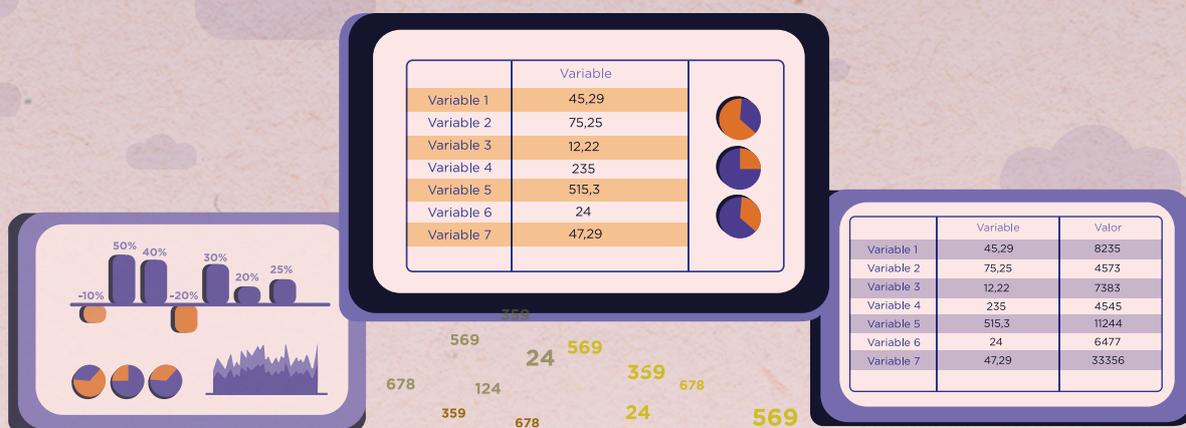


# ELECTRORATING HANDBOOK

A brief introduction to the database of Electric  
Power Distribution Companies in  
Latin America and the Caribbean

Mariana Weiss, Yuri Daltro, Evelyn Campo,  
David Matias, Karla Arias, Michelle Hallack



## Summary

This manual gives a brief Introduction to the Electratorating database and its methodology. Electratorating is an initiative led by the Knowledge Team of the IDB's Energy Division to raise, build, and reinforce awareness of electric utilities in Latin America and the Caribbean (LAC) by integrating financial and non-financial information of the companies in a single database and website. It aims to disseminate key data on electric utilities annually to facilitate comparison, analysis, and regional research on the electricity distribution sector. This database allows for the dissemination of experiences and discussion of viable solutions to the main regional energy challenges, in addition to fostering interaction between key actors. It provides comparable annual economic and financial statistics from 2000 to 2020 for 19 LAC countries and more than 300 electric utilities.

**Keywords:** Electricity distribution companies, Corporate Governance, Financial Performance, Quality of electricity service, Latin America and the Caribbean

**JEL codes:** L94, G3, O16, Q4

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# 1. WHAT IS THE ELECTROSTATING DATABASE?

The electricity service is a fundamental input for families to meet their basic needs and for companies to produce goods and services. Electricity distribution systems are responsible for providing electricity services to most end users. Therefore, distribution systems must be safe, reliable, affordable, and sustainable to deliver electricity to end users.

Electric utilities are responsible for distribution systems, including planning, development, operation and maintenance of the electrical network, connection and disconnection of the users, management of technical data and control of electrical energy losses. Furthermore, when commercialization is integrated with distribution, electric utilities are also responsible for selling energy to end users. Few countries in Latin America and the Caribbean (LAC) have a competitive retail electricity market, and when it does exist, it tends to focus on large consumers. That is the case for some electric utilities in LAC, which are often also responsible for retail marketing to final consumers, the power distribution grid, and its connections.

Nowadays, energy policy is increasingly based on data, and information about electric utilities is critical to supporting companies, policymakers and regulators to increase efficiency in the electric power distribution sector. In the case of LAC, this is especially true due to the great heterogeneity of regional electric utilities. Thus, only from the collection and consolidation of information on the characteristics and performance of distributors is it possible to support the modernization of the electricity distribution sector through recommendations of corporate practices, regulatory instruments and public policies that are more effective in improving efficiency in electric utilities in LAC countries.

With this challenge in mind, the Inter-American Development Bank (IDB) launches the Electrostatating database. The Electrostatating database compiled by the IDB comprises data available in official public documents of electric utilities and public organizations in LAC countries. The Electrostatating database is unique in its coverage, size and composition. The data includes financial and non-financial indicators from a sample of regional electric utilities.

All the information compiled and harmonized in the Electrostatating database will be available in a single place, on the Energy HUB platform, in an easy, fast and intuitive way. That allows for a comparative analysis of electric utilities, which can provide inputs for improving regulatory mechanisms and the sustainability of the electricity sector in LAC countries.

In this way, Electrostatating aims to support the dissemination of information, the generation of knowledge, the promotion of innovation, sectoral cooperation and the creation of more effective public policies for the electricity sector in LAC countries. The cross-dissemination of experience and information about regional electric utilities can significantly contribute to discussing and identifying possible solutions to regional energy challenges. Identify best practices regarding the sustainability

of electric utilities and collaborate in designing and implementing evidence-based policies and action plans in the electricity sector.

