

March 2, 2026
ENVIRONMENTAL GOODS AND SERVICES SECTOR ACCOUNTS
2020 – 2023

IN 2023, THE ENVIRONMENTAL GOODS AND SERVICES SECTOR ACCOUNTED FOR 3.8% OF GVA AND 4.5% OF NATIONAL ECONOMY EMPLOYMENT

In 2023, the environmental goods and services sector regained relevance in the Portuguese economy, representing 5.8% of production, 3.8% of Gross Value Added (GVA), 4.5% of employment and 4.3% of national exports.

Energy savings and management activities stood out (33% of the sector's GVA), driven by the growth of construction and renovation of Nearly Zero Energy Buildings (NZEB). They were followed by energy from renewable sources (17.8%) and waste management (10.5%).

In that year, Portugal ranked as the fifth Member State with the highest share of environmental goods and services exports in total national exports (8.2%).

1. INTRODUCTORY NOTE

Statistics Portugal (INE) publishes the main results of the Environmental Goods and Services Sector Accounts (EGSS) for the period 2020–2023. This new series is fully consistent with the Portuguese National Accounts based on the 2021 benchmark. In this exercise, the Classifications of Environmental Protection Activities (CEPA) and Resource Management Activities (CReMA) were replaced by a single classification of environmental purposes (CEP). It should also be noted that, following Eurostat's guidance, from 2021 onwards the EGSS began to include estimates for Nearly Zero Energy Buildings (NZEB).

On the Statistics Portugal website, in the National Accounts area (under "[Satellite Accounts](#)"), additional tables, a simplified correspondence table between CEPA/CReMA and CEP, and the updated methodological document are available.

2. MAIN RESULTS

Output, GVA, employment and exports of environmental goods and services recorded a significant recovery in 2021 and 2022 compared with 2020, the year most affected by the COVID-19 pandemic crisis. In 2023, the growth rate slowed down, although all variables still showed increases above 10%. It is important to highlight that this performance was strongly influenced by the inclusion of NZEB; excluding this contribution, the sector's growth would have been lower than that observed for the national economy across most indicators, with the exception of exports.

Table 1

MAIN RESULTS OF THE ENVIRONMENTAL GOODS AND SERVICES SECTOR ACCOUNTS

| | | 2020 | 2021 | 2022 | 2023 | Rate of change (%) | | |
|---|-----------------|----------------|----------------|----------------|----------------|--------------------|-------------|-------------|
| | | | | | | 20/21 | 21/22 | 22/23 |
| Output | | | | | | | | |
| Environmental Goods and Services | 10 ⁶ | 13,987 | 20,066 | 26,463 | 29,427 | 43.5 | 31.9 | 11.2 |
| excluding NZEB ¹ | euro | 13,987 | 17,310 | 20,753 | 20,725 | 23.8 | 19.9 | -0.1 |
| Economy | | 352,871 | 395,952 | 473,336 | 504,302 | 12.2 | 19.5 | 6.5 |
| Share in the economy | | 4.0% | 5.1% | 5.6% | 5.8% | | | |
| excluding NZEB | | 4.0% | 4.4% | 4.4% | 4.1% | | | |
| GVA | | | | | | | | |
| Environmental Goods and Services | 10 ⁶ | 5,003 | 6,626 | 8,151 | 9,067 | 32.4 | 23.0 | 11.2 |
| excluding NZEB | euro | 5,003 | 5,814 | 6,436 | 6,391 | 16.2 | 10.7 | -0.7 |
| Economy | | 175,104 | 187,361 | 211,028 | 235,589 | 7.0 | 12.6 | 11.6 |
| Share in the economy | | 2.9% | 3.5% | 3.9% | 3.8% | | | |
| excluding NZEB | | 2.9% | 3.1% | 3.1% | 2.7% | | | |
| Exports | | | | | | | | |
| Environmental Goods and Services | 10 ⁶ | 3,400 | 4,245 | 4,933 | 5,497 | 24.8 | 16.2 | 11.4 |
| Economy | euro | 74,897 | 89,950 | 120,714 | 127,486 | 20.1 | 34.2 | 5.6 |
| Share in the economy | | 4.5% | 4.7% | 4.1% | 4.3% | | | |
| Employment | | | | | | | | |
| Environmental Goods and Services | | 116,120 | 166,704 | 202,284 | 234,689 | 43.6 | 21.3 | 16.0 |
| excluding NZEB | FTE | 116,120 | 129,576 | 133,922 | 136,849 | 11.6 | 3.4 | 2.2 |
| Economy | | 4,663,482 | 4,779,270 | 5,052,060 | 5,246,411 | 2.5 | 5.7 | 3.8 |
| Share in the economy | | 2.5% | 3.5% | 4.0% | 4.5% | | | |
| excluding NZEB | | 2.5% | 2.7% | 2.7% | 2.6% | | | |

