



## Webinar on Energy Efficiency: Use and Limits of Energy efficiency Indicators in International Comparisons and their Implications for Climate Change Negotiations

Online workshop open to the public

### Main information

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| Date     | 19 October 2022  |
| Time     | Time in Brasilia (Brazil, UTC-3): 11h-15h<br>Time in Paris (France, UTC+2 - DST): 16h-20h<br>Time in Amsterdam (Netherlands, UTC+2 – DST): 16h-20h<br>Time in Washington, D.C. (USA, UTC-4 – DST): 10h-14h<br>Time in Berkeley (USA, UTC-7 – DST): 7h-11h<br>Time in Boulder (USA, UTC-6 – DST): 8h-12h  |
| Type     | Online webinar open to the public upon registration.<br>Registration necessary at:<br><a href="https://us02web.zoom.us/webinar/register/WN_Zht_sd_vSUGGKLyNTijChA">https://us02web.zoom.us/webinar/register/WN_Zht_sd_vSUGGKLyNTijChA</a><br>After registering, a confirmation email containing the joining link and other information about the webinar will be sent. |
| Language | English and Portuguese – with simultaneous interpretation.   |
| Host     | Brazilian Energy Research Office – EPE   |
| Support  | Ministry of Mines and Energy of Brazil – MME   |

### Goal

To bring awareness to the audience about implications of energy efficiency concepts on indicators selection and on their effectiveness for guiding energy efficiency policies & measures and international agreements.

### Target public

The target public is national and international decision-makers, specialists, professionals, and other stakeholders that deals with energy efficiency.



## Background

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The webinar aims at recalling the attention to the fact that it is fundamental to harmonize energy efficiency concepts, policy objectives and indicators, which are selected to monitor and to evaluate the performance of the policy and the achievement of the targets. In other words, concepts are very important to design good policies and to select the appropriate set of energy efficiency indicators.

Particularly, the webinar places several key questions that can help countries and the world to design energy efficiency policies and evaluate its achievements properly, particularly in developing countries. What is energy efficiency? How do we measure it adequately? What are the key indicators that can guide and support decision-making regarding investments and/or actions in energy efficiency? What are the main analytical frameworks that countries and institutions have been adopting to promote, to measure and to evaluate policies, mechanisms, and achievements in energy efficiency? How to establish fair ambitious in energy efficiency targets in public policies and in climate agreement negotiations? What could countries, specialists, investors, consumers, and other stakeholders learn, or recollect, from several previous debates and actions in the international community about those issues?

Those questions and debates are not new. In 70's and 80's, due to the oil shocks and the energy policies needed to deal with their consequences, several decision-makers and specialists placed those questions. At that time, the Resources for the Future (RFF) developed a project, financed by Electric Power Research Institute (EPRI), to deep dive those issues. The debates and research were carried out and registered in proceedings, books and papers by Joel Darmstadter, Joy Dunkerley, Jack Alterman, J. J. Schanz Jr., and others. In the 90's, during the early stages of climate negotiations, similar questions and debates led to international efforts to define energy efficiency concepts, to establish sound methodologies to measure energy efficiency and to set appropriated databases and indicators for energy efficiency. In mid-90's, the Lawrence Berkely National Laboratory (LBNL) and the University of Utrecht held an international workshop, inviting different specialist from all over the world to bring lights to decision-makers and specialists on those fundamental issues, as well as build a robust analytical framework for energy policy and negotiations. Once again, findings were published in proceedings, books and papers by leading researchers and specialists such as Lee Schipper, Mark Levine, Kornelis Blok, Ernst Worrell, Nathan Martin, Lynn Price, Dian Phylipsen, Jayant A. Sathaye, Roberto Schaeffer, Gilberto Jannuzzi, Howard Geller, and many others. Furthermore, several energy institutions (LBNL, University of Utrecht, International Energy Agency, Enerdata, International Atomic Energy Agency, World Energy Council, World Bank, etc.) implemented robust databases and a



set of indicators in energy efficiency, which contributed to well-design policies and their proper evaluations.