This manual introduces the user to the Electroring methodology, its indicators and the visualization resources of this database in the Energy Hub.

## 1.1. What is the Electroring database?

Electroring is an initiative led by the IDB's Energy Division to provide, increase and strengthen the knowledge of electric utilities in Latin America and the Caribbean (LAC) by integrating financial and non-financial information of the companies in a single database and website. It aims to disseminate key data on electric utilities annually to facilitate comparison, analysis, and regional research on the electricity distribution sector. This database allows for the dissemination of experiences and discussion of potential solutions to the main regional energy challenges, in addition to fostering interaction between key actors. It provides comparable annual economic and financial statistics from 2000 to 2020 for 19 LAC countries and more than 300 electric utilities.

## 1.2. Purpose of the Handbook

This manual provides the definitions and methodological structure of the Electroring indicators. The metadata for this project constitutes a central tool for compiling the indicators and systematization of the database's contents, meanings, scopes, and extensions.

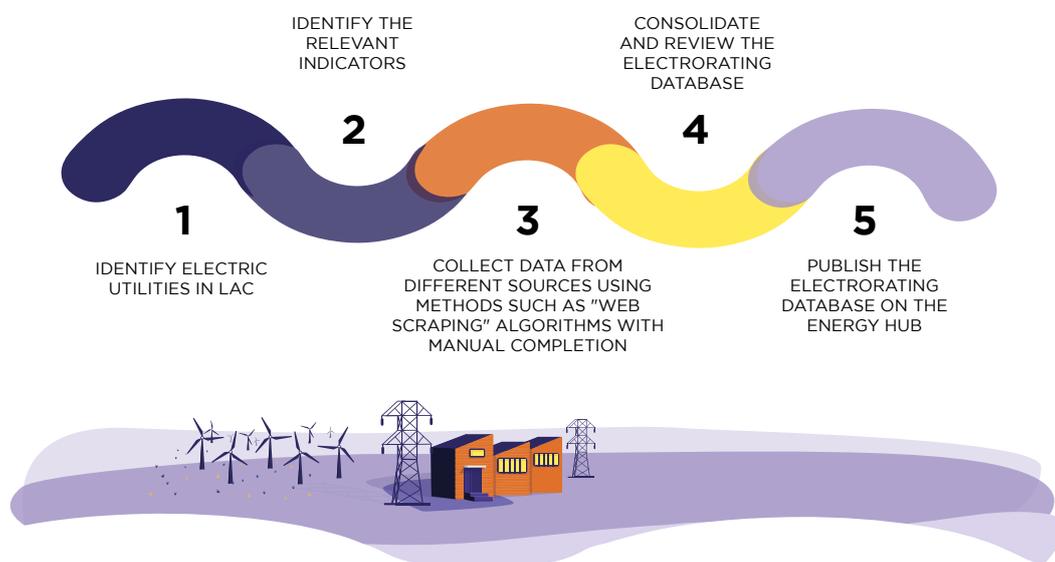
The handbook first presents the methodology for structuring the Electroring database, its indicators, and finally, the Electroring data features and visualization.



## 2. THE DATABASE METHODOLOGY

Electrorating collects key indicators published yearly by electric utilities or country regulators on their websites. To ensure quality control and guarantee the reliability of the data presented, the database's development process follows the following five-step approach shown in Figure 1.

**Figure 1. Steps for the Electrorating Database Construction**



### 2.1. Identify electric utilities in LAC

The first step was to research and identify the regional electric utilities using the websites of the regulators and local governments.

It is important to note that the number of electric utilities and observations are subject to changes depending on the period. The number of companies operating in a country can differ due to regulation, mergers, acquisitions, and liquidations. In addition, some information may not always be publicly available for all indicators in all years.

The Electroring database includes data from 2000 to 2020 from electric utilities in 19 of the 26 LAC countries<sup>1</sup>. The sample of electric utilities with publicly available data includes 316 companies in Argentina (51), Belize (1), Bolivia (6), Brazil (153), Chile (15), Colombia (21), Costa Rica (8), Dominican Republic (4), Ecuador (25), El Salvador (9), Guatemala (1), Guyana (1), Jamaica (1), Mexico (1), Panama (3), Paraguay (1), Peru (13), Trinidad and Tobago (1) and Uruguay (1), from 2000 to 2020.

