







Kick off meeting of the BIEE-ROSE Project on Energy Efficiency and SDG7 monitoring in Latin America and the Caribbean Virtual conference September 22th 2020

New BIEE indicators template on SDG7/OSD7

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Content

- Overview of OSD 7
- Adaptation of the data template
- Annex: List of indicators



Goal 7 on energy

- To define the sustainable goals various indicators have been proposed corresponding to the different areas of development.
- Goal 7 addresses energy and aims at "ensuring access to affordable, reliable, sustainable and modern energy for all" with three quantified targets.

Topic	Goal	Indicators to monitor
OSD 7.1 Energy access	ensure universal access to affordable, reliable and modern energy services by 2030	share of households with access to electricity, to clean fuels
OSD 7.2 Renewables	increase substantially the share of renewable energy in the global energy mix by 2030	indicators on the penetration of renewables in the energy mix
OSD 7.3 Energy efficiency	double the rate of improvement in energy efficiency by 2030	indicators measuring energy efficiency improvement → BIEE data base has been developed so far to monitor progress in energy efficiency in LACs, through a wide variety of indicators



Proposed indicators for energy access (7.1)

% of households with access to clean cooking technologies

% of clean fuels in households consumption

% of households with access to electricity

Indicator already calculated in BIEE
Indicator that can be calculated with current BIEE data
In bold, indicator already available in CEPALSTAT



Proposed indicators for renewables (7.2)

Four types of indicators are proposed

Share of renewables in TPES (in oferta total)

Share of renewables in power*

Share of renewables in final energy consumption**

Share of renewables by end-use sector*

Indicator already calculated in BIEE
Indicator that can be calculated with current BIEE data
Indicator needing additional data to be calculated
In bold, indicator already available in CEPALSTAT

- * See Annex for more details
- **Indicator implicitly proposed for monitoring OSD 7.2; indicator also used in Europe to set targets on renewables.



Proposed indicators to monitor the energy efficiency dimension (7.3)

Primary energy intensity at purchasing power parities Final energy intensity at purchasing power parities Efficiency of power generation Efficiency of thermal power plants **Rate of electricity T&D losses** Energy intensity of industry at purchasing power parities Energy intensity of transport to GDP at purchasing power parities Unit consumption of road transport per vehicle Energy consumption of households per household Electricity consumption per electrified households Energy intensity of services at purchasing power parities Electricity intensity of services at purchasing power parities Electricity consumption for public lighting per capita Energy intensity of agriculture at purchasing power parities



Energy intensity and energy efficiency

- The total energy intensity is good to describe the overall trend in energy efficiency from an economic point of view but does not tell anything about the factors behind this trend.
- Trends in the final energy intensity will not be affected by changes in supply, but will be still influenced by other factors not linked to energy efficiency (eg structural changes).
- To better understand what is going on and better measure the impacts of energy efficiency programmes more detailed indicators are required, such as the indicators developed in the framework of BIEE.
- In particular an energy efficiency index has been developed to measure the overall energy efficiency progress; it is the best indicator to monitor the energy efficiency goal but is difficult to calculate for countries with limited energy consumption data by end-uses and sub-sector

For countries for wich is possible, we will calculate energy efficiency index to monitor goal 7.3



