The European Energy Efficiency Scoreboard 2024

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Key questions

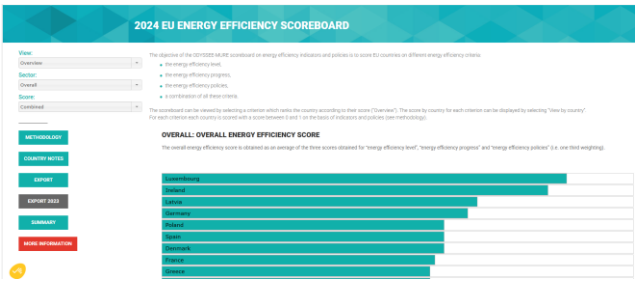
- **How is my country performing with respect to energy efficiency in the 2024 Energy Efficiency Scoreboard?**
- **How does the 2024 edition of the European Energy Efficiency Scoreboard compare to the 2023 edition?**

The European Energy Efficiency Scoreboard assesses the energy efficiency performance of EU Member States across sectors, based on the ODYSSEE-MURE databases. The scores are based on three main criteria for each country: energy efficiency level reached, energy efficiency progress and the impacts of energy efficiency policies. This policy brief presents the 2024 edition of the Scoreboard, which includes the latest energy efficiency data and policy impacts, with an emphasis on a comparison between the 2024 and 2023 edition of the Scoreboard.

Introduction

The European Energy Efficiency Scoreboard[1] (see Figure 1) was created under the ODYSSEE-MURE project (www.odyssee-mure.eu) with the objective to show how European Member States perform with respect to their energy efficiency (EE) status, trends and policies.

Figure 1: ODYSSEE-MURE Energy Efficiency Scoreboard



Source: *European Energy Efficiency Scoreboard 2024*

The Scoreboard is disseminated jointly with the European Council for an Energy Efficient Economy eceee (www.eceee.org).

In early 2024 the ODYSSEE-MURE project published the 2023 European Energy Efficiency Scoreboard. It was presented to a broader public in the frame of the ODYSSEE-MURE webinar series[2] and described in a related policy brief[3].

Recall: How the European Energy Efficiency Scoreboard is calculated

The European Energy Efficiency Scoreboard is a **benchmarking tool** to compare the impacts of EE policies and developments among European countries. It is intended to paint a well-rounded picture of how a country is performing with respect to energy efficiency, relative to its peers in Europe. It is **the first EE scoreboard to account for quantitative impacts of policies** (**output-based scoring**). It thus looks at how policies are implemented. It accounts for several decades of statistical data as well as

[1] https://www.odyssee-mure.eu/data-tools/scoring-efficiency-countries.html

[2] https://help.leonardo-energy.org/hc/en-us/articles/12329995772828--EEA05-The-European-Energy-Efficiency-Scoreboard-2023

[3] https://www.odyssee-mure.eu/publications/policy-brief/eu-efficiency-scoreboard.html

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assessments of future impacts of adopted and planned EE programmes.

The scores are based on data from the **ODYSSEE database on energy efficiency indicators** (https://www.indicators.odyssee-mure.eu/) and the **MURE database on energy efficiency policies** (https://www.measures.odyssee-mure.eu/).

This scoreboard aids in pinpointing areas where energy efficiency policies have been successful/less successful and where efforts should be intensified.

Figure 2: The ODYSSEE-MURE Scoring Methodology

Source: European Energy Efficiency Scoreboard 2024

The scores are determined by three criteria (Figure 2):

- **LEVEL:** A detailed quantitative measure of a country's current performance across major sectors and end-uses. The Level Score answers the question "*How is my country currently performing with respect to EE?*"
- **TREND:** A dynamic parameter considering past development and past actions. The "Trend" score answers the question "*How much progress has my country achieved in the area of EE?*"
- **POLICY:** Relies on ex-ante assessment (i.e. it is effectively a forecast) of energy-saving expected for 2030, stemming from recent policies from a given starting year onwards (2010), converting them into a quantitative score. The Policy Score answers the question "*What future impacts can I expect from recent policies enacted in my country?*"

All three criteria are equally weighted. Policy scores reflect expected savings by 2030, hence are commitments for the future. Achieved policy impacts are incorporated into present levels and trends from 2010 to 2021.