## 2.2. Identify Relevant Indicators

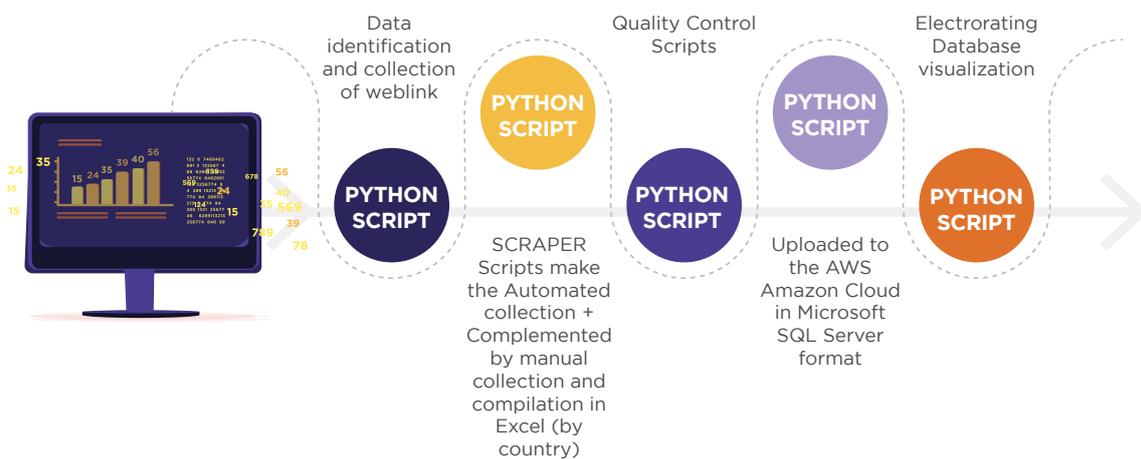
The relevant financial and non-financial indicators for the electric utilities were identified based on the literature review and the research on publicly available data on electric utilities and regulators' websites. The literature review was followed by a search for publicly available data on utilities, regulators, and government websites. The configuration of 100% public data should ensure that the data is, first, fully auditable and, secondly, fully openly accessible.

## 2.3. Extract Content Using Web Scraping, complemented by Manual Data Extraction

The construction of the database used python scripts to collect and analyze public data made available by distribution companies, public and available, to feed the Electroring database. The collection, in some cases, had to be complemented with the manual collection due to the format in which the information was available in the official documents of the electricity distribution companies and public bodies in the LAC countries.

Figure 2 shows the steps for data extraction and the next steps for quality analysis, database construction, and visualization, which are described in the following sections.

**Figure 2. Steps for the Web Data Extraction**



1. The IDB has 26 borrowing member countries, all of them in Latin America and the Caribbean.

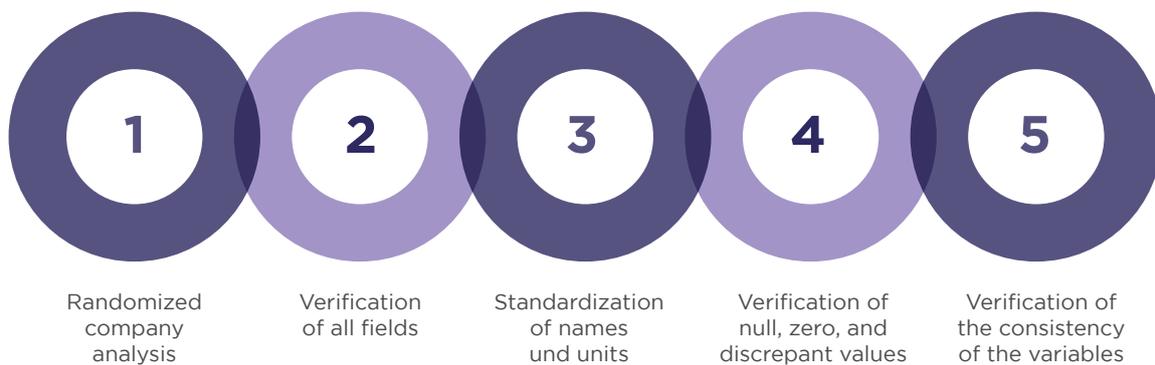
## 2.4. Standardize and Review the Database

The compiled data went through a quality assurance process with python scripts to prevent errors and inconsistencies. An additional exploratory data analysis verified that the information was accurate. The quality assurance process considered the Bank's experience working with electric companies in multiple countries and international standards in the industry, such as the International Organization for Standardization (ISO).

Figure 3 shows the steps to reduce errors and validate the collected data and information. The quality assurance process started with a randomized company analysis in which all the fields were verified, comparing the information in the database with the information available at utilities and regulators' websites. In addition, the quality assurance process included standardization of the companies' indicators and units and analysis of null, zero and discrepant values. Finally, quality assurance is finished by verifying the consistency of values of different indicators. For example, the sum of non-technical and technical losses must equal total losses.

The financial indicators were standardized following the balance sheet and income statement framework. In addition, all financial data in national currency values were converted to United States dollars to facilitate comparison. For non-financial indicators, the electric utility sector literature was used to standardize and compile the data. As part of the quality assurance of the information compiled in the Electroring database, names and units were standardized since companies and countries have different ways of referring to the main indicators in the database<sup>2</sup>.

**Figure 3. Quality Assurance of data collected in the Electroring database**



## 2.5 Publish the Eletroring database in the Energy Hub

Once consolidated and revised, the Eletroring database is published in the Energy Hub to share public information on LAC electric utilities with users easily and intuitively.