¹Nearly Zero Energy Buildings – NZEB

Note: The results for 2020, 2021 and 2022, with the exception of exports, are not comparable due to the phased inclusion of NZEB. The year 2020 does not include any information on NZEB, since the legislation that made their construction mandatory only came into force at the beginning of 2021. In 2021, NZEB are considered only from July onwards, due to the lack of information for the first half of the year.

Source: Statistics Portugal (Environmental Goods and Services Sector Accounts)



Nearly Zero Energy Buildings (NZEB)

According to Regulation (EU) 2015/2174, “low energy consumption buildings and passive buildings, and the energetic renovation of existing buildings” are considered environmental goods and services. The output associated with these activities must be accounted for in the compilation of the EGSS.

In this context, it became necessary to assess the feasibility of measuring and recording the following environmental goods and services:

- i) the energetic renovation of existing buildings, and
- ii) the construction of new passive and low-energy buildings (considered energy-efficient buildings).

The buildings considered relevant for this purpose are those classified as “nearly zero-energy buildings (NZEB)” in the national energy certification systems resulting from Directive 2010/31/EU. It should be noted that, although the terminology used in Regulation (EU) 2015/2174 — low energy consumption buildings and passive buildings — differs from that used in Directive 2010/31/EU — nearly zero-energy buildings (NZEB) — both refer to the same type of buildings.

Based on the applicable legislation (Directive 2010/31/EU) and its transposition into national law through Decree-Law No. 118/2013, all new buildings constructed in Portugal must comply, from the beginning of 2021 onwards, with energy efficiency requirements that classify them as NZEB.

In the Portuguese context and given that the NZEB label represents the highest level of energy performance within the national certification system, the information reported under the EGSS should correspond to buildings classified as NZEB.

For the purposes of EGSS compilation, the values considered correspond to the share of NZEB buildings (estimated based on the energy certification data provided by the Energy Agency — ADENE — to Statistics Portugal from 1 July 2021) applied to the aggregate values obtained from the annual National Accounts. According to Eurostat’s guidance, the total value of output (and the related employment, GVA and exports) of low-energy and passive buildings to be reported must reflect full costs.

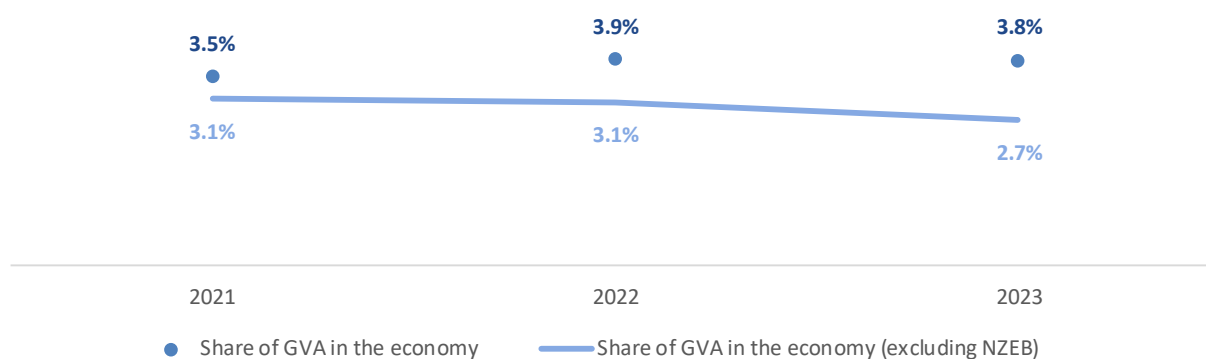
Thus, due to the introduction of this certification in mid-2021, the results that include NZEB are not comparable across 2020, 2021 and 2022 for all variables presented, with the exception of exports.

