



Introductory Training for the BIEE-ROSE Project on
Energy Efficiency and SDG7 monitoring in Latin
America and the Caribbean
Virtual conference January 28th 2021

Overview and status of the Energy Efficiency Policy Data Base for LACS

Bruno Lapillonne, Laura Sudries, Enerdata

Overview of BIEE policy data base

Overview of BIEE Policy Data Base

- The objective of the BIEE policy data base is to compile all existing policy measures in LACs related to energy efficiency, energy access and end-use renewables*.
- To be easily retrieved through queries, policy measures are **classified** :
 - by **sector**
 - by **type** : e.g. mandatory information, regulation (i.e. obligation), financial (e.g. subsidies), fiscal (taxes)...
 - and **sub-type**: e.g. for regulation: minimum energy efficiency standards, obligation for large consumers (e.g. mandatory audits).
 - according to their **targets, i.e. to whom they are addressed** (e.g. SME's in industry, low income households for households, public buildings in services, modal shift in transport,...
- This corresponds to **descriptors** that have to be specified to characterise the measures.

** Measures on the promotion of renewables in the power sector are not included, as already well documented*

Measure types

Each measure is characterised by its type and sub type

| Measure type | Sub types |
|-----------------------|---|
| Mandatory information | <ul style="list-style-type: none">• Mandatory labels/ energy efficiency certificates• Mandatory audits |
| Regulation | <ul style="list-style-type: none">• Minimum Efficiency standards for buildings, for electrical appliances, vehicles• Other regulations (energy management obligations, installation of solar...) |
| Financial | <ul style="list-style-type: none">• Subsidies• Soft loans |
| Fiscal | <ul style="list-style-type: none">• Tax reduction on efficient vehicles, appliances• Eco-Tax |
| Information/training | <ul style="list-style-type: none">• Information campaigns; information centres• Voluntary labelling; voluntary audits• Promotion of EE practices (public transport, behaviour...) |
| Others | <ul style="list-style-type: none">• Energy saving or renewables obligation• Technology procurement• Agreements , awards ... |
| Programme | General programmes (covering the whole sector) or all sector (for horizontal sector) |

Summary of descriptor of measures in BIEE policy data base

| | |
|--------------------------|---|
| Sector | 5 sectors: households, industry, transport, services, horizontal, |
| Types | 7 main types: mandatory information, regulations, financial, fiscal, information, others, sectoral programmes |
| Sub-types | ~100 sub types :horizontal 14), households (17), services (24), industry (19), transport (25) |
| End-uses | ~30 end-uses : households (12), services (6), industry (5), transport (5) |
| Targets | ~20 actors: households (6), services (6), industry (5), transport (5) |
| Status | On going, planned, terminated |
| Other descriptors | Overview Impact evaluation (savings, cost) Detailed description References |

BIEE Policy Data Base consists of 2 interfaces

- BIEE policy data base is made of **two interfaces** :
 - A **public interface** to query policies and measures, freely accessible to anybody: <https://biece-cepal-measures.enerdata.net/energy-efficiency-policies-database.html>
 - A **private interface for national experts** to input or modify the measures accessible with a password
- BIEE policy data base is **bilingual English/Spanish** (language selection on home page):
 - Menu in Spanish if Spanish selected and vice versa.
 - Input by national experts in Spanish or English (translation of main characteristics to be done by Enerdata).

Public interface

The public interface: query of measures

- Measures can be searched by **key words** (e.g. “energy poverty”) or by **sector and/or** by **country**
- Measures can then be **filtered** by **type** (or sub type) and/or by **end-use**.
- The results of a query are displayed in a **table** specifying the country, sector, title, measure type and starting year.
- This table can be exported on **Excel**.

UNITED NATIONS

ESPAÑOL ENGLISH



Economic Commission for Latin America and the Caribbean

Search: ⓘ :

Enter text to search in measures

Sector :

All

Country :

Select...

Search

More options

By default only ongoing measures are selected. For visualizing completed and proposed measures, click on "more options/status"

More detail

3 measures found

Export

| Country | Sector | Title | Type | Starting Year |
|------------|------------|--|---------------------|---------------|
| Ecuador | Households | Replacement of inefficient refrigerators | Financial | 2012 |
| Mexico | Households | Mexican Official Standards for Energy Efficiency | Programme | 1995 |
| Costa Rica | Transport | New Regulations for gasoline-ethanol mixtures | Mandatory standards | 2019 |

Public interface: example of query of measures

- Search of measures by **sector** (households here), **country** (Chile, Uruguay, Brazil) and measure **type/ sub type** (mandatory information/ energy efficiency labels).

