

ODYSSEE-MURE

Energy Efficiency Academy 2025-2027 Opening Session: Where are we heading to with Energy Efficiency Policies in the coming years?

Wolfgang Eichhammer, Fraunhofer ISI

26 November 2025



ODYSSEE-MURE

PROJECT OBJECTIVES

The 2025-2027 period of the project, ODYSSEE-MURE is focused on supporting the national implementation and monitoring of key provisions of the Energy Efficiency Directive recast (EED, (EU)2023/1791).

ODYSSEE AND MURE DATABASES: ODYSSEE-MURE - MONITORING THE EED-RECAST, SUPPORTED BY THE LIFE PROGRAMME OF THE EUROPEAN COMMISSION, RELIES ON 2 COMPLEMENTARY DATABASES:

- **ODYSSEE** contains **detailed energy efficiency and CO₂ indicators** with data on energy consumption, their drivers (e.g. activity indicators) and related CO₂ emissions.
- **MURE** provides **quantitative, semi-quantitative and qualitative information** on energy efficiency policies implemented at EU or national level.

TOOLS AND ANALYSES

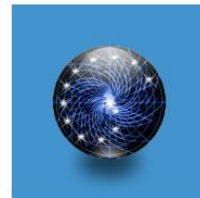
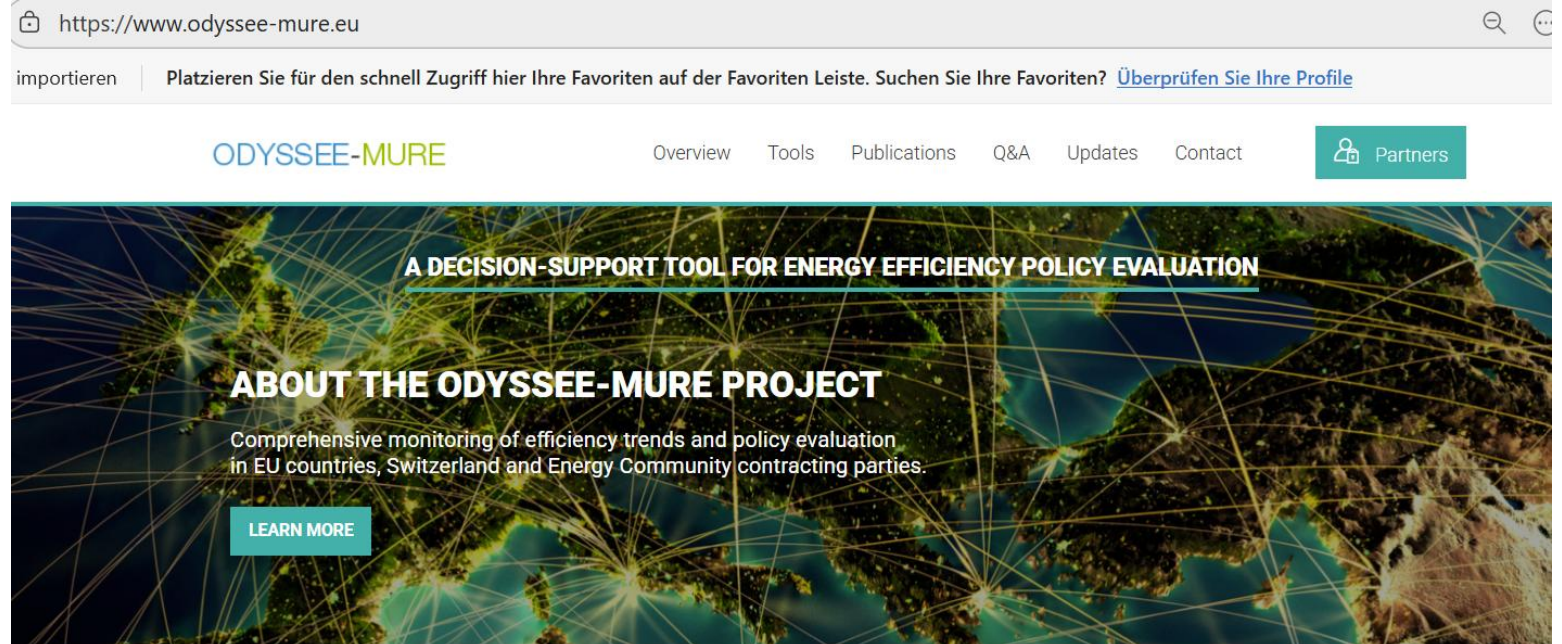
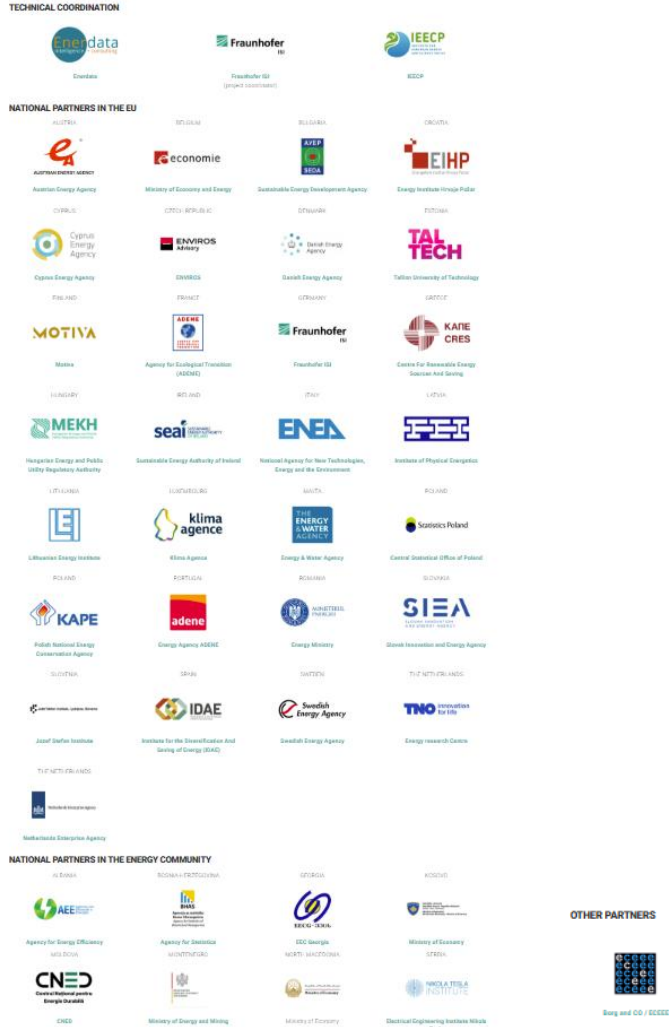
- Decomposition Tool / Policy Assessment Tool (policy gaps) / Energy Efficiency Scoreboard / Energy Savings Tool / Link to Multiple Benefits Tool MICATool ...

Training

- E.g. Quantitative and semi-quantitative assessment of policy impacts
- Exploitation and analysis with energy efficiency indicators

ODYSSEE-MURE

National Teams –
the heart of the project



ABOUT ODYSSEE

Database on energy efficiency indicators and energy consumption by end-use and their underlying drivers in industry, transport and buildings.

[Learn more](#)



ABOUT MURE

Database on energy efficiency policies and measures by country in industry, transport and buildings.

[Learn more](#)

LATEST NEWS

[26 NOVEMBER 2025](#)

A public [webinar](#) will take place on 26 November: The Energy Efficiency Academy 2025–2027 Opening Session: Where are we heading with energy efficiency policies in the coming years?

KEY PUBLICATIONS

ODYSSEE-MURE Energy Efficiency Academy 2025-2027

Bundles of Webinars & Policy Briefs:

- Clean and Competitive Industry - Energy efficiency and the Decarbonisation of Industry, notably:
 - **Energy efficiency trends in the EU industry (Enerdata, 16 Dec 2025, 10-11h)**
 - Multiple benefits of energy efficiency in industry (in cooperation with the International Energy Agency IEA)
 - Industrial energy efficiency scoreboard (in cooperation with ecee zero carbon industry)
- Key topics of the revised EED:
 - EE1st Principle
 - EE in the Public Sector
 - Data Centres
 - Decarbonising Heating & Cooling
- Energy efficiency - the social dimension
 - Energy Poverty
 - Energy Sufficiency

Upcoming events

ODYSSEE-MURE

Webinar Series Energy Efficiency Academy 2025-2027

The Energy Efficiency Academy 2025-2027

Energy Efficiency Trends in Industry in the EU

Webinar #21



16 December 2025



10:00 - 11:00 CET

[Registration link](#)

11-12
December
2025

Paris

Behave
2025 8th European Conference on
Behaviour and Energy Efficiency

[More details](#)



3-5
February
2026

Rome

**ZERO
CARBON
INDUSTRY** Register
now!
#ZEROCARBON2026

[More details](#)



1-6
June
2026

Lac d'Ailette

**efficiency:
powering on**
ecee 2026 Summer Study
on energy efficiency
Call for abstracts! Submit by 17 December

[More details](#)



Co-funded by the European Union under project ID 101215674. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA.

Webinar series hosted by:
 IEECP Energy and Climate
Academy

In partnership with:



ODYSSEE-MURE

Thank you!