3. EVOLUTION OF GROSS VALUE ADDED (GVA)

The share of GVA of the environmental goods and services sector in the national economy's GVA decreased by 0.1 p.p. between 2022 and 2023, as it grew less than the economy as a whole (11.2% compared with 11.6%). Among the various activities, those that showed negative contributions to GVA were **energy from renewable sources** (-13.1%) and **noise and radiation** (-6.1%).

Figure 1

GVA SHARE OF THE ENVIRONMENTAL GOODS AND SERVICES SECTOR IN TOTAL ECONOMY GVA, 2021–2023

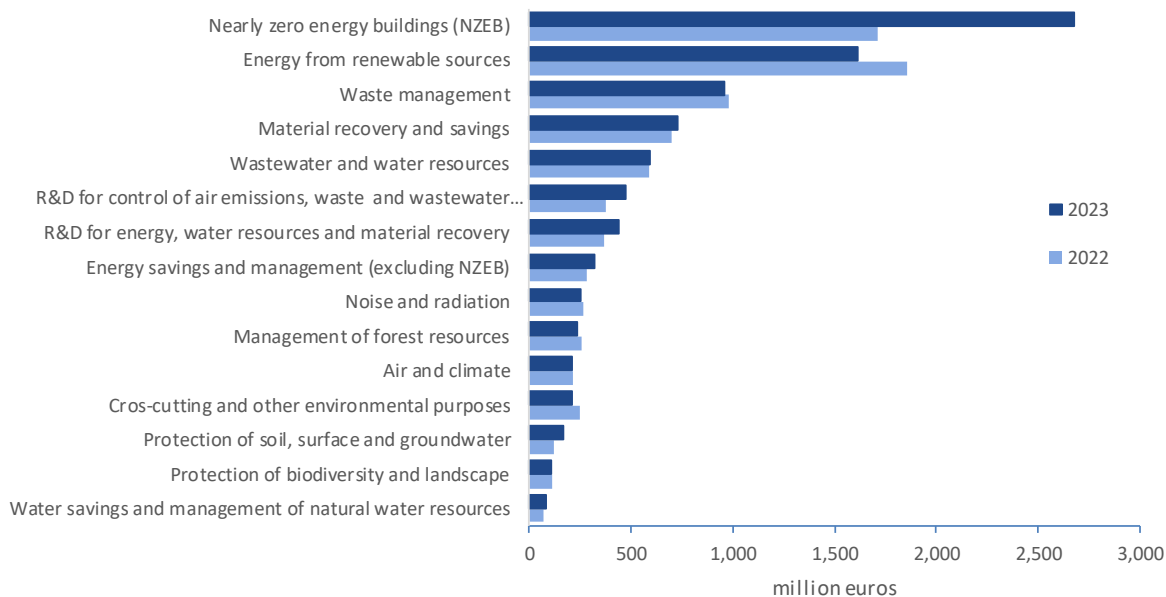


In 2023, **energy savings and management** activities stood out as the main contributors to the sector's GVA, accounting for 33.0% of the total. These activities were also those that recorded the highest growth between 2022 and 2023 (49.9%), driven by NZEB, which increased by more than 50%.