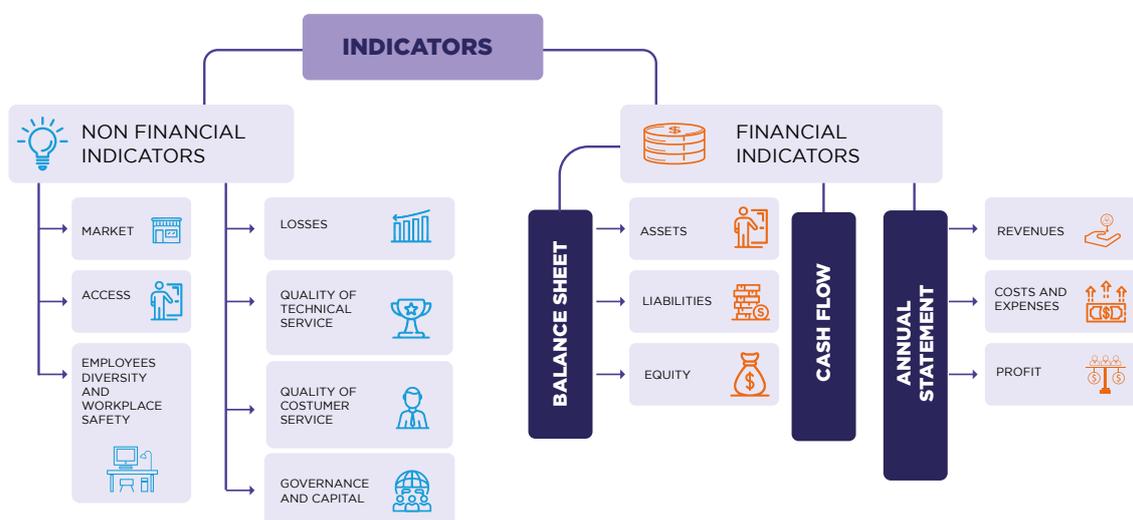
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2. In order to ensure that the Electroring database is auditable, the original indicator names used by each company in their annual reports were recorded in the database under the column "Name in the Document" for both the financial and nonfinancial indicators.

# 3. THE INDICATORS

The Electroring database presents data in eight dimensions: year, country, company name, indicator theme, indicator name, indicator unit, currency (if applicable), source (link to utility's documents), and indicator name in the utility's original document. The indicators were classified into two main categories: financial and non-financial indicators. This structure and the main categories are shown in Figure 4.

**Figure 4. Structure of the Electroring Indicators**



The indicators for each category result from the research on publicly available data, including company annual reports, shareholder documents, financial statements, and regulatory documents. These documents can usually be found on utility, regulatory, and government websites. Web links where the information was obtained were collected and recorded in the database to enable auditing of the information available in the database. However, many indicators required additional calculations, as shown in the calculation column for Tables 1 and 2.

Below, each indicator for financial and non-financial categories is further detailed. The extensive information for companies and indicators is explained thoroughly in the Electroring Metadata.

### 3.1. Non-financial Indicators

The non-financial indicators include seven themes: market, access, employees, diversity and workplace safety, energy losses, technical service quality, customer service quality, governance, and capital. Table 1 shows the non-financial indicators included in the database, which contains fifty-five indicators distributed into seven main themes.

**Table 1. Non-financial Indicators and Definitions**

THEMES	INDICATORS	DEFINITION	FORMULA
 <b>MARKET</b>	CUSTOMERS	Consumption units or customers connected to the distribution grid.	NOT AVAILABLE
	COMMERCIAL CUSTOMERS	The number of commercial customers or consumption units.	NOT AVAILABLE
	INDUSTRIAL CUSTOMERS	The number of industrial customers or consumption units	NOT AVAILABLE
	RESIDENTIAL CUSTOMERS	The number of residential customers or consumption units.	NOT AVAILABLE
	CUSTOMERS CONNECTED TO THE HIGH-VOLTAGE GRID	The number of customers connected to the high voltage grid.	NOT AVAILABLE
	CUSTOMERS CONNECTED TO THE MEDIUM-VOLTAGE GRID	The number of customers connected to the medium voltage grid.	NOT AVAILABLE
	CUSTOMERS CONNECTED TO THE LOW-VOLTAGE GRID	The number of customers connected to the low voltage grid.	NOT AVAILABLE
	LENGTH OF THE DISTRIBUTION NETWORK	Length of the distribution grid considering all voltage levels, including underground networks.	NOT AVAILABLE
	ELECTRICITY BILLED TO THE HIGH VOLTAGE CUSTOMERS	Energy sold to the high voltage customer.	NOT AVAILABLE
	ELECTRICITY BILLED TO THE MEDIUM VOLTAGE CUSTOMERS	Energy sold to the medium voltage customer.	NOT AVAILABLE
	ELECTRICITY BILLED TO THE LOW VOLTAGE CUSTOMERS	Energy sold to the low voltage customer.	NOT AVAILABLE
	ELECTRICITY BILLED TO COMMERCIAL CUSTOMERS	Energy sold to the commercial customer.	NOT AVAILABLE
	ELECTRICITY BILLED TO INDUSTRIAL CUSTOMERS	Energy sold to industrial customers.	NOT AVAILABLE
	ELECTRICITY BILLED TO RESIDENTIAL CUSTOMERS	Energy sold to residential customers.	NOT AVAILABLE
	TOTAL ELECTRICITY BILLED	Amount of energy billed to all customers.	NOT AVAILABLE