Search:

Sector:

Country:

Measure type:

End use:

More detail 6 measures found

| Country | Sector | Title | Type |
|---------|------------|---|-----------------------|
| Chile | Households | Refrigerator Labeling and MEPS | Mandatory information |
| Uruguay | Households | Energy Efficiency Labelling - Domestic electric storage water heaters | Mandatory information |
| Uruguay | Households | Energy Efficiency Labelling - Refrigerators | Mandatory information |
| Uruguay | Households | Energy Efficiency Labelling - Air conditioners and heat pumps (domestic or similar use) up to 6kW of cap./refrig. | Mandatory information |
| Uruguay | Households | Energy Efficiency Labelling - Compact Fluorescent Lamps (CFLs) | Mandatory information |
| Brazil | Households | Brazilian Labeling Program | Mandatory information |

- By clicking on a button, possibility to enlarge the result table

More detail 6 measures found

| Country | Sector | Title | Type | Starting Year |
|---------|------------|---|-----------------------|---------------|
| Chile | Households | Refrigerator Labeling and MEPS | Mandatory information | 2007 |
| Uruguay | Households | Energy Efficiency Labelling - Domestic electric storage water heaters | Mandatory information | 2012 |
| Uruguay | Households | Energy Efficiency Labelling - Refrigerators | Mandatory information | 2012 |
| Uruguay | Households | Energy Efficiency Labelling - Air conditioners and heat pumps (domestic or similar use) up to 6kW of cap./refrig. | Mandatory information | 2016 |
| Uruguay | Households | Energy Efficiency Labelling - Compact Fluorescent Lamps (CFLs) | Mandatory information | 2011 |
| Brazil | Households | Brazilian Labeling Program | Mandatory information | 2001 |

Query of measures with more options

- As an option, measures can also be filtered:
 - by target (e.g. general public, SME's, public sector),
 - by status (i.e. ended, ongoing or planned)
 - by period,
 - by qualitative impact in terms of energy savings (high, medium or low).

The screenshot displays a web interface for querying energy measures. On the left, there is a sidebar with a search bar and three buttons: 'Search', 'Clear all', and 'Less options'. Below these are filter sections: 'Target' with a dropdown menu showing 'General public' and a close button 'x'; 'Status' with a dropdown menu showing 'All'; 'Starting year' with two input fields (2000 and 2010) and a 'Clear' button; and 'Semi quantitative impact' with a dropdown menu showing 'High' and a close button 'x'. On the right, the main content area shows 'More detail' with a toggle switch, '2 measures found', and an 'Export' button. Below this is a table with the following data:

| Country | Sector | Title | Type | Starting Year |
|---------|------------|--------------------------------|-----------------------|---------------|
| Chile | Households | Refrigerator Labeling and MEPS | Mandatory information | 2007 |
| Brazil | Households | Brazilian Labeling Program | Mandatory information | 2001 |

Query of measures: display of more details

- By clicking on the title of any measure displayed in the table, it is possible to get more details on each measure (see below example of refrigerator labeling in Chile).
- And then to display a detailed description by clicking on a button.
- Possibility to export the **measures description as PDF**.

Refrigerator Labeling and MEPS - Measure Detail

Country : Chile

Title : Refrigerator Labeling and MEPS

Short description : El etiquetado de eficiencia energética es una política orientada a entregar información a los consumidores para que al momento de la compra puedan comparar y seleccionar artículos más eficientes. Contar con artefactos más eficientes significa para el usuario menor consumo de energía, lo que a su vez se traduce en cuentas de electricidad más bajas y una menor incidencia ambiental debido a menores emisiones de gases de efecto invernadero. Las etiquetas de consumo de energía, le permiten al consumidor hacer una elección más razonada sobre los productos que compra.

Reference : https://www.sec.cl/transparencia/docs2015/Resolucion_74.pdf

| Status | Issuing date | Starting date | Ending date | Semi quantitative Impact |
|---------|--------------|---------------|-------------|--------------------------|
| Ongoing | 2006 | 2007 | | High |

Types : Mandatory energy efficiency labels - Labels for electrical appliances

Target : General public

End Use : Refrigerators

[View Detailed Measure Description](#)

Private interface

Private interface: general content

- To **input a measure** in the data base, you have to access the “**private**” interface protected by a password.
- By default a language will be selected depending on your country, which can be changed with a button.
- This interface also allows to **modify an existing measure**
- Click on the sector and action required (**add** or **manage**).

The screenshot displays the Mure private interface. On the left, a dark sidebar contains the text 'Mure' and a hamburger menu icon. Below this, under 'MAIN NAVIGATION', are two expandable menu items: 'Measures' and 'Quality'. The main content area is a grid of five sector cards: 'Households', 'Industry', 'Transport', 'Services', and 'Horizontal'. Each card has a blue header with the sector name and a blue circle with the number '0' in the top right corner. Below the header, each card contains two blue buttons: '+ Add a new measure' and 'Manage measures' (with a pencil icon). A red box in the top right corner contains the text 'Language EN', with a red arrow pointing to it from the text in the list above. A blue oval highlights the 'Add a new measure' and 'Manage measures' buttons for the 'Households' sector, with a blue arrow pointing to it from the text in the list above.