Energy from renewable sources ranked second in terms of contribution to the sector's GVA (17.8%). However, the GVA of these activities decreased between 2022 and 2023 (-13.1%), in line with the nominal reduction in output, influenced by the significant drop in energy prices. In third place were **waste management**, whose relative weight in the sector's GVA reached 10.5%.

Figure 2

GVA OF THE ENVIRONMENTAL GOODS AND SERVICES BY ENVIRONMENTAL PURPOSE, 2022–2023

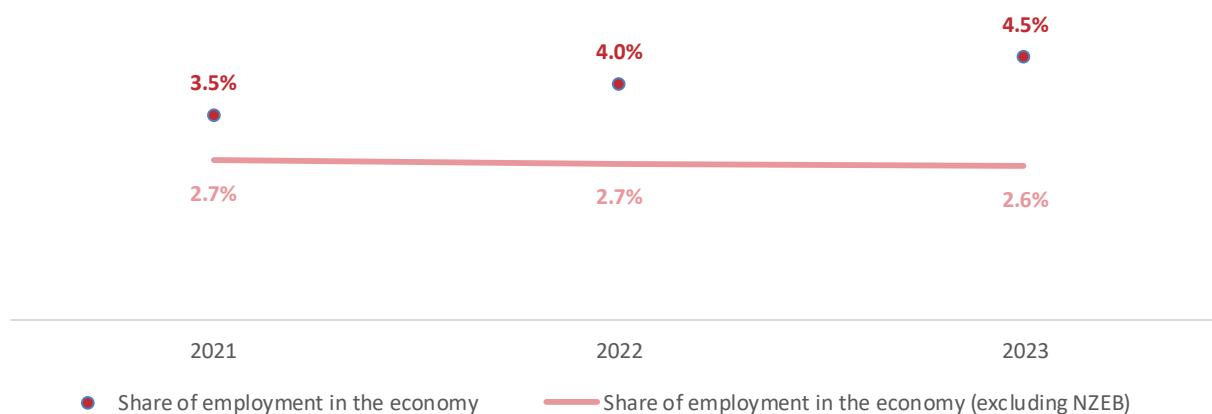


4. EVOLUTION OF EMPLOYMENT

The share of employment in the environmental goods and services sector within total national employment increased by 0.5 p.p. between 2022 and 2023 (from 4.0% to 4.5%). However, excluding NZEB, the sector's relative share of employment decreased by 0.1 p.p., to 2.6% in 2023.

