

Session 2: Implementation, Economic Impact and Challenges

- Energy Efficiency, Key Dimension of the Energy Union: Implementation Perspective - Ž. Tomšić (University of Zagreb)





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Energy Efficiency, Key Dimension of the Energy Union: Implementation Perspective

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Objectives of EU energy policy

- **The Energy Union** is based on the **three long-established objectives** of EU energy policy:
 - **security of supply,**
 - **sustainability and**
 - **competitiveness.**
- To reach these objectives, the Energy Union focuses on five mutually supportive dimensions:
 - Security, solidarity, and trust;
 - A fully integrated internal energy market;
 - **Energy efficiency** - improved energy efficiency will reduce dependence on energy imports, lower emissions, and drive jobs and growth;
 - Climate action, **decarbonising the economy**; and
 - Research, innovation, and competitiveness.



Package: Clean energy for all Europeans

- The package pursues **three main goals**:
 - **Putting energy efficiency first**;
 - **Achieving global leadership** in renewable energies; and
 - Providing a **fair deal for consumers**.
- **Putting energy efficiency first** is a crucial objective of the EU, as energy savings are the easiest way to save consumers and reduce greenhouse gas emissions.
 - **The EU has set binding targets** of reducing our energy consumption through improvements in energy efficiency by 2030 by **at least 32.5%**, relative to a 'business as usual' scenario.



Energy efficiency first principle (1)

- **Energy efficiency is the pillar** that contributes **to all goals** of the strategy **at the same time**.
- The meaning of this principle is **prioritizing all energy planning, policy, and investment decisions** that make energy demand and supply more efficient.
- It also considers **energy efficiency** as “**an energy source in its own right**” because the energy we do not use is the energy we do not need to produce or import.



Energy efficiency first principle (2)

- **There are clear benefits** of energy efficiency policy:
 - There are also relevant economic reasons for implementing **energy efficiency first principle**.
 - Some studies estimated that a 40% efficiency target for 2030 would **save up to 2 trillion Euro** on energy imports during 2020-2030.
 - Energy efficiency also has **significant health and social benefits** (Especially it can be the way how to address the growing [problem of energy poverty](#))
 - Energy efficiency also contributes to **higher shares of renewable energy in our energy mix**.

What is the energy efficiency first principle?

- **Energy efficiency first principle** is the acknowledgment that Europe's most significant **domestic energy source** is **energy efficiency**.
- As an organising principle, “**energy efficiency first**”, applies to all policy-making and investment decisions, and it includes:
 - ensuring that **energy-saving solution** are not overlooked or undervalued;
 - **collecting reliable data** which will allow valuing the long-term economic, environmental, and social costs and benefits of energy-efficient solutions;
 - **removing barriers** preventing energy efficiency improvements; and
 - **developing and enforcing concrete policies**, which will prioritize investment in energy efficiency.

Making Energy Efficiency First principle operational (1)

- With **current trends**, meeting the 2020 energy efficiency target **appears increasingly difficult**
- There is still an evident **lack of political will** in the EU although energy efficiency is the foundation of the energy transition
- Despite **high potential and ambitions**, progress **falls below expectations**.
- Numerous reports and studies have shown that the **untapped economic potential** behind energy efficiency remains considerable.
- And projections for **2030 do not look good either**.
 - According to the European Commission, energy efficiency measures **currently planned by EU member states risk leaving a gap of 6.2 percentage points** versus a 32.5% energy saving benchmark for 2030.



Making Energy Efficiency First principle operational (2)

- **Several barriers strongly undermine** Energy efficiency policies and measures.
- **Barriers were limiting the implementation** of energy efficiency policies.
- Three main categories of barriers are: **economic, institutional, and behavioural.**
- Addressing policy barriers **require innovative policy design**, which calls for institutional skills and competencies, accurate information, policy monitoring, and review.
- **It requires** the ability to critically **assess the nature of barriers** - economic, institutional, or behavioural - and tailor-made design solutions to address them.
- **Understanding peculiarities** in terms of barriers, relevance is crucial for designing innovative solutions to address different needs and contextual situations.
- In Europe, one of the top barriers to implementing the decision-making principle of “efficiency first” in energy system planning and policymaking is **lack of political will.**



Energy efficiency in the European Green Deal (1)

- **Energy sector action** is central to the **European Green Deal**
- **Energy efficiency** in the European Green Deal
 - With the European Green Deal, the EU is increasing its climate ambition and becoming the first **climate-neutral continent by 2050**.
 - Keeping the momentum in **energy efficiency will bring multiple benefits** for the climate
- **The energy efficiency first principle** is increasingly **incorporated** into policymaking, planning, and investment as part of efforts to achieve climate neutrality by 2050 as written in the EU's Green Deal.

Energy efficiency in the European Green Deal (2)

- **Energy efficiency is the central pillar, but:**
 - **Progress falls** short of ambitions and more challenges ahead;
 - **One key challenge** for the years to come will be **to find a way to incentivise** more energy efficiency investments at times of low energy prices;
 - **The pressure for further improvements** for energy efficiency is likely **to increase**; and
 - A number of assessments highlight the **disappointing progress** towards Europe's EE goals, but many studies and reports estimate at the same time that there is **substantial potential for economically profitable investments** in EE measures.





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Energy efficiency
first!

Accelerating towards
a 2030 objective of

32.5%



Energy efficiency in
Europe:
**A fuel waiting
to take off ***

* <https://www2.deloitte.com/ro/en/pages/about-deloitte/articles/Energy-efficiency-in-Europe-a-fuel-waiting-to-take-off.html>