Wolfgang Eichhammer, Fraunhofer ISI

wolfgang.eichhammer@isi.fraunhofer.de; tina.theiss@isi.fraunhofer.de

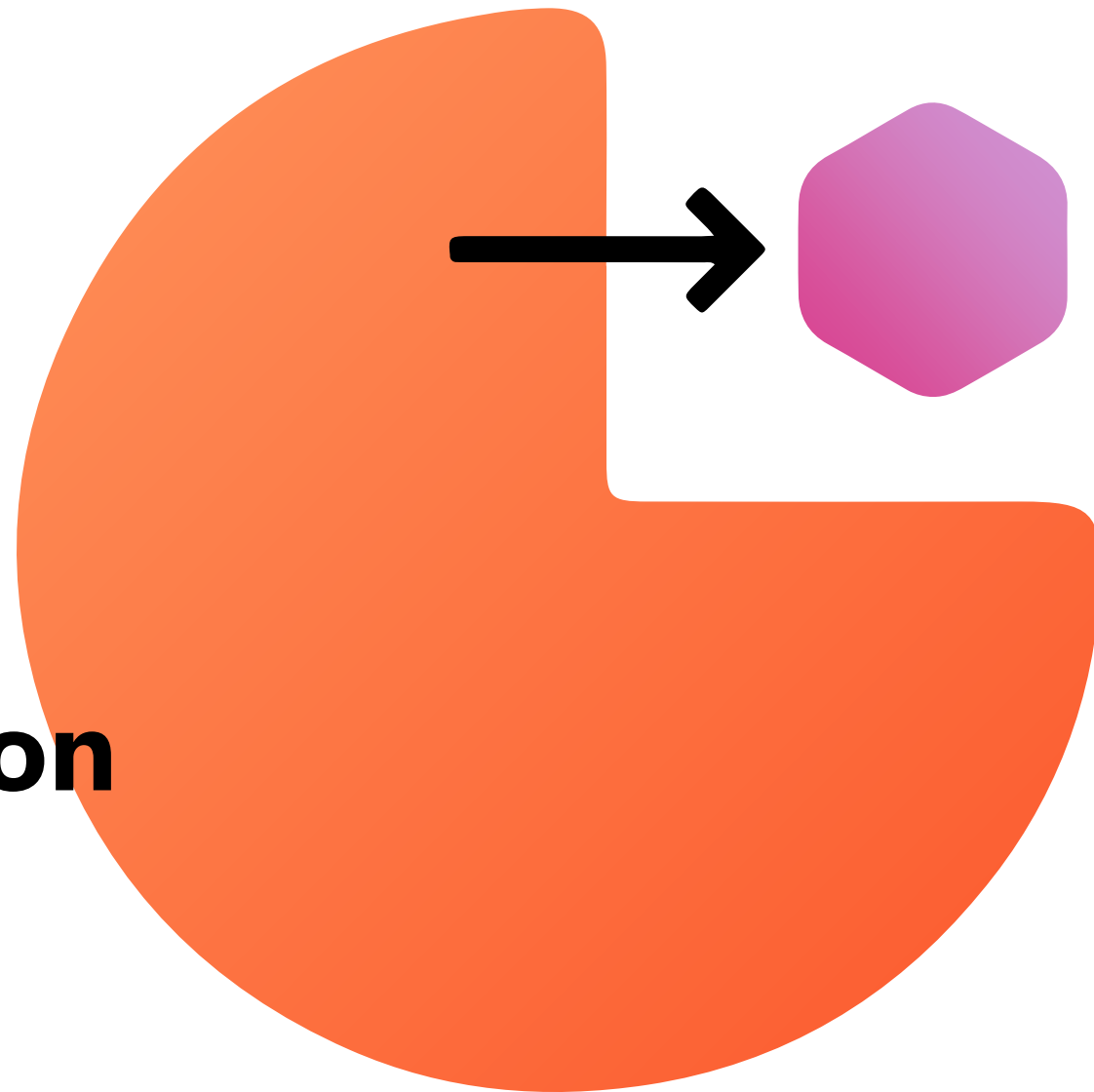
Partners:



Efficiency First – or later?

EED III Implementation

26. November 2025



Situation in the efficiency sector continues to deteriorate: layoffs, partial plant closures. Investment backlog driven by political irritations.

Continued alarming feedback by EE companies:

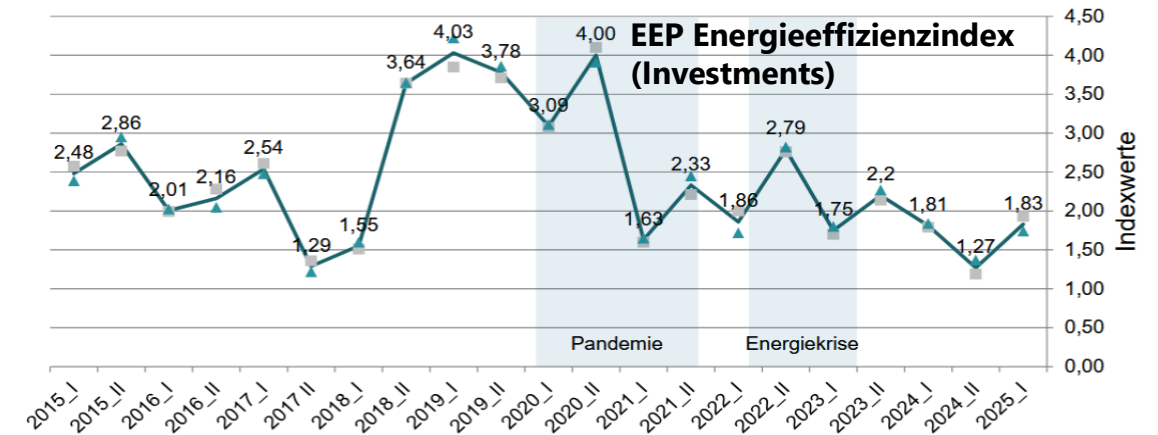
Industry: Market reluctance. Announcements about weakening EE Act slowing down EnMS uptake.

Buildings: Renovation rate at a historic low. Increasing reports of layoffs and plant closures.

Energy services: Existing contracts remain stable, but hardly new projects/investments due to framework conditions

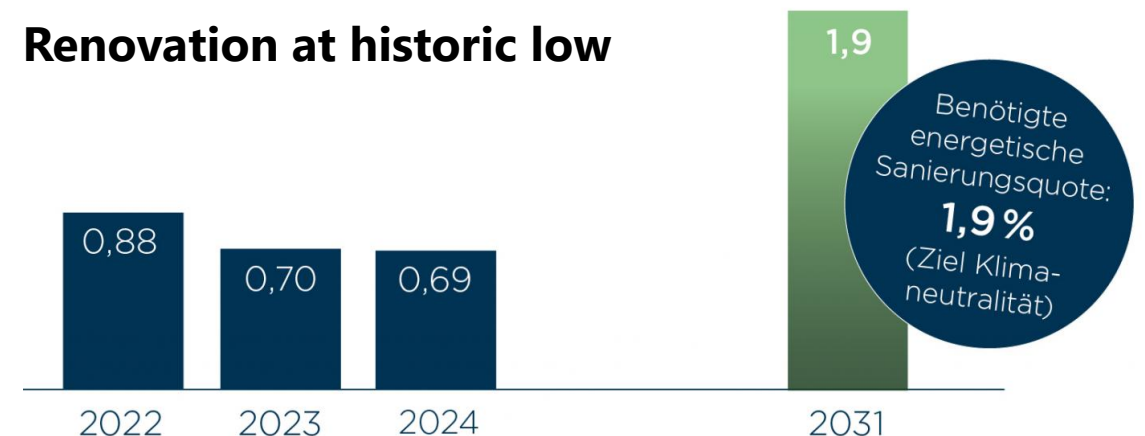
General conclusion: High energy prices act more as a barrier than a driver.

Suspension/delay of ETS II sending the wrong signal to the market.

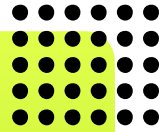


© EEP Energieeffizienz-Index – Sommererhebung 2024

Renovation at historic low



DENEFF is Germany's strong voice for energy efficiency and a knowledge hub for climate action in practice

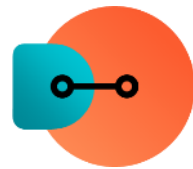


Together, we are driving the **energy transition** and the **market** for the saved kilowatt-hour forward – through effective policy work, a **strong network** across the entire value chain, and successful innovation projects.