Figure 3

EMPLOYMENT SHARE OF THE ENVIRONMENTAL GOODS AND SERVICES SECTOR IN TOTAL ECONOMY EMPLOYMENT, 2021-2023

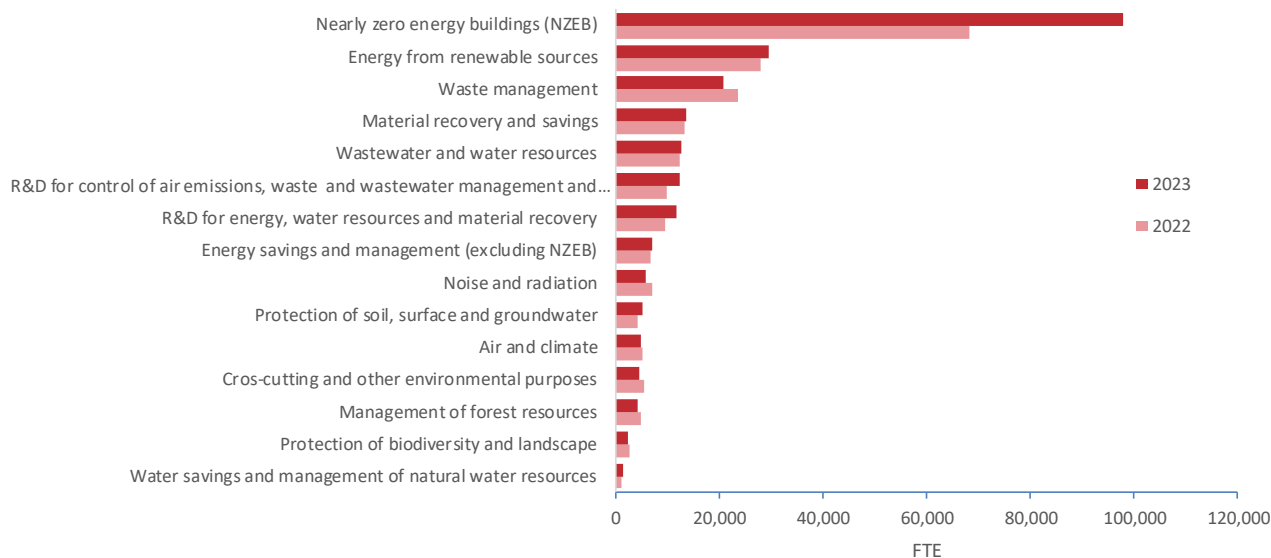


As with the evolution of GVA by environmental purpose, employment also highlighted **energy savings and management** activities, which together were the largest contributors to sectoral employment in 2023 (44.7%) and the ones that grew the most between 2022 and 2023 (39.6%). Within these activities, NZEB accounted for 43.1% of the growth, while the remaining energy savings and management activities (excluding NZEB) grew by 4.6%.

In terms of the sectoral structure of employment, **waste management** constituted the second largest component, representing 12.5% of the total. These were followed by **energy from renewable sources** (8.9%). Between 2022 and 2023, employment in this latter group fell by 11.2%, mirroring the nominal evolution of output (-9.0%) and GVA (-13.1%) for these activities.