 <b>ACCESS</b>	LOW-INCOME CUSTOMERS	The number of low-income customers or customers participating in a social program to receive subsidies on their electricity bill. This is associated with local poverty and the government's effort to guarantee access to electricity services.	NOT AVAILABLE
	NUMBER OF INTERRUPTIONS DUE TO NON-PAYMENT	The number of electricity power cuts due to non-payment.	NOT AVAILABLE
	COVERAGE	Percentage of the population supplied with electricity services. This is associated with local poverty and the government's effort to guarantee access to electricity.	NOT AVAILABLE
	YEAR OF UNIVERSAL ACCESS TO ELECTRICITY IN THE RURAL REGIONS	This concerns the year when there was universal electricity access in rural regions. It is associated with local poverty and the government's effort to guarantee access to electricity.	NOT AVAILABLE
	YEAR OF UNIVERSAL ACCESS TO ELECTRICITY IN THE URBAN REGION	This concerns the year when there was universal electricity access in urban regions. It is associated with local poverty and the government's effort to guarantee access to electricity.	NOT AVAILABLE
 <b>EMPLOYEES, DIVERSITY AND WORKPLACE SAFETY</b>	EMPLOYEES	The total number of employees, including permanent and subcontracted employees.	NOT AVAILABLE
	OWN AND PERMANENT EMPLOYEES	The sum of the company's own and permanent employees.	NOT AVAILABLE
	PARTICIPATION RATE OF WOMEN IN THE LABOR FORCE	Participation of women in the company's workforce.	Number of female workers / Total workers
	PARTICIPATION RATE OF WOMEN IN LEADERSHIP POSITIONS	Participation of women in leadership positions in the company's management workforce.	Women employed in leadership managerial positions/ total employees in managerial positions
	TOTAL NUMBER OF ACCIDENTS	The total number of accidents. This is related to the company's workforce size.	NOT AVAILABLE
	NUMBER OF FATAL ACCIDENTS (OWN AND PERMANENT EMPLOYEES)	The number of fatal workplace accidents with own employees. This is related to the company's workplace safety and its workforce size.	NOT AVAILABLE
	NUMBER OF FATAL ACCIDENTS (SUBCONTRACTED EMPLOYEES)	The number of fatal workplace accidents with subcontracted employees. This is related to the company's workplace safety and its workforce size.	NOT AVAILABLE
	NUMBER OF FATAL ACCIDENTS (THIRD PARTIES)	The number of fatal accidents with third parties refers to people who do not work for the electric utility.	NOT AVAILABLE

 <b>EMPLOYEES, DIVERSITY AND WORKPLACE SAFETY</b>	ACCIDENT FREQUENCY	Frequency of accidents and injuries, concerning the total time worked by all employees during the reporting period.	(Frequency of injuries *maximum number of hours the total number of employees could work in a year)/ number of hours worked in the reporting period or in a year <sup>3</sup> .
	LOST TIME DUE TO AN ACCIDENT	The average number of hours not worked per injured worker.	NOT AVAILABLE
 <b>LOSSES</b>	TOTAL LOSSES	Electricity losses caused by physical and commercial factors.	Non-technical energy losses / Energy Injected into the grid.
	TECHNICAL LOSSES	Electricity losses generated by physical factors (length of the grid, the resistance of the wire material, etc.).	Technical energy losses / Energy Injected into the grid.
	NON-TECHNICAL LOSSES	Electricity losses generated by commercial factors (e.g., electricity theft, billing failure, etc.)	Electricity Losses / Energy Injected into the grid.
 <b>QUALITY OF THE TECHNICAL SERVICE</b>	SYSTEM AVERAGE INTERRUPTION DURATION INDEX (SAIDI)	SAIDI refers to the average interruption duration per number of customers. It only normally considers interruptions longer than 3 or 5 minutes, depending on the methodology adopted by the regulator. It is associated with the quality of the company's technical service.	Total interruption time / Number of customers
	SYSTEM AVERAGE INTERRUPTION FREQUENCY INDEX (SAIFI)	SAIFI contemplates the average number of interruptions per number of customers. It normally considers only interruptions longer than 3 or 5 minutes, depending on the methodology adopted by the regulator. It is associated with the quality of the company's technical service.	Number of Interruptions / Number of customers
	DURATION OF INTERRUPTIONS PER POWER UNIT	It differs from SAIDI because it is weighted by the installed power of the number of customers. This is also associated with the quality of the company's technical service.	Total outage time / installed power
	FREQUENCY OF INTERRUPTIONS PER POWER UNIT	It differs from SAIFI because it is weighted by installed power instead of the number of customers. This is also associated with the quality of the company's technical service.	Total number of outages / installed power.
 <b>QUALITY OF CUSTOMER SERVICES</b>	DURATION OF COMPLAINTS	The average length of time for resolution of complaints per customer	NOT AVAILABLE
	FREQUENCY OF COMPLAINTS	The average number of complaints per customer.	Number of complaints / Number of customers
	NUMBER OF COMPLAINTS	Customer complaints received by the company. Related to the quality of the company's service and its size.	NOT AVAILABLE

3. Considering that a company has 400 employees and that each worker would work 40 hours a week for 50 weeks in a year, the maximum number of hours worked in a year would be 1,000,000 hours.