Policy

Political advocacy, policy proposals, and up-to-date information on relevant political developments



Network

Over 250 frontrunner companies – from technology providers to financiers



Innovation

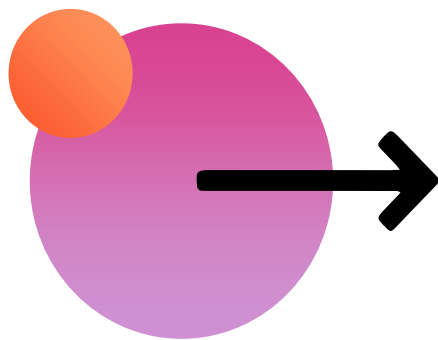
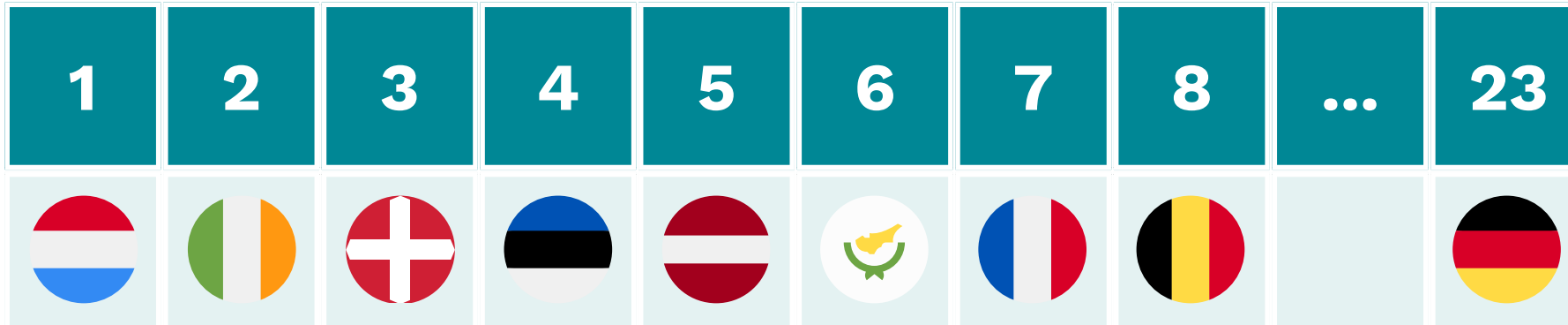
Development of innovative solutions and tools in times of major transformation challenges



Almost 1 million people work in the energy efficiency sector. In building renovation alone, there are **600,000** jobs.

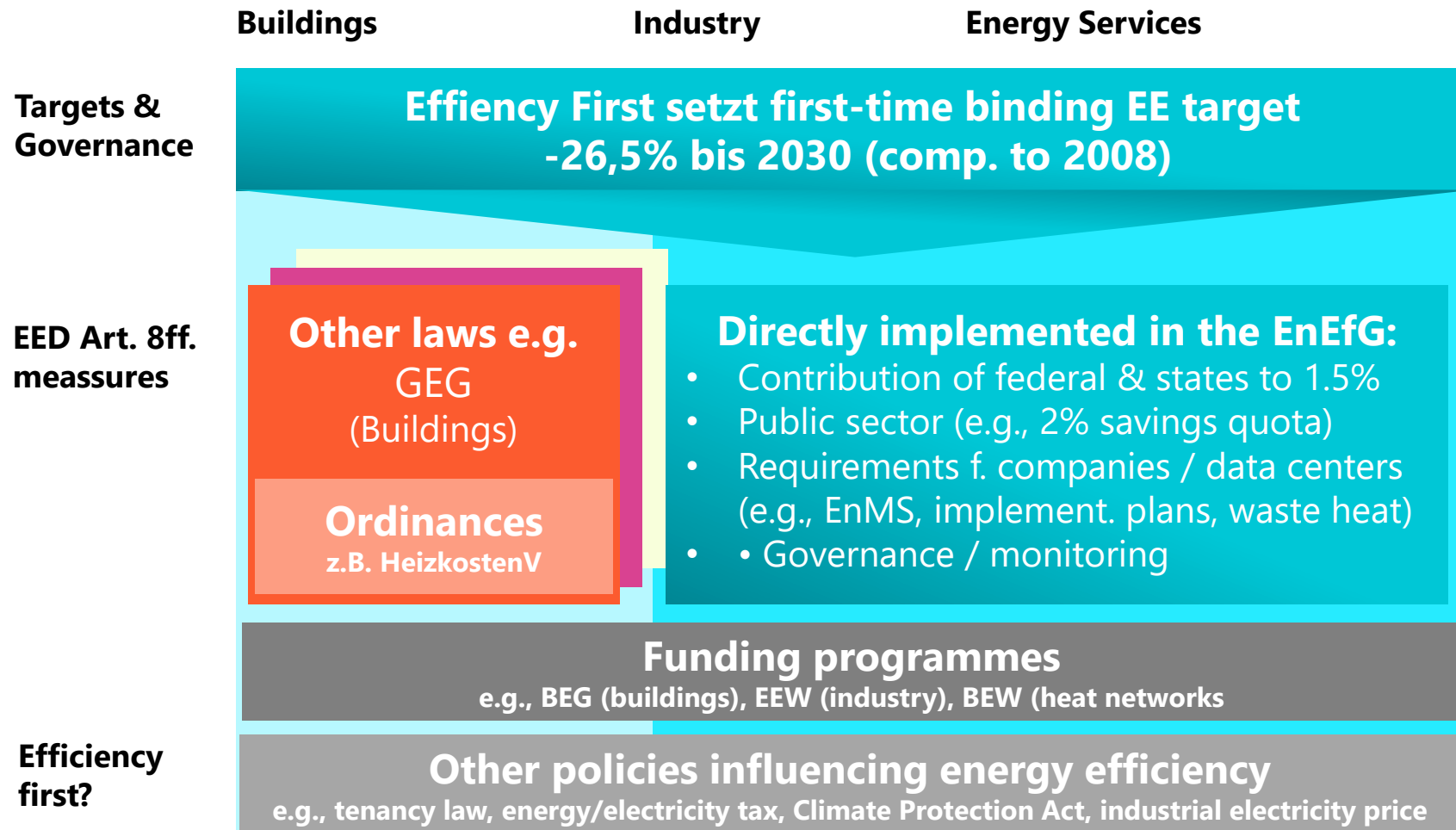
German industry is currently losing an important part of its competitiveness.

ODYSSEE-MURE
Projekt



- While Germany once played a pioneering role in energy efficiency, it is now facing a **modernization backlog**.
- Many countries that were traditionally seen as less efficient have now overtaken Germany.
- Germany **now ranks in the bottom 23rd place** among EU countries in the category of energy-efficiency progress, according to the European Energy Scoreboard.
- Industrial policy impulses can reverse this trend.

German Energy Efficiency Act anchors EU targets nationally and requires further measures (that must go beyond minimum requirements)



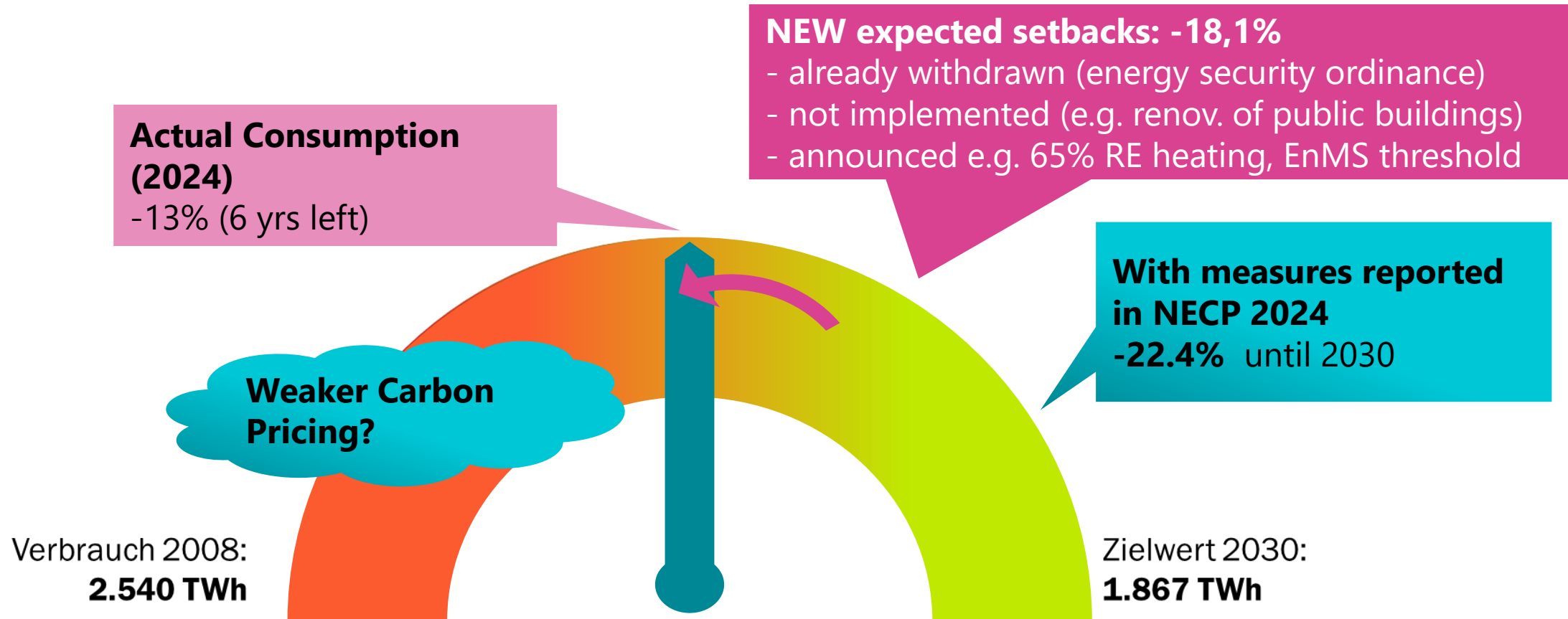
Nov. 2023: First overarching legal framework on EE

Strategic measures count toward Art. 8 if they go beyond EU law, e.g.