The scoring for levels and trends is based on indicators adjusted to national circumstances, mainly physical indicators for energy efficiency.

Policy scores are based on impacts gathered in the MURE Database by National Teams participating in the project from each Member State. Such impacts are assessed through quantitative and semi-quantitative impact evaluations of EE measures, either from assessments of the project teams, or from the reporting obligations under the National Energy and Climate Plans (NECPs) and under Article 8 of the EED on energy saving obligations.

For each sector, the scores are then normalised to the best country by criterion and combined finally in an overall score.

Analysis of changes between the European EE Scoreboard (SB) 2024 compared to 2023

comparison between the European EE Scoreboard (SB) 2024 compared to 2023.

Table 1 shows the comparison between the European EE Scoreboard (SB) 2024 compared to 2023.

*Table 1: Comparison of the **overall ranking** in the European Energy Efficiency Scoreboards 2024 and 2023*

Ranking	Overall	Scoreboard 2024	Scoreboard 2023	
1	Luxembourg	0,843	Luxembourg	0,856
2	Ireland	0,800	Germany	0,683
3	Latvia	0,646	France	0,626
4	Germany	0,631	Latvia	0,613
5	Poland	0,583	Denmark	0,602
6	Spain	0,582	Greece	0,591
7	Denmark	0,578	Spain	0,580
8	France	0,561	Estonia	0,542
9	Greece	0,551	Slovenia	0,510
10	Estonia	0,546	Netherlands	0,505
11	Cyprus	0,531	Cyprus	0,504
12	Bulgaria	0,514	Romania	0,486
13	Lithuania	0,511	Poland	0,485
14	Slovenia	0,508	Ireland	0,476
15	Netherlands	0,503	Hungary	0,468
16	Romania	0,488	Czech Republic	0,456
17	Czech Republic	0,467	Portugal	0,430
18	Portugal	0,455	Lithuania	0,420
19	Hungary	0,444	Sweden	0,411
20	Italy	0,414	Slovakia	0,407
21	Sweden	0,408	Austria	0,406
22	Slovakia	0,403	Italy	0,400
23	Austria	0,372	Blulgaria	0,371
24	Finland	0,368	Finland	0,361
25	Belgium	0,347	Belgium	0,330
26	Croatia	0,325	Croatia	0,278
27	Malta	0,146	Malta	0,257

Source: *European Energy Efficiency Scoreboard 2024 and 2023*

The comparison is made with a colour scheme:

- Green colour: the country has gained more than two places in the 2024 edition compared to the 2023 edition.
- Light green colour: the change in the country's position is at maximum 2 steps upwards in the Scoreboard between 2023 and 2024.
- Yellow colour: the country's position is unchanged between 2023 and 2024.
- Light brown colour: the change in the country's position is at maximum 2 steps downwards in the Scoreboard between 2023 and 2024.
- Red colour: the country has lost more than two positions in the scoreboard in 2024 compared to 2023.

A larger number of countries have kept their position (6 countries) or changed it moderately up- (3 countries) or downwards (7 countries). This shows that the scoreboard methodology is reaching maturity.

4 countries have substantially improved their position in the scoreboard, while 6 countries lost a substantial amount of steps in the scoring.

A deeper view to individual components (levels, trends, policies) and sectors in the scoreboard

The following tables show the three individual components (levels, trends, policies) as well as two exemplary sectors in the scoreboard (residential sector and industry):

- *EE Levels:* In the case of Greece and Netherlands the loss in position of the overall scoreboard is related to the level observed (see Table 2).
- *EE Trends:* In Greece, Hungary, Netherlands and Slovenia the loss in position of the overall scoreboard is related to the trend development. Trends have contributed positively to the position of France and compensated partly its losses in position in the overall scoreboard (see Table 3).
- *EE Policies:* Lack in the impacts of EE policies have negatively contributed to the position of France in the overall scoreboard (see Table 4).
- *Sectoral scoreboards:* Sweden and France have notably lost positions in the residential scoreboard (see Table 5) while EE in the industry scoreboard (Table 6) affected countries such as Romania, Finland and the Netherlands in the overall scoreboard.

