



# CIIAE

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consumption: a pathway to demand reduction”  
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# Motivation and background

- Research motivation and background:
  - Research on energy sufficiency in EU energy law as part of broader research on Degrowth in EU energy law <sup>1</sup>
  - Looking at what already exists in EU law to facilitate quick action, legally solid
  - Targeting higher level (principles and targets) in order to have wide system effects
- General motivation and background:
  - To reach net-zero by 2050, EU must reduce its emissions 3 times faster over 2020-2050 compared to 1990-2020.
  - Yet, in EU law: green growth strategy (decoupling) to reach this target
  - Decoupling is not sufficient at all and unlikely to happen
  - One of the reasons: rebound effect
    - Which brings the issue of energy efficiency vs sufficiency
- Research complements EERA's energy reduction demand report, Oct. 2023

<sup>1</sup> Romain Mauger (2023) Finding a needle in a haystack? Identifying degrowth-compatible provisions in EU energy law for a just transition to net-zero by 2050, *Journal of Energy & Natural Resources Law*, 41:2, 175-193, DOI: 10.1080/02646811.2023.2187549

# Methodology

- Legal doctrinal method:
  - Analysing successive Energy efficiency directives (EED)
    - 2012 version, 2018 revision, 2023 recast
    - Also preparatory documents (trilogue with positions from Commission, Council and Parliament)

# Results

- Notion of sufficiency does not appear in EEDs (nor elsewhere in EU energy law)
- The EU policy reaction to the Russian war on Ukraine focused on non-binding voluntary choices to save energy. No organised energy sufficiency policy.
- But, some EED provisions can be used and, with limited changes, concur to such an energy sufficiency policy:
  - 1. Strengthening existing caps on energy consumption (art. 4(1) of 2023 EED)

	2012 Energy efficiency directive	2018 Energy efficiency directive	2023 Energy efficiency directive
Primary energy efficiency consumption reduction target	1 474 Mtoe by 2020	1 273 Mtoe by 2030	992,5 Mtoe by 2030
Final energy efficiency consumption reduction target	1 078 Mtoe by 2020	956 Mtoe by 2030	763 Mtoe by 2030

# Results

- 1. Strengthening existing caps on energy consumption
  - 2023 energy consumption caps => a reduction of energy consumption of at least 11,7% in 2030 compared to the projections of the 2020 EU Reference Scenario
  - Original goal in Commission's proposal was 9% in 2021, raised to 13% in 2022 with REPowerEU Plan (corresponds to 980 and 750 Mtoe by 2030 of primary and final energy consumption)
  - The Parliament's position was more ambitious, but taken down by Council.
  - A 2021 used by the Commission for the 13% estimated technical energy savings' potential at 19%
  - Also, research showed that with the 2022 energy prices context, the potential for economic energy savings reached up to 23%
  - Disappointing result, but the mechanism is well established.

# Results

- 2. Placing the Energy Efficiency First (EEF) principle under an Energy Sufficiency First (ESF) principle
  - EEF principle:
    - Introduced in 2018 EED, art. 1, but not even defined
    - Defined in 2018 Regulation on the Governance of the Energy Union, but not made operational
    - 2023 EED changes this, especially with art. 3(1).

## **Energy efficiency first principle**

1. In accordance with the energy efficiency first principle, Member States shall ensure that energy efficiency solutions, including demand-side resources and system flexibilities, are assessed in planning, policy and major investment decisions of a value of more than EUR 100 000 000 each or EUR 175 000 000 for transport infrastructure projects, relating to the following sectors:

(a) energy systems; and

(b) non-energy sectors, where those sectors have an impact on energy consumption and energy efficiency such as buildings, transport, water, information and communications technology (ICT), agriculture and financial sectors.



# Results

- 2. Placing the Energy Efficiency First (EEF) principle under an Energy Sufficiency First (ESF) principle
  - EEF principle:
    - Art. 7(1), public bodies have to purchase only products, services buildings and works with high energy-efficiency performance and must apply the EEF principle
      - Previously applicable conditionalities with regard to cost-effectiveness and technical and economic feasibility were removed
    - Art. 25(3), Member States must take into account the EEF principle in the cost-benefit analysis of the comprehensive heating and cooling assessment they have to conduct
    - Art. 6(1), regional and local authorities must prepare local heating and cooling plans (at least in municipalities with <45000 inhabitants) and such plans must “be compliant” with the EEF principle.

# Results

- 2. Placing the Energy Efficiency First (EEF) principle under an Energy Sufficiency First (ESF) principle
  - EEF principle:
    - Art. 27(1):
      - National energy regulatory authorities must apply the EEF principle in their regulatory tasks about the operation of the gas and electricity infrastructure
      - Gas and electricity transmission and distribution system operators must apply the EEF principle in their network planning, network development and investment decisions




# Take home message(s)

- Energy sufficiency is not part of EU law
- It should be legally defined and made operational
- Possible to start with amending existing provisions to facilitate their adoption:
  - 1. Strengthening the hard caps on energy consumption
    - Easy, known instrument, ambition has to be science-based
  - 2. Placing the EEF principle under the ESF  
(logic: Avoiding (sufficiency), Improving (efficiency), Shifting (RES production))
    - Newly detailed instrument, with high potential for system-wide effect:
      - Silo-breaking (not only purely energy sector)
      - Blanket obligation, from policy and planning moment until execution



# Thank you for your attention

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