- higher thresholds for EnMS (7.5 instead of 23 GWh)
- Requirements for data centers & waste heat

... and also count outside the EnEFG.

No “gold-plating” but underachievement: Ongoing debates to dilute EE policies risk missing the EE Art. 8 savings requirement (1,5%) by half.



Develop the EE act further: Implement EU rules 1:1 by defending standards, simplify reporting and unlocking the EE market

Situation

- High energy prices & import dependence continue to burden industry
- Investments in efficiency are declining; the efficiency sector (1M jobs in GER) under pressure
- Announced rollbacks in EnEg/GEG deepen the investment backlog
- Full 1:1 transposition of the EU Energy Efficiency Directive (EED) remains pending

DENEFF Recommendations

1. Implement EU 1:1 law by achieving targets

- **No weakening:** avoids infringement risks & higher long-term costs
- **“Efficiency First”:** introduce efficiency & flexibility auctions parallel to power plant auctions
- **Public buildings:** comply with 3% annual renovation rate, launch investment push

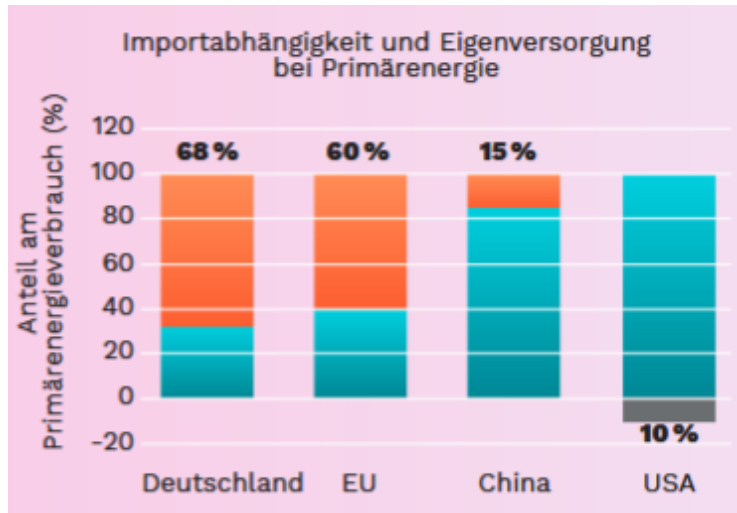
2. Cut bureaucracy but protect energy-management standards

- **Streamline reporting** (once-only principle / “Energie-Elster”)
- **Make EnMS requirements more practical:** allow UMS with energy module; temporary ISO 50005 option (introduction); exemptions for special cases (e.g. transport)
- **Focus waste heat register** on marketplace function, include urban heat sources

3. Strengthen the energy-efficiency market

- **Equal treatment** of energy services (funding and regulation)
- Introduce a **market-based incentive system** (MEAS)
- **Link energy price relief to efficiency** measures: (re)new agreement between German industry and the federal government

More than just a missed target: Sovereignty, security of supply, and affordability are at risk. Therefore: Build on earlier successes!



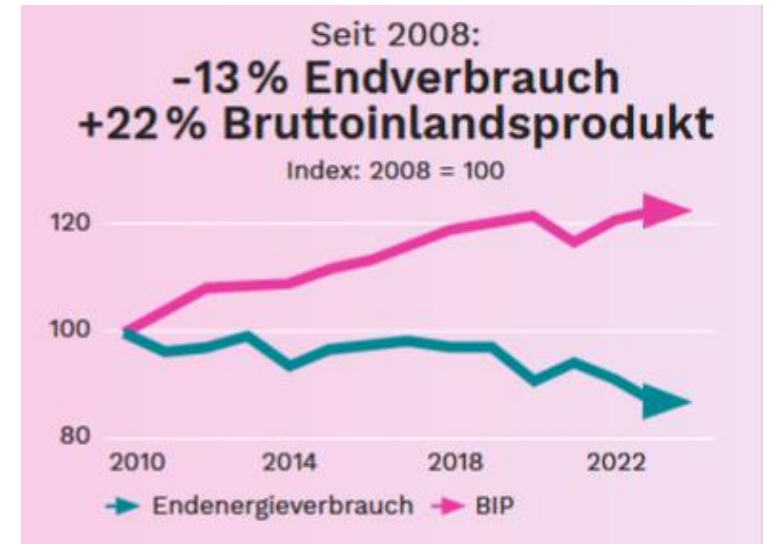
Ohne Gebäudesanierung:

200 Gaskraftwerke
à 500MW bzw. fast Verdopplung
der Spitzenlast, allein für
Heizen und Warmwasser



Bei Vernachlässigung von Energieeffizienz in der Industrie:

8 zusätzliche
Großkraftwerke
plus
4 LNG-Terminals



Germany imports over two-thirds of its mainly fossil energy demand

- Energy Dependence Day: 27 April
- High geopolitical vulnerability

Efficiency reduces system costs

- Electrification without building renovation means roughly doubling peak load
- Efficiency in industry can save >20 bn EUR in energy costs p.a. – economically beneficial

Energy efficiency works!

- Without EE progress, consumption would be significantly higher
- Decoupling consumption / growth
- But recently, declining energy productivity

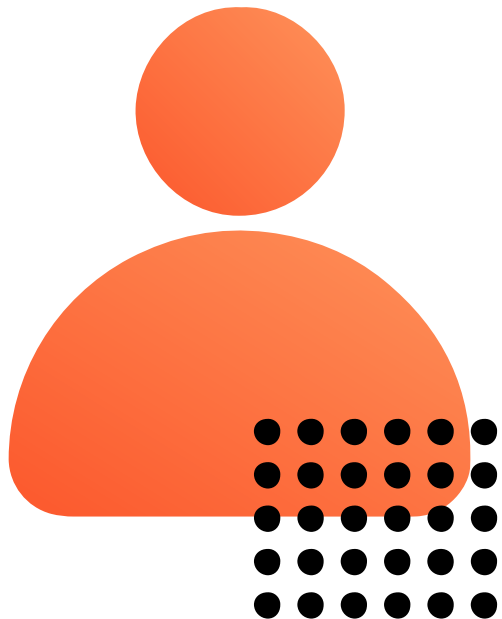
Some ideas and wishes: Closing the gap, boosting the economy.

- **Tender the gap to the market:**
Implement 1.5 % (-x) competitively (MEAS)
- **One GW in, one (or two) out (negawatts):**
Parallel tendering instead of building new power plants (*efficiency first*)
- **A new deal with industry:**
Link energy price subsidies again to a clear commitment to energy efficiency progress or even: Opportunity Sharing Obligation (*those who do not implement themselves make potentials available via a protected platform*)



Question? Looking forward!

Deutsche Unternehmensinitiative
Energieeffizienz e.V. [DENEFF]
Alt Moabit 103 · 10559 Berlin