*Table 2: Comparison of the **level ranking** in the European Energy Efficiency Scoreboards 2024 and 2023*

Ranking	SB24-Level		SB23-Level	
1	Lithuania	1,000	Denmark	1,000
2	Latvia	0,869	Lithuania	0,964
3	Greece	0,830	Slovenia	0,875
4	Denmark	0,808	Greece	0,864
5	Slovenia	0,807	France	0,860
6	France	0,801	Latvia	0,857
7	Sweden	0,787	Spain	0,850
8	Germany	0,773	Germany	0,846
9	Estonia	0,772	Sweden	0,839
10	Ireland	0,758	Romania	0,838
11	Netherlands	0,747	Slovakia	0,827
12	Spain	0,741	Austria	0,821
13	Slovakia	0,737	Netherlands	0,781
14	Italy	0,731	Italy	0,762
15	Austria	0,679	Estonia	0,726
16	Portugal	0,666	Portugal	0,699
17	Hungary	0,644	Hungary	0,661
18	Romania	0,610	Poland	0,594
19	Poland	0,570	Ireland	0,573
20	Czech Republic	0,552	Luxembourg	0,569
21	Luxemburg	0,530	Bulgaria	0,538
22	Bulgaria	0,513	Czech Republic	0,508
23	Malta	0,401	Finland	0,492
24	Belgium	0,398	Belgium	0,370
25	Finland	0,361	Malta	0,283
26	Croatia	0,120	Croatia	0,157
27	Cyprus	0,000	Cyprus	0,000

Source: *European Energy Efficiency Scoreboard 2024 and 2023*

*Table 3: Comparison of the **trends ranking** in the European Energy Efficiency Scoreboards 2024 and 2023*

Ranking	SB24-Trend		SB23-Trend	
1	Luxembourg	1,000	Luxembourg	1,000
2	Ireland	0,882	Estonia	0,809
3	Denmark	0,823	Ireland	0,736
4	Estonia	0,810	Greece	0,715
5	Latvia	0,768	Denmark	0,691
6	Cyprus	0,677	Cyprus	0,681
7	France	0,648	Hungary	0,645
8	Belgium	0,644	Latvia	0,644
9	Czech Republic	0,622	Czech Republic	0,628
10	Greece	0,610	Belgium	0,618
11	Romania	0,600	France	0,606
12	Spain	0,598	Slovenia	0,546
13	Hungary	0,595	Netherlands	0,528
14	Portugal	0,573	Spain	0,522
15	Slovenia	0,550	Portugal	0,507
16	Netherlands	0,544	Croatia	0,456
17	Lithuania	0,466	Malta	0,436
18	Poland	0,435	Sweden	0,377
19	Croatia	0,428	Poland	0,373
20	Sweden	0,420	Romania	0,356
21	Italy	0,401	Austria	0,344
22	Austria	0,390	Italy	0,325
23	Germany	0,350	Germany	0,315
24	Slovakia	0,319	Slovakia	0,256
25	Finland	0,313	Lithuania	0,233
26	Bulgaria	0,230	Finland	0,185
27	Malta	0,000	Bulgaria	0,000

Source: *European Energy Efficiency Scoreboard 2024 and 2023*

*Table 4: Comparison of the **policy ranking** in the European Energy Efficiency Scoreboards 2024 and 2023*

Ranking	SB24-Policy		SB23-Policy	
1	Luxembourg	1,000	Luxemburg	1,000
2	Cyprus	0,915	Germany	0,887
3	Bulgaria	0,799	Cyprus	0,831
4	Germany	0,771	Bulgaria	0,573
5	Ireland	0,759	Poland	0,489
6	Poland	0,743	France	0,413
7	Finland	0,432	Finland	0,407
8	Croatia	0,427	Spain	0,367
9	Spain	0,407	Latvia	0,337
10	Latvia	0,300	Romania	0,262
11	Romania	0,256	Czech Republic	0,232
12	France	0,235	Croatia	0,220
13	Czech Republic	0,228	Netherlands	0,207
14	Netherlands	0,218	Greece	0,193
15	Greece	0,213	Slovakia	0,138
16	Slovenia	0,166	Ireland	0,118
17	Slovakia	0,154	Denmark	0,114
18	Portugal	0,125	Italy	0,112
19	Italy	0,109	Slovenia	0,110
20	Denmark	0,102	Hungary	0,098
21	Hungary	0,094	Estonia	0,091
22	Lithuania	0,067	Portugal	0,086
23	Estonia	0,055	Lithuania	0,063
24	Austria	0,047	Malta	0,052
25	Malta	0,036	Austria	0,052
26	Sweden	0,017	Sweden	0,016
27	Belgium	0,000	Belgium	0,000