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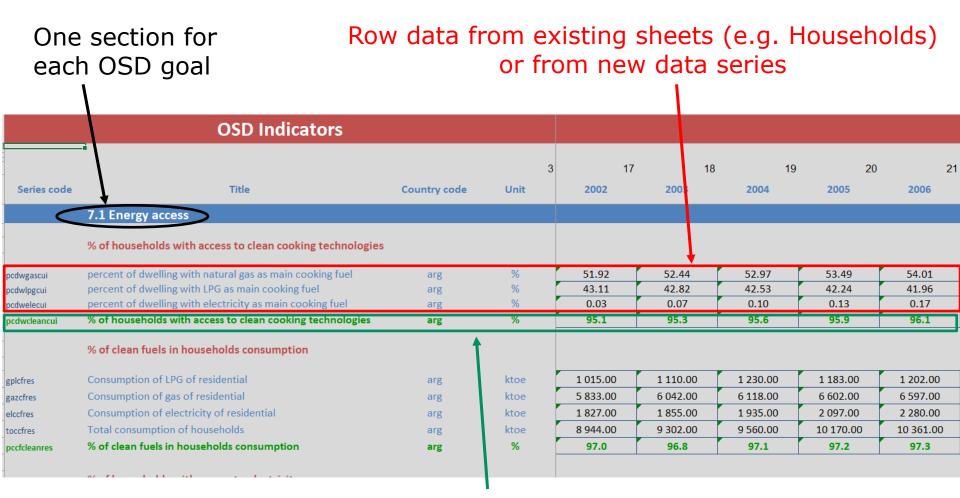
What has changed in the BIEE template?

- The existing BIEE data template needs to be adapted to include the new indicators on 7.1 and 7.2 goals based on:
 - Existing data for most of them
 - New data sets for some of them (e.g. renewable electricity capacity)
- To include the new data series and indicators
- → new sheet called « OSD indicators »





Presentation of the new sheet

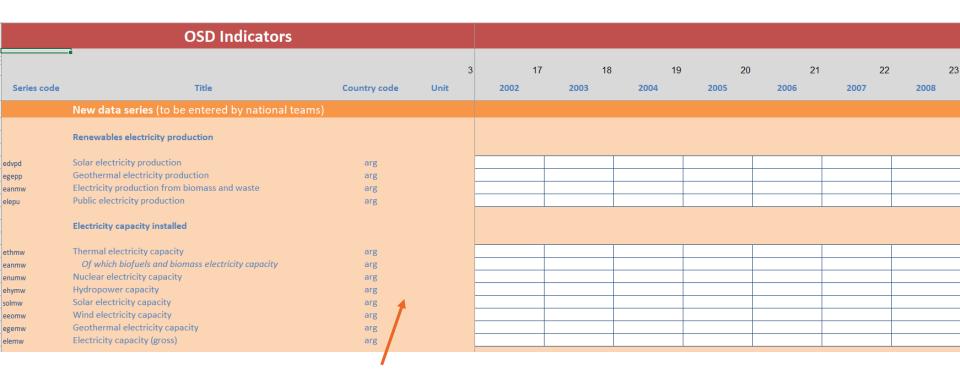


New indicator (in green)



New data series

 At the beginning of the sheet, new data series to be entered by national teams in order to calculate new indicators on renewables



New data series (in orange backround)



What is expected from national teams?

- We ask national teams to fill in the new data series in orange background:
 - Solar electricity production
 - Geothermal electricity production
 - Electricity production from biomass and waste
 - Public electricity production
 - Electricity capacity installed (total, thermal, renewables)
 - Solar thermal heat consumption of residential
 - Solar thermal heat production of tertiary



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Proposed indicators for power

Share of renewables in power generation (i.e. in power mix):

- Total (actual)
- Total (normalized)
- Without large hydro (actual)
- Without large hydro (normalized)

Share of renewables in electricity capacity

- Total
- Without hydro

Share of renewables in electricity consumption (actual)
Share of renewables in electricity consumption (normalized)



Proposed indicators for renewables: households

Share of renewables in household final consumption

Share of renewables in household final consumption (including renewable electricity)

Share of biomass in household sector

Area of solar water heaters:

- Total area
- Area per capita



Proposed indicators for renewables: services and industry

Share of renewables in services final consumption

Share of renewables in services final consumption (including renewable electricity)

Share of renewables in industry final consumption

Share of renewables in industry final consumption (including renewable electricity)



Proposed indicators for renewables: transport

Share of biofuels in transport sector

Share of renewables in transport sector (including renewable electricity)

Share of biofuels in road transport

Share of biofuels in consumption of gasoline and diesel in road transport (i.e. average blending rate)