Christian Noll

Geschäftsführender Vorstand

christian.noll@deneff.org

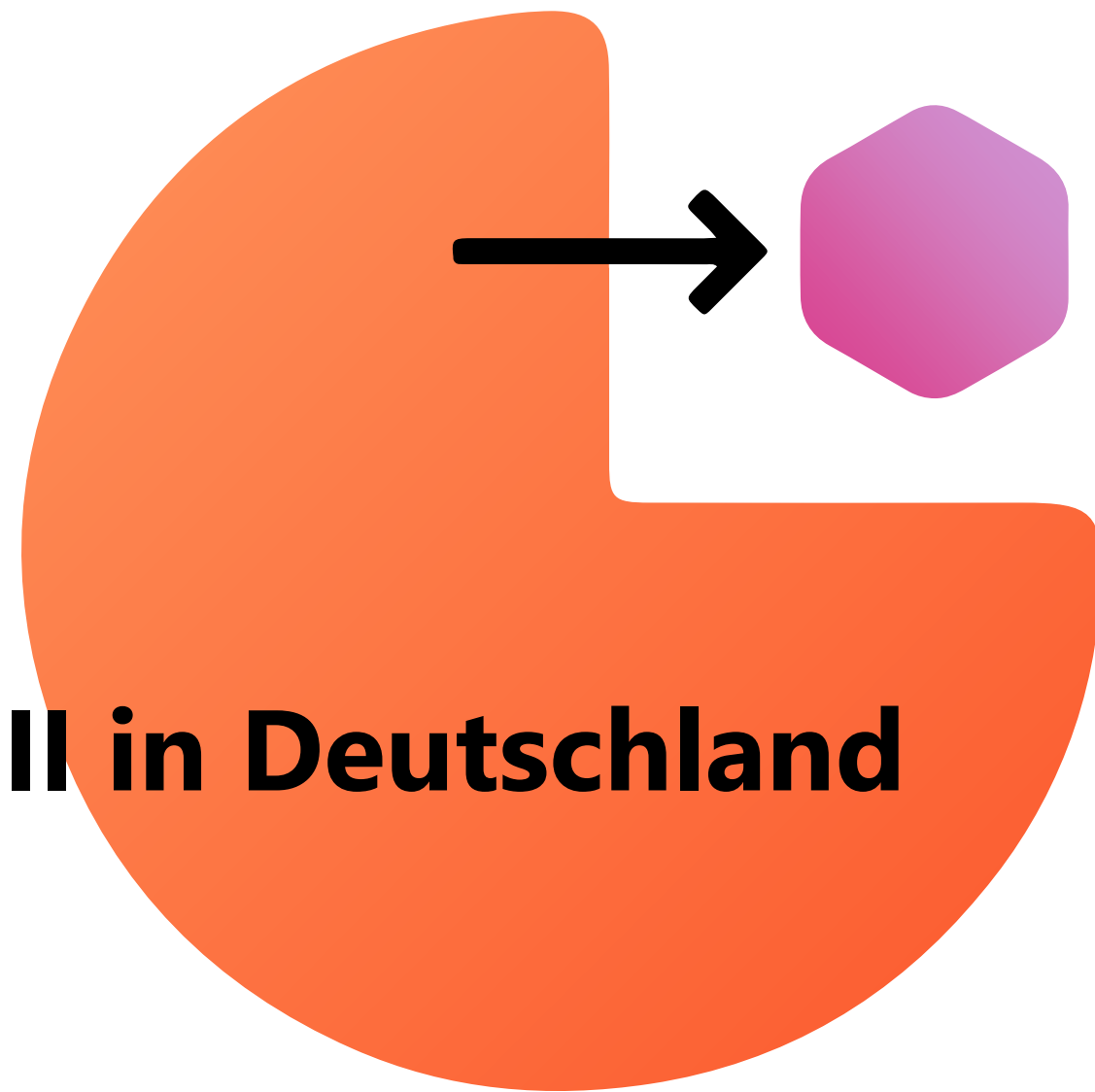


VERSION IN GERMAN

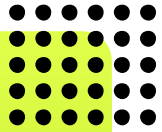
Perspektive der Energieeffizienzbranche

Umsetzung der EED III in Deutschland

26. November 2025



Die DENEFF ist Deutschlands starke Stimme der Energieeffizienz und Wissenspool für Klimaschutzpraxis

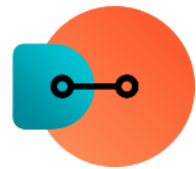


Gemeinsam bringen wir die **Energiewende** und den **Markt** für die eingesparte Kilowattstunde voran - **durch gute politische Arbeit**, ein **starkes Netzwerk** entlang der gesamten Wertschöpfungskette und **erfolgreiche Innovationsprojekte**.



Politik

Politische Willensbildung, Politikvorschläge und aktuelle Informationen über relevante politische Entwicklungen



Netzwerk

Über 250 Vorreiterunternehmen vom Technologiehersteller über Berater bis zum Finanzierer



Innovation

Entwicklung innovativer Lösungen und Tools in Zeiten großer Transformationsherausforderungen



Fast **1 Mio.** Beschäftigte arbeiten in der Energieeffizienzbranche. Allein im Bereich der Gebäudesanierung sind es **600 Tsd.**

Situation in der Effizienzbranche verschärft sich weiter: Freistellungen, Kurzarbeit, tlw. Werksschließungen. Investitionsstau politisch bedingt.

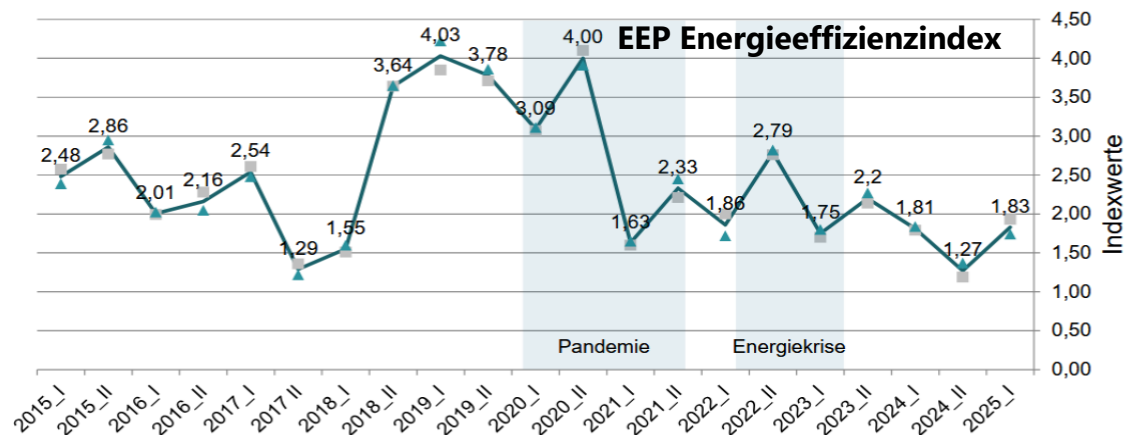
Weiterhin besorgniserregende Rückmeldungen:

Industrie: Zurückhaltung bei Investitionen. Ankündigungen zur Aufweichung EnEfG bremsen Energiemanagementsysteme.

Gebäude: Sanierungsrate auf historischem Tiefstand. Mehr Meldungen über Freistellungen und Werksschließungen.

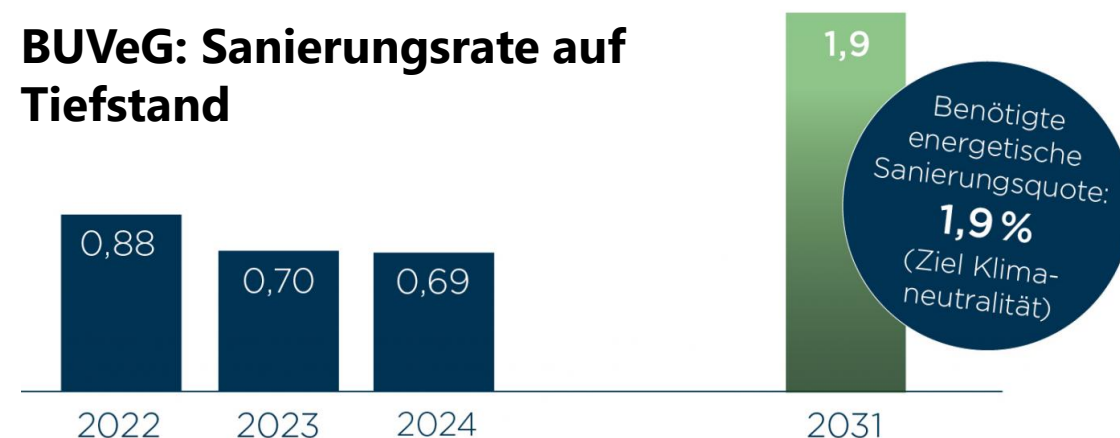
Energiedienstleistungen: Bestehende Energielieferungen stabil, aber kaum neue Projekte / Investitionen, u.a. da Umstellung auf EE-Wärme schwierig durch Rahmenbedingungen (WärmeLV Vergleich zu historischen Energiepreisen)

Allgemeine Feststellung: Hohe Energiepreise eher Hemmnis als Treiber. Aussetzen/Verzögerung bei ETS II falsches Signal an den Markt.



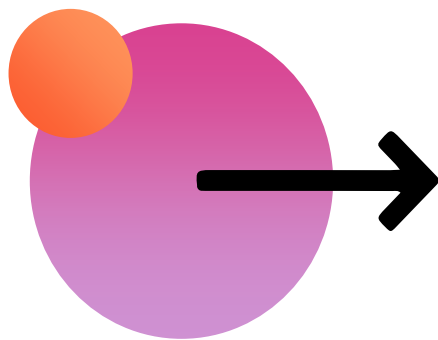
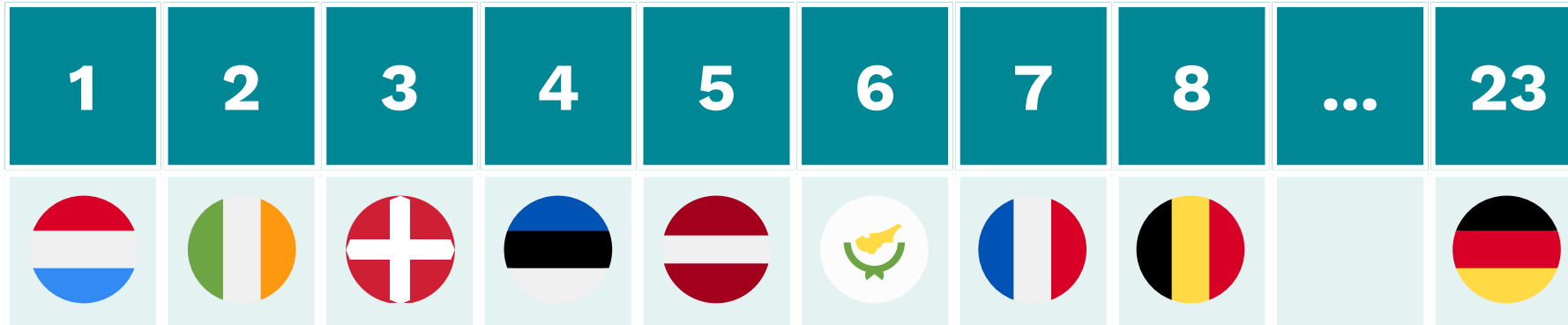
© EEP Energieeffizienz-Index – Sommererhebung 2024