Occasionally, there are still some specialists publishing papers and materials about those issues. However, decision-makers and other stakeholders restarted evaluating energy efficiency policies and their achievements, as well as negotiating agreements and targets for energy efficiency with bias and unrobust bases.

EPE will hold this webinar on energy efficiency to address the issues of usage and limits of energy efficiency indicators in international comparisons and their implications for climate change negotiations. The main purpose is to recollect the “forgotten knowledge” on energy efficiency to bring awareness to the audience about implications of energy efficiency concepts on indicators selection and on their effectiveness for guiding energy efficiency policies & measures and international agreements on climate. The target public is national and international decision-makers, specialists, professionals, and other stakeholders that deals with energy efficiency.

The expected results are:

- To reintroduce an awareness on appropriate benchmarks to evaluate energy efficiency policies and to establish energy efficiency goals in climate negotiations by disseminating the “forgotten knowledge” on energy efficiency.
- To reinforce and to revitalize the international network of energy efficiency specialists that used to be very active in the mid-90’s, aiming to help reconciling energy efficiency policy objectives and indicators’ selection, including for climate negotiations.

This webinar is a kick-off to achieve more consistent efforts in the next steps through the international network of energy efficiency specialists, such as: to elaborate a position paper with recommendations to decision-makers; to disseminate proceedings, publications & papers regarding those issues to promote capacity building to leaders, specialists and students of the newer generations; and to hold other national and international events to promote findings and public awareness on how to prevent misleading policies objectives in energy efficiency and climate negotiations. If the “forgotten knowledge” were not considered appropriately, then, energy efficiency policies and agreement will bring only frustration and weak results.

EPE welcome international and national specialists and decision-makers and invite them to join this effort to improve the energy efficiency policies objectives and targets!



## Draft Agenda

**Wednesday, 19 October 2022 at 11:00 – 15:00 (BRT)**

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| <b>11:00</b> | <b>Opening (20 min)</b><br>Thiago Barral, Executive President – EPE<br>Gustavo Masili, Director – MME<br>George Soares, Manager – ENBPar/PROCEL<br>Luis Ricardo Trezza, Executive Director – ABESCO   |
| <b>11:20</b> | <b>Concepts &amp; Indicators: The Forgotten Knowledge (45 min)</b><br>Moderator: Giovani Machado, Director - EPE<br>Speakers:<br>Wolfgang Eichhammer, Professor, Head of Competence Center Energy Policy and Energy Markets – Fraunhofer Institute for Systems and Innovation Research ISI<br>Dian Phylipsen, Director – SQ Consult<br>Q&A  |
| <b>12:05</b> | <b>Usage of Energy Efficiency Indicators: Practical Issues and Lessons from International Experience - Aggregated &amp; Disaggregated Indicators (60 min)</b><br>Moderator: Carla Achão, Head of Department - EPE<br>Speakers:<br>Roberta Quadrelli, Head of Data and Indicators of Energy Transitions - IEA<br>Laura Sudries, Energy Efficiency Project Manager - Enerdata<br>Stephane de la Rue du Can, Program Manager - LBNL<br>Q&A   |
| <b>13:05</b> | <b>Break (15 min)</b>   |
| <b>13:20</b> | <b>Discussions on the Implications for Energy Efficiency Policies &amp; Measures and for Climate Negotiations (60 min)</b><br>Moderator: Howard Geller, Consultant – SWEEP<br>Speakers:<br>Robert Sandoli, Director of Strategic Initiatives – DOE (tbc)<br>Leonardo Rocha Souza, Chief of Energy Statistics Section – DESA/UNSD<br>Steven Nadel, Executive Director - ACEEE<br>Jeferson Soares, Director Advisor - EPE<br>Luis Augusto Horta Nogueira, Professor - UNIFEI<br>Q&A |
| <b>14:20</b> | <b>Closing: Wrap-up, next steps and final remarks (10 min)</b><br>Thiago Barral, Executive President – EPE  |