Private interface: adding a measure (1/3)

- First write the **title** which should be short to be easily displayed in the table in the public interface.
- Second include a **reference** : link to a web site
- Third provide a **short description** (1 to 5 lines) (example of norms in Mexico below).
- So far only this part is translated

Title ⓘ Normas Oficiales Mexicana de Eficiencia Energética

Reference ⓘ <https://www.gob.mx/conuee/documentos/normas-oficiales-mexicanas-de-eficiencia-energetica-89073>

Short description ⓘ

✂ 📄 📁 📂 📅 | ⬅ ➡ ABC ▾ 🔗 📧 🚩 | 📊 📋 Ω 🖼️ 🔄 | 📄 Source |

B **I** **S** | **I**_x | ☰ ☷ | ☰ ☷ | ☰ ☷ | ” | Styles ▾ | Format ▾ | ?

Desde 1995 a la fecha, la CONUEE (antes CONAE) ha implantado un número importante de Normas Oficiales Mexicana de Eficiencia Energética (NOM-ENER), que establecen valores de desempeño energético en equipos y sistemas, entre ellos los más utilizados en los hogares.

Private interface: adding measures' characteristics (2/3)

- To **characterise** the measure (type, end-use, status, impacts and targets) you have to select among the categories proposed (drop list) and input the date for the active period.
- Information button to remind the meaning of each parameter.

Types ⓘ *

End uses ⓘ

Implementation ⓘ **Issuing year**

Active Period ⓘ **Starting year**
Ending year

Status ⓘ *

Semi quantitative impact ⓘ *

targets

Private interface: detailed description of the measure (3/3)

The measure has then to be described in more details in 3 categories:

- **General description** to provide more details on the measure ; you can insert graphs, pictures (picture of label)
- **Impact description** to indicate what is the impact (expected or measured from data or evaluations studies: amount of energy/GES saved, number of equipment sold etc...
- **Background** : why was it implemented? Link to other measures, etc...

General description ⓘ

Paragraphs: 0, Words: 0

Impact description ⓘ

Paragraphs: 0, Words: 0

Background ⓘ

Paragraphs: 0, Words: 0

Status of BIEE policy data base

Status of BIEE Policy Data Base

- The software of the BIEE policy database in LACs has been adapted from the MURE policy database for Europe* by Enerdata from July to September 2020.
- It has been tested by 4 volunteer countries, that we warmly thank: Brazil, Chile, Mexico and Uruguay

| | Brazil | Chile | Mexico | Uruguay | Total |
|------------|--------|-------|--------|---------|-------|
| Horizontal | 2 | 2 | | 6 | 10 |
| Households | 2 | | 1 | 4 | 7 |
| Services | | | 2 | 2 | 4 |
| Industry | 2 | | | 2 | 4 |
| Transport | 1 | 1 | | 2 | 4 |
| Total | 7 | 3 | 3 | 16 | 29 |

*MURE contains over 2000 energy efficiency measures <https://www.measures.odyssee-mure.eu/energy-efficiency-policies-database.html#/>

Status of BIEE policy data base: overview of measures

- The pilot test showed a majority of measure on mandatory information (i.e. energy efficiency labels) and overall programmes (9 each), followed by financial measures.
- Others include an important measure in Uruguay: the energy efficiency certificates.

| | Brazil | Chile | Mexico | Uruguay | Total |
|-----------------------|--------|-------|--------|---------|-------|
| Mandatory information | 2 | 2 | 1 | 4 | 9 |
| Regulation | | | 1 | 2 | 3 |
| Financial | | | 1 | 4 | 5 |
| Information | 1 | | | | 1 |
| Programme | 4 | 1 | | 4 | 9 |
| Others | | | | 2 | 2 |
| Total | 7 | 3 | 3 | 16 | 29 |

Status of contacts for BIEE Policy Data Base

| Country | First contact | Participation confirmation |
|-------------------|---------------|----------------------------|
| Argentina | 18/11/2020 | Y |
| Barbados | 14/12/2020 | |
| Bolivia | | |
| Brasil | 20/11/2020 | Y |
| Chile | 05/11/2020 | Y |
| Cuba | 14/01/2021 | Considered |
| Colombia | 18/11/2020 | Considered |
| Costa Rica | 04/12/2020 | |
| Ecuador | 07/12/2020 | Y |
| El Salvador | 18/11/2020 | |
| Guatemala | 07/12/2020 | |
| Guyana | 15/12/2020 | Y |
| Honduras | 07/12/2020 | |
| Jamaica | 14/12/2020 | |
| Mexico | 20/11/2020 | Y |
| Panama | 04/12/2020 | Y |
| Paraguay | 15/12/2020 | Y |
| Peru | | |
| Rep. Dominicana | 15/12/2020 | |
| Trinidad & Tobago | 16/12/2020 | |
| Uruguay | 20/11/2020 | Y |

Contact:

Laura Sudries

Senior Energy Efficiency Analyst

Laura.sudries@enerdata.net

Bruno Lapillonne

Scientific Director

Bruno.lapillonne@enerdata.net

www.enerdata.net

Enerdata



Enerdata is an energy intelligence and consulting company established in 1991. Our experts will help you tackle key energy and climate issues and make sound strategic and business decisions. We provide research, solutions, consulting and training to key energy players worldwide.