BUVeG: Sanierungsrate auf Tiefstand



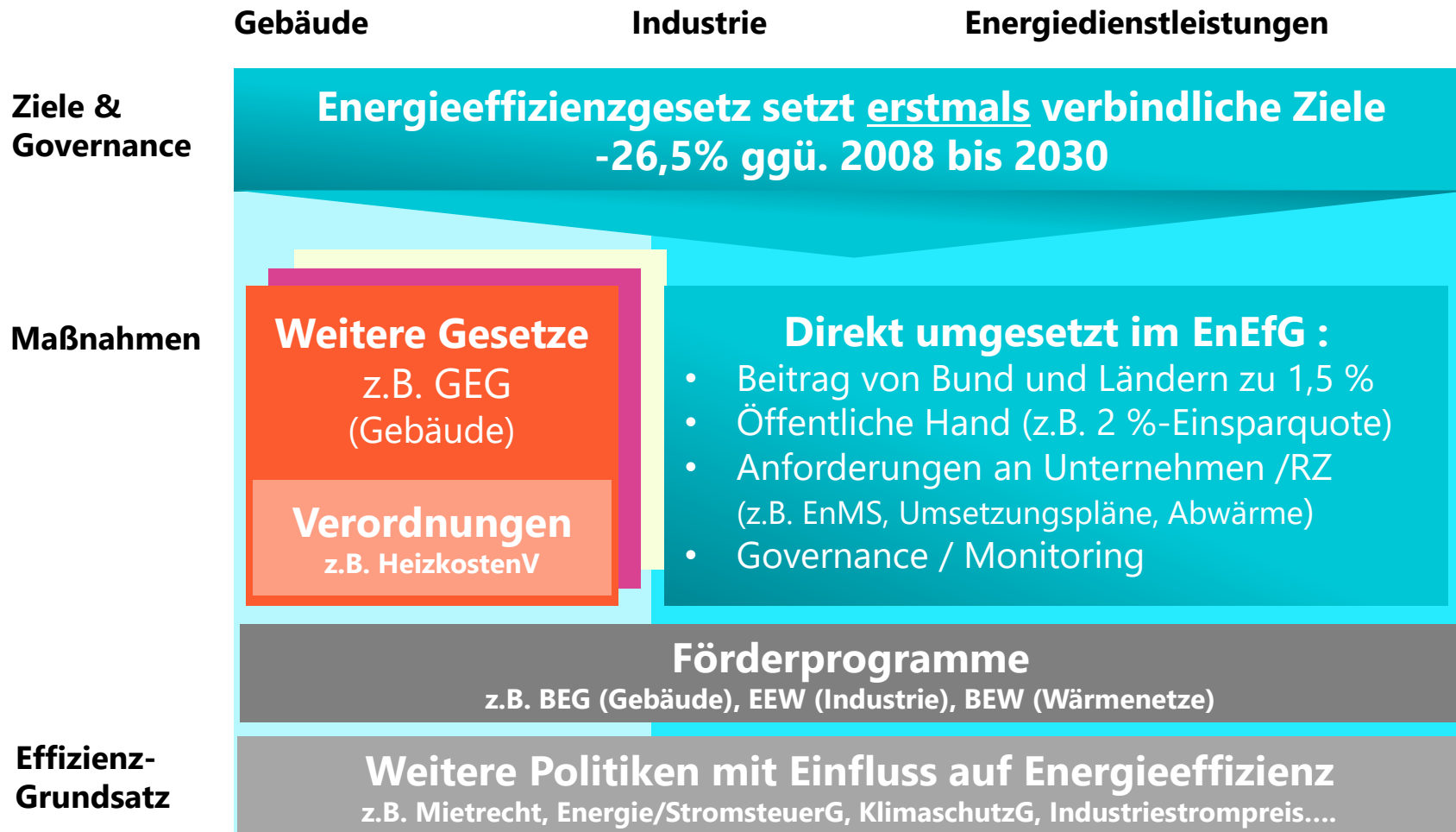
Nicht abhängen lassen: Die deutsche Industrie verspielt gerade einen wichtigen Teil ihrer Wettbewerbsfähigkeit.

ODYSSEE-MURE
Projekt



- Während Deutschland früher eine Vorreiterrolle bei der Energieeffizienz eingenommen hat, besteht heute **Modernisierungstau**.
- Viele Länder, die traditionell als weniger effizient galten, haben **Deutschland inzwischen überholt**.
- Nun belegt sie den letzten **23. Platz** unter den EU-Ländern in der Kategorie Energieeffizienz-Fortschritt laut European Energy Scoreboard.
- Industriepolitische **Impulse** können den Trend umkehren.

Dt. Energieeffizienzgesetz verankert EU-Ziele national und weitergehende Maßnahmen (die über Mindestvorgaben hinausgehen müssen)



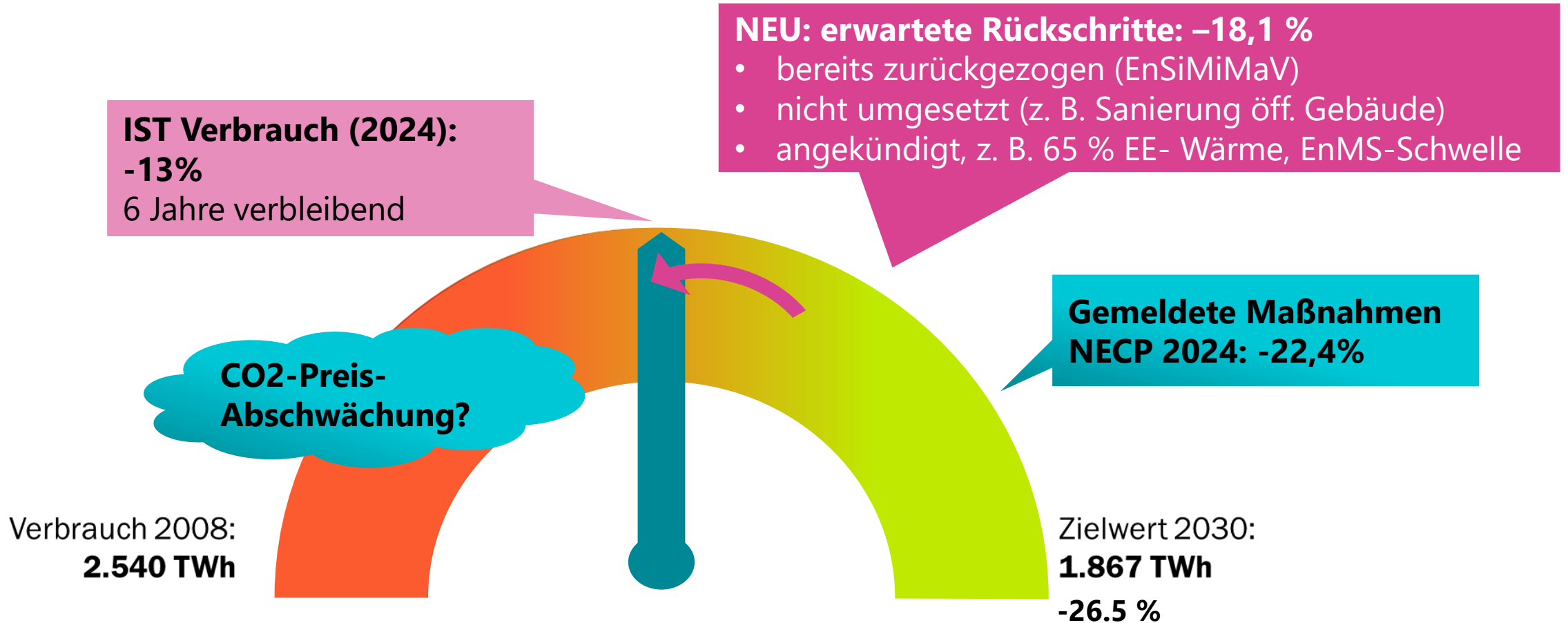
Erstmals verbindlicher Rahmen für Energieeffizienzpolitik (Nov 2023)

Strategische Maßnahmen zählen als auf Art 8. ein...
...sofern wenn sie über EU-Recht hinausgehen, z.B.

- Höhere Schwellen z.B. für EnMS (7,5 statt 23 GWh)
- Anforderungen an Rechenzentren & Abwärme

...und finden sich auch außerhalb des EnEFG.

Kein „Gold-Plating“ sondern Untererfüllung: Diskutierte Abschwächung der Energieeffizienzpolitik vergrößert die Art. 8 Zielverfehlung (1,5%)



EnEfG weiterentwickeln: 1:1-Umsetzung durch starke Standards für eine starke Wirtschaft, Berichtspflichten vereinfachen, Markt entfesseln

Situation

- Hohe Energiepreise & Importabhängigkeit belasten die Wirtschaft, dennoch...
- ...Investitionen in Effizienz rückläufig. Effizienzbranche (1 Mio. Beschäftigte) unter Druck (Kurzarbeit, Schließungen).
- Ankündigungen zu Aufweichungen von EnEfG/GEG verstärken Investitionsstau weiter.
- 1:1-Umsetzung der EU-Energieeffizienzrichtlinie (EED) steht weiterhin aus (von Gold-Plating kann keine Rede sein).

