

REQUEST FOR EXPRESSIONS OF INTEREST CONSULTING SERVICES

Selection # as assigned by e-Tool: RG-E1790-P001

Selection Method: Simplified Competitive Selection

Country: Regional

Sector: Energy

Funding – TC #: RG-E1790

TC name: *Tariff Structure: what is the efficient tariff structure for the LAC and the transformation needed to include clean innovation?*

Description of Services: *Structured Database of Electricity Tariffs for LAC*

The Inter-American Development Bank (IDB) is executing the above-mentioned operation. For this operation, the IDB intends to contract consulting services described in this Request for Expressions of Interest. Expressions of interest must be delivered using the IDB Portal for Bank Executed Operations (<http://beo-procurement.iadb.org/home>) by **May 26th, 2022, 5:00 P.M. (Washington D.C. Time)**.

The consulting services (“the Services”) include (i) *identification of the availability of historical electricity tariffs structure, respective components and regulated costs for utilities in the 26 LAC countries and 3 extra-LAC countries known as good global practices for tariff structure transparency and cost allocation;* (ii) *collection through web-scraping (manually complemented when needed) of the historical electricity tariffs for all utilities identified previously;* (iii) *identification and collection of publicly available data of consumer groups for the previously identified utilities and tariff structures. It should include, when available, data of consumption, the number of clients and revenue by consumer groups;* (iv) *harmonization and quality assurance of the complete Electroring Electricity Tariff Database, including the pilot information provided by IDB,* (v) *visualization of the complete Electroring Electricity Tariff Database, including a visualization of the database in excel format and dynamic graphic visualization of the database in HTML, PowerBI or Tableau.* (vi) *elaboration of scripts guidelines, database handbook and variables dictionary for the complete Electroring Electricity Tariff Database;* (vi) *adaptation of the web scrapping scripts to headless migration, and update of all legacy code to GitHub, and other any requirements to upload, store and process the complete Electroring Electricity Tariff database in IDB's cloud storage system.*

Eligible consulting firms will be selected in accordance with the procedures set out in the Inter-American Development Bank: *Policy for the Selection and Contracting of Consulting firms for Bank-executed Operational Work* - GN-2765-4. All eligible consulting firms, as defined in the Policy may express an interest. If the Consulting Firm is presented in a Consortium, it will designate one of them as a representative, and the latter will be responsible for the communications, the registration in the portal and for submitting the corresponding documents.

The IDB now invites eligible consulting firms to indicate their interest in providing the services described above in the draft summary of the intended Terms of Reference for the assignment. Interested consulting firms must provide information establishing that they are qualified to perform the Services (brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc.). Eligible consulting firms may associate in a form of a Joint Venture or a sub-consultancy agreement to enhance their qualifications. Such association or Joint Venture shall appoint one of the firms

as the representative.

Interested eligible consulting firms may obtain further information during office hours, 09:00 AM to 05:00 PM, (Washington D.C. Time) by sending to *Mariana Weiss, Energy Economist Consultant* (marianawe@iadb.org) and *Michelle Hallack, Senior Economist and Team Leader* (michellecar@iadb.org).

Inter-American Development Bank

Division: *Energy Division*

Attn: *Michelle Hallack (Senior Economist and Team Leader)*

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DRAFT OF TERMS OF REFERENCE: STRUCTURED DATABASE OF ELECTRICITY TARIFFS FOR LAC