 <p><b>QUALITY OF CUSTOMER SERVICES</b></p>	NUMBER OF VALID COMPLAINTS	The total number of valid complaints. Related to the quality of the company's service and its size.	NOT AVAILABLE
	NUMBER OF NON-VALID COMPLAINTS	The total number of non-valid complaints. Related to the quality of the company's service and its size.	NOT AVAILABLE
	PARTICIPATION IN SOLVED COMPLAINTS	Refers to the percentage of resolved complaints weighted by the total number of Complaints.	% Complaints Resolved / Total Complaints
	NUMBER OF SOLVED COMPLAINTS	The total number of non-valid complaints related to the quality of the company's service and its size.	NOT AVAILABLE
	NUMBER OF COMMERCIAL SERVICES	The total number of commercial services for resolving complaints and other customer requests related to the size and quality of a company's service.	NOT AVAILABLE
	NUMBER OF COMMERCIAL SERVICES (FINISHED IN TIME)	The number of services performed within the time limit to resolve complaints and other customer requests related to the company's size and customer service quality	NOT AVAILABLE
	NUMBER OF COMMERCIAL SERVICES (DELAYED)	The number of services that were delayed in resolving complaints and other customer requests related to the company's size and customer service quality.	NOT AVAILABLE
	AVERAGE TIME TO REPAIR ELECTRICAL SERVICE	The average time for network repair, connection and restoration of electrical service to the customer.	NOT AVAILABLE
	CUSTOMER SATISFACTION INDEX	This represents the customers' satisfaction with the electricity distribution company's service. It varies between 0 and 1, with 0 being unsatisfied and 1 satisfied.	NOT AVAILABLE
 <p><b>GOVERNANCE AND CAPITAL</b></p>	CAPITAL OWNERSHIP	This indicates whether the company is private, public, public-private, or cooperative.	NOT AVAILABLE
	EXISTENCE OF A BOARD OF DIRECTORS	The existence of an appointed board of directors was confirmed.	NOT AVAILABLE
	EXISTENCE OF A FISCAL COUNCIL or INTERNAL AUDIT	The existence of an appointed fiscal council or internal audit was confirmed (specifically for Brazilian companies).	NOT AVAILABLE
	EXISTENCE OF AN INDEPENDENT AUDIT	Existence of an appointed independent auditor was confirmed.	NOT AVAILABLE
	NUMBER OF FINANCIAL SHARES	The number of existing shares of the company.	NOT AVAILABLE
	MAIN SHAREHOLDER	Name of principal shareholder. Related to corporate governance.	NOT AVAILABLE

	PARTICIPATION OF THE MAIN SHAREHOLDER	Shareholding of the principal shareholder	NOT AVAILABLE
	CONTROLLER	Name of the controlling company, related to company governance.	NOT AVAILABLE
	LISTING ON THE STOCK MARKET	Companies with or without shares on the stock exchange.	NOT AVAILABLE

### 3.2. Financial Indicators

The financial segment includes a wide range of indicators available in the electric utilities' balance sheets, cash flow and income statements. Table 1 shows the financial indicators included in the database, which contains thirty-five indicators split into seven themes and three main categories. The financial categories are balance sheet (composed of assets, liabilities, and equity), cash flow (composed of cash flow), and annual financial statements (composed of income, costs and expenses, and profit).

The exchange rates used to convert all financial indicators to US Dollars were from IMF (2022)<sup>4 5</sup>.

**Table 1. Financial Indicators and Definitions**

CATEGORY	THEME	INDICATOR	DEFINITION	CALCULATION
 <b>BALANCE SHEET</b>	 <b>ASSETS</b>	TOTAL ASSETS	The assets of the company correspond to the assets and rights it owns. That is represented by the total income on the balance sheet and identifies where the funds were invested.	Total liabilities + Equity or current assets + Non-current assets
		CURRENT ASSETS	Cash on hand or in banks, plus goods, rights, accounts, and investments that can be liquidated or converted in the short term within a maximum period of one year (i.e., duplicates, inventories of produced goods, etc.).	Total Assets - Non-current Assets
		NON-CURRENT ASSETS	Non-current assets refer to the company's guaranteed assets and resources that can only be converted to cash in the medium or long term.	Total Assets - Current Assets
		CASH AND EQUIVALENTS	Cash in short-term, highly liquid investments that are readily convertible to known amounts of cash and subject to an insignificant risk of changes in value.	Cash + cash equivalents
		PROPERTY, PLANT, AND EQUIPMENT (PP&E)	These are all those assets of tangible nature that are acquired, built, and intended for use by the company. These assets are intended for leasing, developing new products or services, supporting the company's or organization's administrative functions, or leasing purposes. For instance: vehicles, machinery and equipment, tools, furniture, land, sheds, buildings, etc.	Sum of Assets such as machinery, factories, power plants, land, etc.

4. International Monetary Fund - IMF (2022). Exchange Rate Archives. Available at: [https://www.imf.org/external/np/fin/data/param\\_rms\\_mth.aspx](https://www.imf.org/external/np/fin/data/param_rms_mth.aspx)

5. In some special cases, when the exchange rate was not available on the IMF website, it was considered the exchange rate to United States Dollars available at the national central banks' websites.