Lösungsvorschläge der DENEFF (Grundsatzempfehlungen):

1. EU-Recht umsetzen:

Nur Zielerreichung ist 1:1-Umsetzung

- **Keine Aufweichungen!** Risiken: Vertragsverletzung, höhere Kosten
- **EU-Rechtsprinzip „Efficiency First“** parallel zu Kraftwerksausschreibungen Effizienz- und Flexibilitätsausschreibung
- **Öffentliche Gebäude:** jährliche 3%-Sanierungspflicht erfüllen, Investitionsoffensive starten

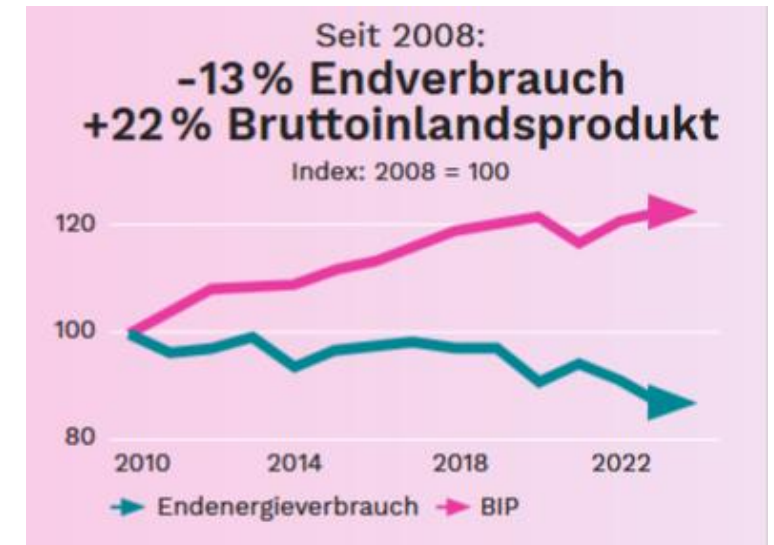
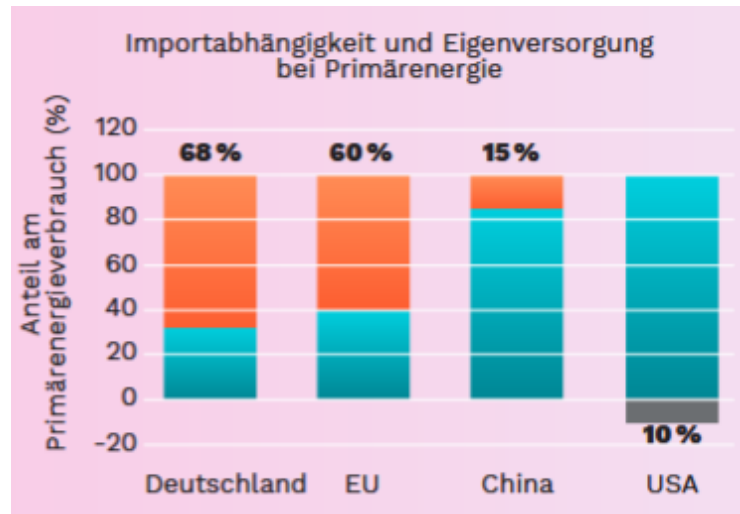
2. Bürokratie abbauen aber Energiemanagement Standards schützen

- **Berichtspflichten bündeln:** „Energie-Elster“ (Once-Only-Prinzip)
- **EnMS-Anforderungen praxistauglicher** machen: UMS mit Energieteil zulassen, bei Einführung ISO 50005 temporär zulassen, Erleichterungen für Sonderfälle
Für Umsetzung: Langjährige EnMS-Unternehmen zeitweise von Rezertifizierung befreien
- **Abwärmeregister:** Fokus Marktplatzfunktion (Berichtspflichten), urbane Wärmequellen einbeziehen

3. Energieeffizienzmarkt stärken:

- **Gleichstellung von Energiedienstleistungen** (EEW, BEW, WärmeLV)
- **Marktbasiertes Anreizsystem** (MEAS) für Energieeffizienz einführen
- **Energiepreisbeihilfen an Effizienzmaßnahmen koppeln**
EU-Beihilferecht: Industriestrompreis als Effizienzhebel nutzen
- **Neue Vereinbarung der deutschen Wirtschaft mit Bundesregierung**

Mehr als nur Zielverfehlung: Souveränität, Versorgungssicherheit und Bezahlbarkeit sind gefährdet. Jetzt an frühere Erfolge anknüpfen!



Deutschland importiert 2/3 Energie

- Tag der Energieabhängigkeit: 27. April
- Folge: Geschwächte Souveränität (Sicherheitsrisiko)

Risiko für die Versorgungssicherheit

- Ohne Gebäudesanierung Verdopplung der Spitzenlast
- Industrie könnte über 20 Mrd. EUR jährlich durch wirtschaftliche Energieeffizienzmaßnahmen sparen

Energieeffizienz funktioniert

- Ohne Effizienz wäre heutiger Verbrauch höher
- Entkopplung von Wachstum/Verbrauch
- Zuletzt: Sinkende Energieproduktivität

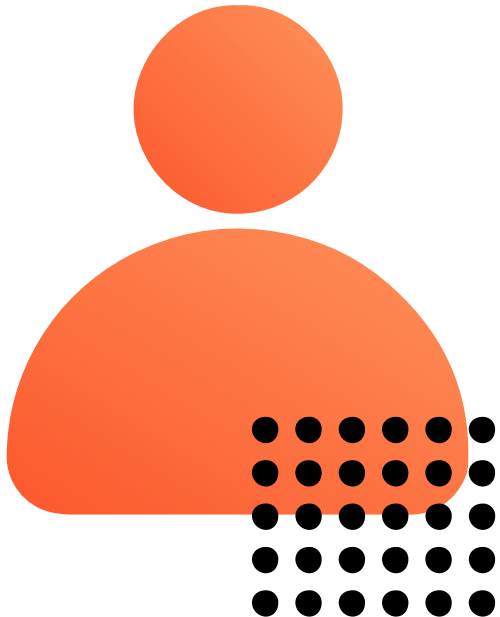
Ein paar Ideen und Wünsche: Lücke schließen, Wirtschaft voranbringen.

- **Lücke marktlich ausschreiben:**
1,5 % (-x) durch wettbew. Ausschreibungen (MEAS)
- **One GW in, one (or two) out (Negawatt):**
Parallele Ausschreibung zu Bau neuer Kraftwerke
(Efficiency first)
- **Ein neuer Deal mit der Wirtschaft:**
Energiepreissubventionen wieder an klares
Commitment zu Energieeffizienzfortschritten
knüpfen oder sogar: Opportunity Sharing Obligation
(wer nicht umsetzt, stellt Potenziale über geschützte Plattform bereit)



Neugierig? Wir freuen uns!

Deutsche Unternehmensinitiative
Energieeffizienz e.V. [DENEFF]
Alt Moabit 103 · 10559 Berlin



Christian Noll

Geschäftsführender Vorstand
christian.noll@deneff.org





The Coalition for
ENERGY SAVINGS

Energy Efficiency Delivers: Turning Policy Into Impact

The Energy Efficiency Academy 2025-2027, Opening session

26 November 2025



The Coalition of Energy Savings - Who we are

The voice of energy efficiency and energy savings in Europe.

The Coalition unites **26 members** representing a wide variety of energy savings actors: businesses, local authorities, energy agencies, energy communities and civil society organisations.