Source: *European Energy Efficiency Scoreboard 2024 and 2023*

*Table 5: Comparison of the **residential sector ranking** in the European Energy Efficiency Scoreboards 2024 and 2023*

Ranking	SB24-Residential		SB23-Residential	
1	Ireland	0,809	Luxembourg	0,832
2	Luxembourg	0,796	Germany	0,800
3	Germany	0,785	Netherlands	0,715
4	Netherlands	0,729	France	0,661
5	Bulgaria	0,687	Latvia	0,622
6	Latvia	0,666	Poland	0,587
7	Finland	0,644	Finland	0,587
8	Poland	0,614	Bulgaria	0,586
9	Spain	0,596	Spain	0,581
10	Denmark	0,591	Denmark	0,574
11	Czech Republic	0,566	Ireland	0,567
12	France	0,557	Sweden	0,562
13	Lithuania	0,555	Lithuania	0,551
14	Italy	0,550	Czech Republic	0,532
15	Sweden	0,535	Italy	0,528
16	Slovenia	0,532	Greece	0,519
17	Austria	0,522	Slovenia	0,503
18	Greece	0,517	Estonia	0,496
19	Romania	0,494	Austria	0,484
20	Estonia	0,485	Cyprus	0,434
21	Cyprus	0,473	Romania	0,431
22	Croatia	0,456	Hungary	0,428
23	Hungary	0,447	Croatia	0,379
24	Belgium	0,435	Belgium	0,371
25	Slovakia	0,359	Slovakia	0,349
26	Portugal	0,333	Portugal	0,310
27	Malta	0,240	Malta	0,212

Source: *European Energy Efficiency Scoreboard 2024 and 2023*

*Table 6: Comparison of the **industry sector ranking** in the European Energy Efficiency Scoreboards 2024 and 2023*

Ranking	SB24-Industry		SB23-Industry	
1	Estonia	0,683	Estonia	0,632
2	Poland	0,664	Germany	0,576
3	Lithuania	0,573	Cyprus	0,576
4	Croatia	0,531	Ireland	0,494
5	Cyprus	0,527	Romania	0,474
6	Latvia	0,498	Lithuania	0,462
7	Ireland	0,494	Poland	0,461
8	Germany	0,469	Denmark	0,448
9	Denmark	0,440	Latvia	0,430
10	Romania	0,424	Greece	0,413
11	Portugal	0,418	Croatia	0,400
12	Greece	0,411	Finland	0,394
13	Malta	0,389	Malta	0,389
14	Slovenia	0,383	Slovenia	0,374
15	Finland	0,349	Portugal	0,369
16	Spain	0,333	Italy	0,361
17	Slovakia	0,321	Czech Republic	0,359
18	Luxembourg	0,308	Luxembourg	0,331
19	Belgium	0,304	Spain	0,327
20	Czech Republic	0,303	Slovakia	0,326
21	Bulgaria	0,301	Netherlands	0,323
22	Italy	0,299	Hungary	0,314
23	Austria	0,297	Austria	0,307
24	Hungary	0,288	bel	0,299
25	Netherlands	0,282	Sweden	0,275
26	France	0,265	France	0,255
27	Sweden	0,254	Bulgaria	0,235

Source: *European Energy Efficiency Scoreboard 2024 and 2023*

Key messages

The comparison between 2024 and 2023 allows for several important conclusions:

- There is a comparatively stable development from the 2023 to the 2024 Scoreboard, showing the methodology reaches maturity.
- Most changes are small within a year, indicating a steady evolution in country positions.
- From a methodological perspective, scoring still remains a learning process and also requires strong quality control on the individual components in the scoreboard.

For further reading or information, please visit https://www.odyssee-mure.eu/ *, in particular the website of the European Energy Efficiency Scoreboard 2024 on* https://www.odyssee-mure.eu/data-tools/scoring-efficiency-countries.html*. More information on the scoring methodology can be found at* https://www.odyssee-mure.eu/php/scoreboard-combined/documents/european-energy-efficiency-scoreboard-methodology.pdf

The webinar underlying this policy brief is available https://www.youtube.com/watch?v=QTfO-e2PbW4*.*