

# WORLD SUSTAINABLE DEVELOPMENT SUMMIT 2023

MAINSTREAMING SUSTAINABLE DEVELOPMENT AND CLIMATE RESILIENCE FOR COLLECTIVE ACTION

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## The relevance of the Energy Efficiency First Principle in an Indian context Thursday, 23<sup>rd</sup> February | 2:00 pm – 3:30 pm (IST) | Jacaranda Hall I, India Habitat Centre

### **Background**

The **energy efficiency first principle** means "taking utmost account of cost-efficient energy efficiency measures in shaping energy policy and making relevant investment decisions"<sup>1</sup>. Energy Efficiency is often underestimated in existing planning and investment programmes. The principle also puts forth the '*save before you build*' philosophy. The principle aims to treat energy efficiency as a source of energy in its own right in which the public and the private sector can invest ahead of other more complex or costly energy sources. This includes giving priority to demand-side solutions whenever they are more cost-effective than investments in energy infrastructure to meet policy objectives.

The Energy Efficiency First Principle implies making decisions that have an impact on the energy demand and focuses on reducing the energy demand. Assessing several EU's initiatives, the following could be potential sectors for integrating the Energy Efficiency First Principle in the Indian context:

- Electricity markets, Energy supply and distribution
- Energy demand (industry and services), Buildings & Transport, including infrastructure
- Information and Communications Technology (ICT) & Financial sector

#### Energy Efficiency as first principle in Indian context

As the world's second most populated country, India sits **third in the list of top electricity consuming countries** at **1.54 trillion kWh per year. The electricity consumption in the country is expected to reach 4 trillion units by 2030**.<sup>2</sup> The priority for the country is to ensure energy security and affordability, as well as the

<sup>&</sup>lt;sup>1</sup>https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficiency-targets-directive-and-rules/energy-efficiency-firstprinciple\_en#:~:text=The%20%E2%80%9Cenergy%20efficiency%20first%20principle,and%20making%20relevant%20investme nt%20decisions.

<sup>&</sup>lt;sup>2</sup> <u>https://www.nsenergybusiness.com/features/electricity-consuming-countries/</u>

implementation of the Paris Agreement. Energy efficiency will remain important to realise these priorities as India continues to develop economically.

**India's final energy consumption increased by 50% from 2007 to 2017**, with growth across all sectors, and the largest increase in the industrial and transport sectors. It has seen the highest growth of primary energy among G20 countries, but still has the lowest GDP per capita<sup>3</sup>.

Recognising the fact that efficient use of energy and its conservation is the least-cost option to meet the increasing energy demand, Government of India has enacted the Energy Conservation Act 2001 and established the Bureau of Energy Efficiency in March 2002. Additionally, as part of Section 134 Companies Act 2013, LODR (Listing Obligations and Disclosure Requirements) 34, 78 mandated by SEBI a company needs to mandatorily disclose steps taken for "conservation of energy". These measures help institutionalise and strengthen delivery mechanism for energy efficiency services in the country and provide the essential coordination between the various entities. Development of a Clean Energy Finance and Investment (CEFI) Roadmap can help India to achieve its clean energy ambitions, bringing together government and private sector stakeholders to agree upon a clear action plan that identifies and addresses bottlenecks complicating or constraining finance and investment in renewable energy and energy efficiency developments.

#### **Objectives**:

- To identify how the Energy Efficiency First principle can be adopted in the Indian context and what the added value would be
- To understand the best practices of energy efficiency first principle in EU member states in various sectors for developing of an action plan for India
- To identify the priority sectors for mainstreaming energy efficiency first principle in India
- To explore model contracts or procurement guidelines that can accelerate adoption of energy efficiency first principle in India

#### **Guiding Questions:**

- What would be the benefit of applying the idea behind the energy efficiency first principle in the Indian context?
- What lessons could EU experiences provide as regards the Energy Efficiency Directive (which has an economy wide quantified goal on energy efficiency) in terms of promoting the energy efficiency first principle?
- What are the barriers and challenges for integrating the energy efficiency first principle in the policy and legal framework in Indian context? How to incentivise the execution of this principle?
- How to conceptualise a comprehensive impact assessment covering socio economical and environmental benefits of energy efficiency policies? What are the priority sectors India should focus on in the short and long term?

<sup>&</sup>lt;sup>3</sup> https://www.iea.org/articles/e4-country-profile-energy-efficiency-in-india