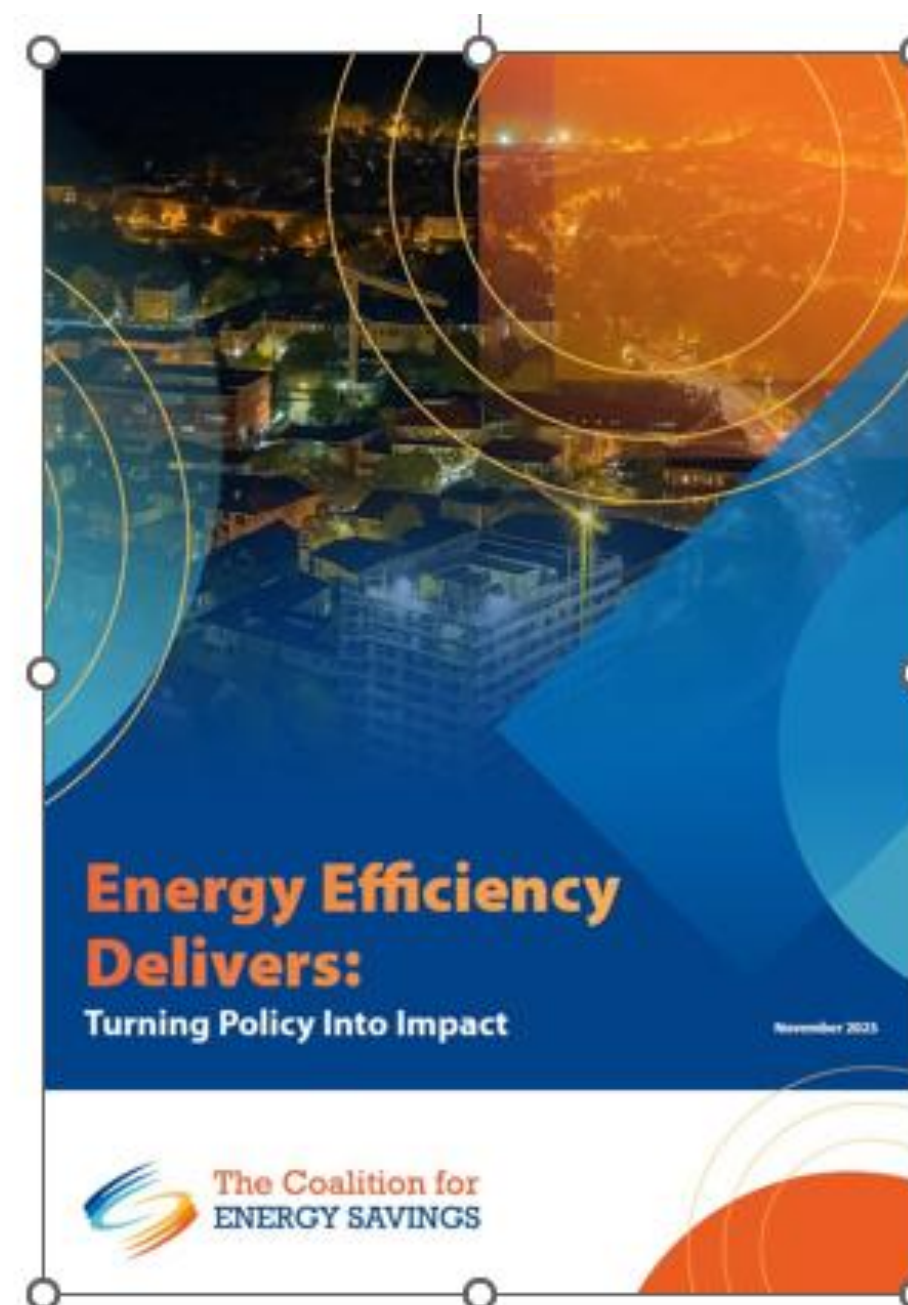


Energy Efficiency Delivers: Turning Policy Into Impact

Our new Report showcases how energy efficiency contributes to

- reducing energy costs and boosting competitiveness,
- ensuring a just and affordable energy transition, and
- fostering a secure, reliant and integrated energy system

through **16 success stories** across EU countries.

This block contains a success story from Croatia. It features the Croatian flag at the top right. The title is 'Croatia SUCCESS STORY 6 Slava Raškaj Education Center renovation project'. Below the title is a 'Description' paragraph and a 'Lesson learned' paragraph. At the bottom, there is a photograph of the renovated education center building. A small orange circle on the left side contains the text 'Articles 3 and 6 EED, and 8.1 EPBD'. The page number '12' is at the bottom right.

Energy Efficiency Delivers: Turning Policy Into Impact

The Report draws key lessons from successful case studies to:

- highlight what **strong** local, regional and national **measures to implement** energy efficiency legislation could look like;
- provide insights **on how upcoming Commission's initiatives** - Citizens Energy Package, European Affordable Housing Plan, Electrification Action Plan and the Heating & Cooling Strategy - **can build on the current efficiency acquis.**

From Practice to Progress: Lessons from the Ground for Future Action

Energy efficiency actions are already delivering benefits on the ground. While the uptake of energy efficiency measures across sectors could be faster, the new energy efficiency legislative framework is driving the widespread implementation of actions by countries, local authorities, businesses, and citizens.

The success stories we present in this report are just a few examples of how energy efficiency is progressing across the EU; they offer insights on how policies and measures at different levels can best be designed, providing inspiration to policymakers and other stakeholders alike. In particular, **the following success factors and insights can be highlighted and leveraged to both further support the implementation of the EED and to inform the effective preparation of several upcoming initiatives**, such as the Citizens Energy Package, Affordable Housing Plan, Electrification Action plan, Heating & Cooling Strategy and Data Center package.

Lessons learned and recommendations to accelerate energy efficiency action

SUCCESS STORIES 3 AND 15

Set a clear long-term framework for increasing energy efficiency:

Strong and robust regulation offers clarity to all actors, from businesses to local authorities and citizens, about the expected efficiency improvements and the timeline to achieve them. The positive signal given by clear and forward-looking regulation stimulates demand, unlocks investments in energy efficiency to boost manufacturing capacity and skills development.

How to translate this into upcoming EU initiatives?

At EU level, the EED and EPBD grant a long-term perspective to all actors, leading to the adoption of new energy efficiency measures by Member States. The stability of the energy efficiency legal framework to 2030, as well as its continuation to 2040 including with EU binding targets, is crucial to ensure businesses mobilise investments and skills to deliver energy efficiency solutions. In that context, any simplification agenda should be carefully balanced against the risk of negatively interfering with the implementation of the efficiency legal framework and jeopardising the regulatory certainty that it has created for businesses and investors.



Reducing energy costs and boosting competitiveness



Italy

SUCCESS STORY 2

Regional energy agency supporting SMEs on energy efficiency uptake

The energy agency of the Italian Region of Friuli Venezia Giulia has developed a [comprehensive process](#) to accompany companies in their energy transition, combining energy audits, support for reviewing proposals for the supply of goods and services in the field of energy efficiency, data analysis and monitoring of energy flows. With this help, a furniture-manufacturing SME took measures to improve energy efficiency starting from 2016, including by consistently monitoring its energy use with digital systems, replacing its compressor with a new one with inverter technology and switching to LED lighting.


In 2024, the efficiency upgrades have reduced the company's energy consumption by 30% compared to 2016,¹⁴ while the SME has maintained the same level of industrial production. This reduction of energy use in the production process has also allowed the company to benefit from the maximum tax credit under the Italian scheme [Transizione 5.0](#) which support companies with tax credits on investment aiming at reducing energy consumption.

Lessons learned: This measure demonstrates that a structured policy framework, in which local support measures for businesses are aligned with national incentives, helps companies to identify and adopt economically valuable energy efficiency actions, maximising cost savings and increasing competitiveness.

¹⁴ The EUSM Energy Award goes to a Friulan company - Friuli Venezia Giulia Energy Agency

7

- The energy agency of Friuli Venezia Giulia has a comprehensive process to accompany businesses in the energy transition.
- With this guidance, a furniture-manufacturing SME has implemented EE measures leading to a reduction of **energy consumption by 30%, while maintaining the same production levels**, and enabling the company to **access the maximum tax credit** under Italy's Transizione 5.0 scheme for investments that cut energy use.



Lessons learned: a structured policy framework, in which local support measures for businesses are aligned with national incentives, helps companies to identify and adopt economically valuable energy efficiency actions, maximising cost savings and increasing competitiveness

Fostering a secure and resilient energy system



Poland

SUCCESS STORY 14

The Clean Air Programme

Article 8.1 EED

In 2018, Poland started the Clean Air Programme,³⁸ a national financial scheme to support building renovations designed for owners of single-family residential buildings, including the replacement of old fossil-fuel based heating devices into modern and decarbonised electric heating technologies, including heat pumps, with €22bn earmarked for the programme. The initiative involved about over 2,000 local communities. In early 2025, the next phase of the programme was presented³⁹ with new elements, including with subsidies up to 100% for the poorest, mandatory confirmation of the energy performance of the building before and after the investment, via an energy audit, and the end of subsidies for gas boilers.

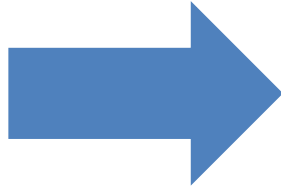
The Clean Air Programme is reported by Poland under the Energy Savings Obligation in the EED. According to estimations from the ENSMOV+ project,⁴⁰ the programme could reach cumulative savings of about 11,000–12,000 ktoe over the 2021–2030 period, which would amount of about 25% of the Polish Energy Savings Obligation.

Lessons learned: By taking a holistic approach to building renovation, combining thermal insulation and the replacement of old heating systems, the Polish Clean Air Programme shows how the Energy Savings Obligation under the EED can be used to support electrification and decarbonisation of heating systems, together with building insulation.

³⁸ Poland's Clean Air Programme – Policies – EA
³⁹ Clean air 2025. Conditions and rules in the new program of the program – Polish News
⁴⁰ Factsheet (unpublished), ENSMOV+ project.

21

- Poland's Clean Air Programme supports **renovations in single-family homes and the replacement of old fossil-fuel heating**, including with heat pumps. The new phase includes grants up to 100% for the poorest and the **end of subsidies for gas boilers**.
- It is one of the measures used by Poland to comply with the Energy Savings Obligation in the EED (it would amount to about **25% of the Polish Energy Savings Obligation** scheme according to ENSMOV+ project).



Lessons learned: By taking a holistic approach to building renovation, combining thermal insulation and the replacement of old heating systems, the Polish Clean Air Programme shows how the Energy Savings Obligation under the EED can be used to **support electrification, decarbonisation of heating systems, together with building insulation**.



Final Takeaways

The uptake of energy efficiency measures must accelerate, but the **existing framework has started driving the adoption of actions** by countries, local authorities, businesses, and citizens.

Efforts must be increased to ensure that **implementation** not only follows its course, but that it **is strongly prioritised** through political commitment and resources.

When shaping rules for the next decade, the EU must build on the existing legislative framework **preserving what has worked and has delivered results.**



Thank you !

arianna.vitali@energycoalition.eu