 <b>BALANCE SHEET</b>	 LIABILITIES	TOTAL LIABILITIES	Includes third-party obligations, such as payment of suppliers, payroll, taxes, loans with banks	Total assets - Equity or Current liabilities + non-current liabilities
		CURRENT LIABILITIES	Obligations or liabilities to be paid during the following year; duplicates payable, accounts payable, securities payable, bank loans, income tax payable, or wages.	Total Liabilities - Non-current liabilities
		NON-CURRENT LIABILITIES	These are liabilities due in the long term after the end of the following year. They also include deferred revenues and related deferred costs.	Long term debt + Amortization + Depreciation
		LONG TERM DEBTS	Debts contracted with third parties for loans received and other debts not included in other accounts of this subgroup, with due dates exceeding one year.	Loans + financings + Obligations contained in non-current liabilities
		SHORT TERM DEBT	Debts contracted with third parties for loans received and other debts not included in other accounts of this subgroup, with a due date of no more than one year.	Loans + obligations contained in current liabilities
		GROSS DEBT	The sum of long-term debts and short-term debts	Short-term debts + long-term debts
		NET DEBT	The sum of long-term and short-term debts minus cash and equivalents.	Short-term debts + long-term debts - cash and equivalent
	 EQUITY	EQUITY	Shareholders' equity. That can consist of (i) the Share Capital, the value of funds that shareholders have invested in the company, and the Retained Earnings, which is the total net income the company decides to keep.	Total Assets - Total Liabilities
 <b>CASH FLOW</b>	CAPEX	Capital expenditure or expense is money spent to purchase, repair, upgrade or improve a company asset, such as a building, a business unit, or equipment. It is related to a company's investment effort.	Non-current assets year t - Non-current assets year (t-1) + Depreciation	
	DIVIDEND	The dividend is the share of a company's money that is distributed to the shareholders of a company.	Mandatory dividend + Interim dividends + Stock dividends	
	FINANCIAL COMPENSATION COSTS FOR NETWORK PROBLEMS	Financial compensation costs for network problems are related to the quality of technical service.	NOT AVAILABLE	
	TOTAL EXPENSES FOR SUBSIDIES TO LOW-INCOME CUSTOMERS	The total expenses to cover subsidies for low-income customers. This value is recovered afterward through the electricity rate.	NOT AVAILABLE	

  
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 REVENUES	SALES	Revenues from sales of goods and or services coming from the company's operation	Sum of total revenues from sales and services
	TOTAL COSTS	Sum of all company costs, including energy purchase, employees', depreciation, amortization, and other costs. Costs are expenses related to goods and services necessary for the production or performance of the end activity. Examples of costs are Feedstock, Energy, Wages of production professionals, and Equipment used in production.	Energy purchase cost + Employee cost + Depreciation cost + Amortization cost + other eventual costs
	ENERGY PURCHASE COSTS	Costs related to the purchase of energy.	NOT AVAILABLE
	EMPLOYEES COSTS	Costs related to the employees involved in the production or provision of the core product or service. Employee costs include wages, taxes, health insurance, social security, and other benefits and obligations.	Sum of Employees' costs (wages, benefits, taxes and allowances)
	DEPRECIATION COSTS	Costs related to the depreciation of equipment necessary for the production or performance of the end activity. It represents the wear and tear of physical assets used for the end-activity due to use, natural causes, or obsolescence.	NOT AVAILABLE
	AMORTIZATION COSTS	Costs related to the amortization of investments in goods necessary for the production or performance of the end-activity.	NOT AVAILABLE
	 COSTS AND EXPENSES	TOTAL EXPENSES	Sum of all company expenses with employees, operation, maintenance, depreciation, amortization, and others. For accounting, expenses are necessary to obtain the company's revenue but are not involved in manufacturing or transforming the core product or service, as is the case with costs. Examples are rental expenses, telephone, internet, office material; administrative staff salaries; and taxes.
EMPLOYEES EXPENSES	Expenses related to the employees involved in secondary activities and not in the production or provision of the core product or service, for instance, administrative work. Employee expenses include wages, taxes, health insurance, social security, and other benefits and obligations.	The aggregate of wages, benefits, taxes and allowances.	
DEPRECIATION EXPENSES	Expenses related to the depreciation of equipment necessary for the production or performance of secondary activities, such as administrative work. That represents the wear and tear of physical assets used for the end activity due to use, natural causes, or obsolescence.	The aggregate of Depreciation rate value * Value of physical assets	



