Closing the EE knowledge gaps: An Introduction

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PARIS AGREEMENT, Article 2 (a)

“Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change”

source: https://www.climatecommunication.org/change/energy-use/#!prettyPhoto/0/
Background

Categories of energy efficiency target

- **Energy Intensity**: A reduction in energy consumption per unit of activity, such as GDP. A commonly used metric because data are usually available. Easy to understand. Achievement influenced by economic activity and structural change. Not always linked to energy use reduction.

- **Energy Productivity**: An increase in activity per unit of energy consumed. Resonates well with some stakeholders. Achievement influenced by economic activity and structural change. Not always linked to energy use reduction.

- **Energy Consumption**: A reduction in energy consumption relative to a base year, projection or benchmark. Aligned with environmental benefits of energy efficiency such as emissions reduction.

- **Energy Elasticity**: A reduction in the ratio of energy consumption growth to activity growth. Allows for target development in the absence of reliable, detailed data or forecasts. Not always achievable.

- **Policy Progress**: An increase in the impact of energy efficiency policies.

Energy Intensity

- A reduction in energy consumption per unit of activity, such as GDP.

Energy Productivity

- An increase in activity per unit of energy consumed.

Energy Consumption

- A reduction in energy consumption relative to a base year, projection or benchmark.

Energy Elasticity

- A reduction in the ratio of energy consumption growth to activity growth.

Policy Progress

- An increase in the impact of energy efficiency policies.

Transactional

- An increase in market penetration of energy efficient goods or services.
Are there enough skills to implement Energy Efficiency project

Are the educational programs tuned enough to provide the future skill requirement for these projects

Energy Efficiency Projects
Skills and Knowledge Gaps in Energy Efficiency

- Understanding demand for skills and knowledge
- Pipeline of projects and policies and skills required to implement them
- Understanding current availability and supply of skills and knowledge
- Survey of in-service professional and their skills
- Survey of the educational program

Gap in skills and knowledge required to implement energy efficiency project and policies
Bridging the knowledge gap

Gap in skills and knowledge required to implement energy efficiency project and policies

Identify courses and contents relevant for the country

Review of best practices
- Education programs
- Training courses

Recommendation to upgrade the academic curriculum in the country
Where

Commercial and Manufacturing Sector

Argentina
Buildings Sector

Ministerio de Economía Argentina
Secretaría de Energía

Energy & Petroleum Regulatory Authority

DTU
Read about our work at
https://unepdtu.org/closing-the-energy-efficiency-knowledge-gaps/

Closing the Energy Efficiency knowledge gaps

Energy efficiency - the low hanging fruit of climate action - needs to be improved, but it requires the right mix of skills and knowledge.

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Improving energy efficiency is widely recognised as a key element and a low hanging fruit in addressing climate change while at the same time contributing to sustainable development. Specifically, energy management represents a significant opportunity for building, transport, industrial-commercial, and other sectors to reduce their energy use while maintaining or boosting productivity.

The potential in improving energy efficiency is also reflected in Sustainable Development Goal 7, which calls for a doubling of the global rate of energy efficiency by 2030.

To achieve these ambitions will require people equipped with the right mix of skills and knowledge.

A global lack of skills and knowledge

Globally, there is a lack of systematic insight of skills and knowledge available in the energy efficiency domain.
Thank You

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Thank you for your attention!

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