1. Background and Justification

- 1.1. Established in 1959, the Inter-American Development Bank ("IDB" or "Bank") is the main source of financing for economic, social, and institutional development in Latin America and the Caribbean. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing countries.
- 1.2. The Energy Division (ENE) specializes in conceptualizing, preparing, and executing financing and technical support operations for the Latin America and the Caribbean (LAC) energy sector in various areas, including electricity, oil & gas, and petrochemicals, energy efficiency and institutional strengthening, among others. Core activities in generating technical value-added include in-house development and implementation of research projects to back its long-term interventions and to provide inputs for public policy decision-making.
- 1.3. This year, one of the IDB ENE Knowledge Agenda's objectives is to discuss addressing Sustainable Infrastructure Services in LAC. In the electricity sector, the tariff structure is a key element for the energy transition and climate change mitigation. The electricity tariff structure can impact the reasonability of using natural resources and the feasibility of investments in energy efficiency, new technologies and services related to the energy transition. Therefore, it is crucial to understand how the electricity tariff structure is settled in LAC and how it can be improved to put all resources on an equal footing and achieve an efficient operation and planning of the electrical system in LAC.
- 1.4. The construction and dissemination of energy databases are essential to support the IDB Energy Division Knowledge Agenda development. In this sense, the IDB has implemented efforts to create the Electrifying Electricity Tariff database, aiming to (i) provide a database of electricity tariffs, (ii) provide a database of regulated electricity costs declared by the utilities in their electricity tariff revision processes, (iii) total consumption, distribution revenue and the number of clients per each group of consumers available by utilities in LAC and at least 3 extra-LAC countries known as global best practices for tariff structure transparency and cost allocation.
- 1.5. The Electrifying Electricity Tariff database is an innovative product that enables diverse analysis of the performance of the electricity utilities in LAC. It is a 100% auditable database that counts only on information publicly available from electricity utilities, regulators, ministries, and other official entities' websites in LAC countries. The data collection is based on web scraping techniques, complemented by manual collection when needed, and it should be structured to be easily updated annually. The database must be harmonized to allow comparisons between companies and contain the proper reference with weblinks and downloaded documents used as data sources. Nowadays, there is a pilot of the Electrifying Electricity Tariff database for a few countries that should be considered.

- 1.6. The Inter-American Development Bank (IDB) will contract a firm to cooperate with the IDB in the web scrapping design and execution, data collection, Electroring Electricity Tariff database consolidation, revision, analysis and documentation.

2. Objectives

- 2.1. The Inter-American Development Bank (IDB) will contract a firm to address the gap in the Electroring Electricity Tariff database and to perform: (i) identification of the availability of historical electricity tariffs structure, respective components and regulated costs for utilities in the 26 LAC countries and 3 extra-LAC countries known as good global practices for tariff structure transparency and cost allocation; (ii) collection through web-scrapping (manually complemented when needed) of the historical electricity tariffs for all utilities identified previously; (iii) identification and collection of publicly available data of consumer groups for the previously identified utilities and tariff structures. It should include, when available, data of consumption, the number of clients and revenue by consumer groups; (iv) harmonization and quality assurance of the complete Electroring Electricity Tariff Database, including the pilot information provided by IDB, (v) visualization of the complete Electroring Electricity Tariff Database, including a visualization of the database in excel format and dynamic graphic visualization of the database in HTML, PowerBI or Tableau. (vi) elaboration of scripts guidelines, database handbook and variables dictionary for the complete Electroring Electricity Tariff Database; (vi) adaptation of the web scrapping scripts to headless migration, and update of all legacy code to GitHub, and other any requirements to upload, store and process the complete Electroring Electricity Tariff database in IDB's cloud storage system.
- 2.2. The database should be validated and cover all utilities with publicly available data from electricity utilities, regulators, ministries, and other official entities. The data collected should have the proper references to be auditable, and it should be harmonized to allow IDB staff to perform a comparative analysis of the different LAC countries. The collection must consider updatable web scrapping techniques as the preferred method.

3. Scope of Services

- 3.1. This consultancy complements other initiatives conducted by the IDB to build a high-quality regional database and support knowledge products of the Energy Division (ENE) that includes monitoring and comparing energy sector indicators for different LAC countries.
- 3.2. The consulting firm should, at a minimum, provide the following services:
- 3.3. Structure and harmonize the historical Electroring Electricity Tariff Database for the publicly available official data of the 26 LAC countries and 3 extra-LAC countries, known as good global practices for tariff structure transparency and efficient cost allocation. The BID staff will validate the database.
- 3.4. Adapting and supporting the Electroring Electricity Tariff Database and respective web scrapping and recompilation codes to be hosted and processed into the IDB's cloud storage system.
- 3.5. Design web scrapping scripts to capture electricity rates and respective regulated electricity cost breakdown periodically for the 26 LAC countries and 3 extra-LAC countries **with** publicly available official data.
- 3.6. Update weekly a table summarizing the progress of web scrapping and database building activities.
- 3.7. Clean, verify, and validate the data collected, and adjust or complement it when necessary.
- 3.8. Execute a quality assurance process of the data through scripts and manual.
- 3.9. Develop variables and script code dictionaries for the electricity utility database. Consolidate all web scrapping scripts and databases into a data archive, variable codebook, and methodological guidebook.
- 3.10. Provide a tutorial training session to teach the BID staff how to use the web scrapping scripts and update the datasets composed of LAC electricity distributor utilities' operational, quality, and financial performance indicators.