ANNUAL STATEMENTS



PROFIT

AMORTIZATION EXPENSES	Expenses related to the amortization of investments in goods necessary for the production or performance of secondary activity, such as administrative work.	The aggregate of Amortization rate value * Value of the intangible asset
OTHER EXPENSES AND COSTS	Other expenses and costs that influence the company's financial performance	Other expenses + Other income + Other gains
OPERATING EXPENSES AND COSTS (OPEX)	Operating expenses and costs are the expenses and costs that a company incurs through its normal business operations. Often abbreviated as OPEX, operating expenses and costs include rent, equipment, inventory, marketing, payroll, and insurance. OPEX results from the deduction of energy purchase costs, depreciation and amortization costs, and expenses from the sum of total costs and total expenses.	Total costs + total expenses - energy purchase cost - Depreciation cost - Amortization cost - Depreciation expense - Amortization expense
DEPRECIACIÓN AND AMORTIZACIÓN EXPENSES	Sum of depreciation and amortization expenses when presented together by the companies.	Not Available
DEPRECIACIÓN AND AMORTIZACIÓN COSTS	Sum of depreciation and amortization costs when presented together by the companies	Not Available
GROSS PROFIT	THIS is the direct profit a company obtains from a good or service, i.e., the difference between a product's selling price (excluding Value Added Tax) and its production costs.	Sales - Cost of sales
FINANCIAL ACCOUNT RESULTS	Income or costs of the financial account, mostly from interests.	Financial income - Financial expenses + Gains/losses due to exchange rate variation + Gains/losses due to inflation
INCOME TAXES	Income tax on profit owed to the government.	Taxes on profit
EARNINGS BEFORE INTEREST, TAXES, DEPRECIATION, AND AMORTIZATION (EBITDA)	Earnings before interest, taxes, depreciation, and amortization, i.e., the gross operating profit calculated before the deductibility of financial expenses.	Earnings before interests + taxes + Depreciation cost + Amortization cost + Depreciation expense + Amortization expense



<p>EARNINGS BEFORE TAXES (EBT)</p>	<p>Earnings before taxes; depreciation and amortization costs and expenses have already been deducted.</p>	<p>Gross Profit - total expenses + Other expenses, income, and revenue + Financial result</p>
<p>NET PROFIT</p>	<p>Net Profit is the money left over for the company after it has deducted all its costs, expenses, interests, and taxes. It is possible that the net profit is negative, thus receiving the name of net loss.</p>	<p>Gross profit - (Total costs - Cost of sales) - Total expenses - Financial account results - Income tax</p>

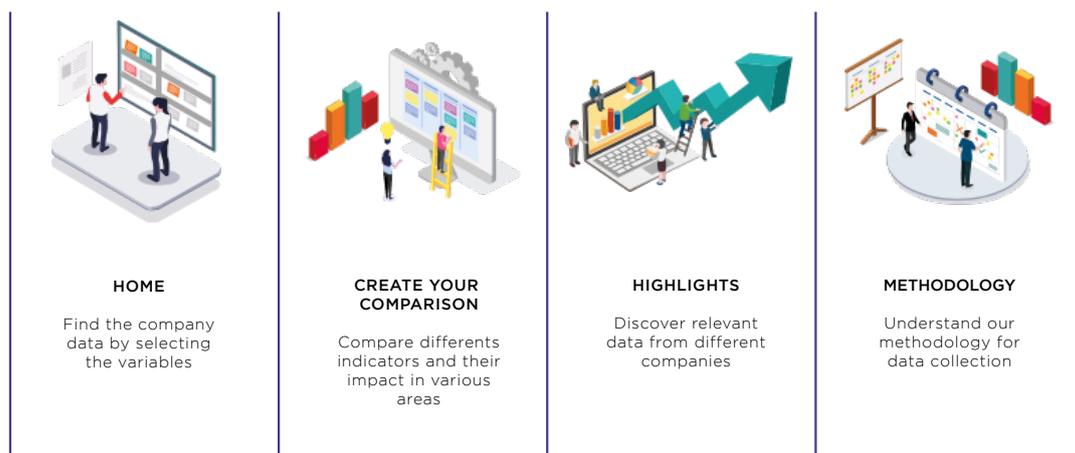
# 4 VISUALIZATION IN THE ENERGY HUB

The Energy Hub has been created to provide free and easy access for decision-makers, researchers, and think tanks to relevant databases for Latin America and the Caribbean's energy sector.

The Electroring initiative is the new visualization initiative of the Energy HUB. It is based on a database built by IDB with publicly available data on electric utilities in Latin America and the Caribbean. The aim of hosting the Electroring initiative at Energy HUB is to provide access in a more intuitive way to this new IDB database. The Electroring initiative will be available in English and Spanish at the Energy HUB.

The Electroring initiative has 4 sections on the Energy HUB Platform. Figure 5 shows the layout of the sections.

**Figure 5. Electroring Features for Visualization**



The first section is the home section of the Electratorating initiative or “Know the data”. It gives users an overview of the electric utility database and available search filters. Users can search the data using the desired indicator type, theme, and LAC electric utility. Users can select up to five electric utilities to create a comparative visualization.

The second section of the Electratorating initiative in the Energy HUB “Create your comparison” offers direct access to the comparison tool that enables the analysis of one indicator results for up to 5 companies simultaneously. As in the home page, visualizations are created using search filters by indicator, indicator type and theme, and electric utility. The visualization can be displayed as a bar or line graph with the facility to pin the company geographically with the map option and as a detailed table. The graphical layouts and tables for featured data can be downloaded and shared on social media anytime, enabling quick and intuitive visualization.

Next, the Highlights section allows users to see some highlights compared by themes, such as the 5 companies with the best value of SAIDI or companies that report the participation of women in the workforce. The highlighted visualizations can be downloaded and shared on social media at any time by users.

Finally, the Methodology section explains the main points of the data collection process, such as the sources from which the data was obtained and methodological notes for a better understanding of the indicators. Additionally, this section explains the goal of having Electratorating as a repository of information from LAC electric utilities so that users can obtain data easily, quickly, and intuitively. In this section, users can also access or download this Electratorating manual and access the metadata tables with the sources of each part of the information in the Electratorating database.

