: a Final Report including the complete analyses of the items presented in the Intermediate Report, including adjustments resulting from comments from GSU and IDB team.

**Payments**

Payment schedule should be as follows:

• 30% after delivering the work program

• 30% after first draft Final Report

• 40% final product

**Coordination and supervision**

The coordination of this consultancy will be responsibility of Mr. Alejandro Melandri of the Energy Division INE/ENE IDB, telephone (202) 623-1938 and email alejandrome@iadb.org, with the support of Jesús Tejeda (jesust@iadb.org.

1. The Program consists of three PBPs that will be developed annually. [↑](#footnote-ref-1)
2. And independent consultant will be hired by the IDB for the period from January 2016 to March 2016, who will prepare the ex-post CBA. ToRs for the ex-post CBA will be prepared at the end of the last operation of the Program [↑](#footnote-ref-2)