Figure 4

EMPLOYMENT OF THE ENVIRONMENTAL GOODS AND SERVICES BY ENVIRONMENTAL PURPOSE, 2022–2023

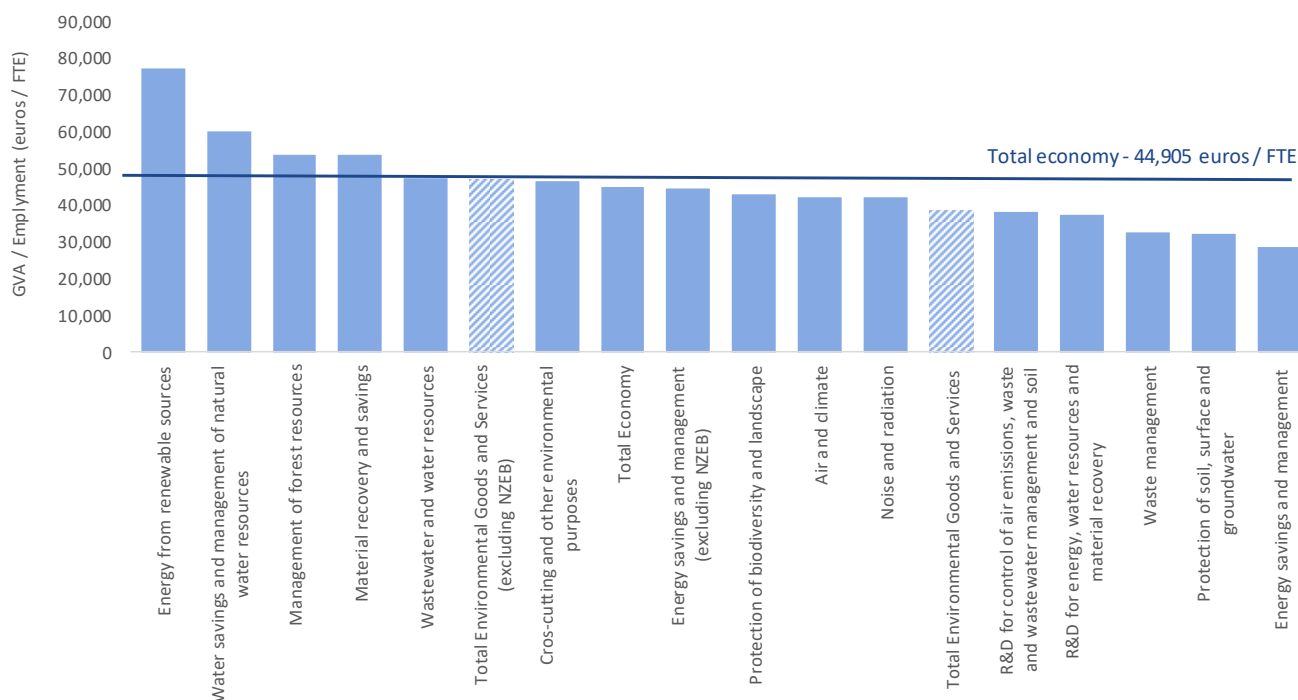


5. LABOUR PRODUCTIVITY

In 2023, the GVA / Employment (expressed in full-time equivalent – FTE) ratio of the EGSS was below that observed in the national economy (39 thousand euros per FTE, compared with 45 thousand euros per FTE). This result is strongly influenced by the weight of NZEB construction, a labour-intensive activity with a structurally lower GVA / Employment ratio. When excluding NZEB, the sector's ratio approaches that of the economy as a whole (44 thousand euros per FTE). **Energy from renewable sources** recorded the highest ratio (77 thousand euros per FTE), reflecting greater capital intensity. At the opposite end of the spectrum, **energy savings and management** (including NZEB) registered the lowest ratio (29 thousand euros per FTE).

Figure 5

GVA / EMPLOYMENT BY ENVIRONMENTAL PURPOSE, 2022–2023

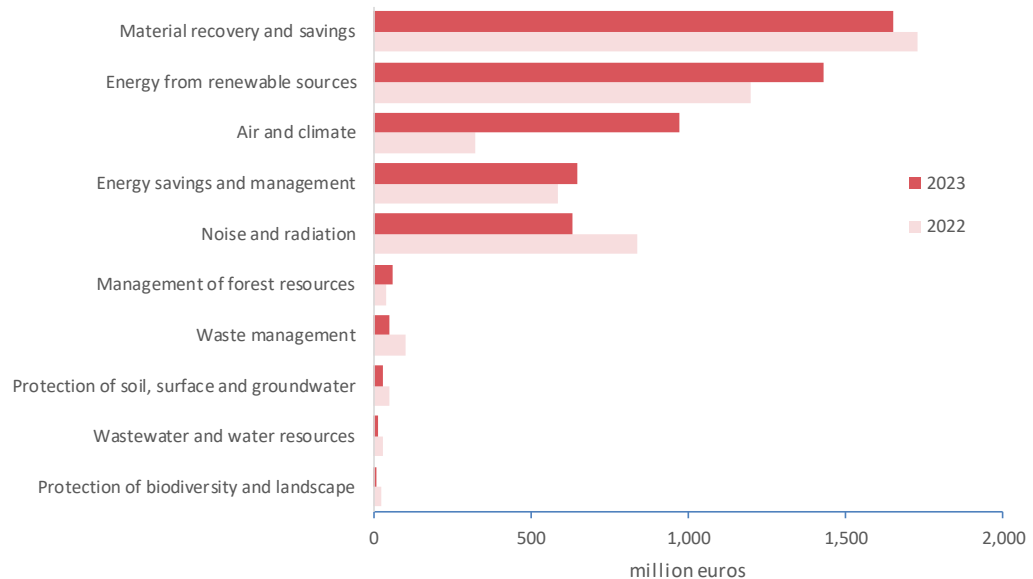


6. EVOLUTION OF EXPORTS

Exports from activities related to **air and climate** and to **energy from renewable sources** were those that grew the most between 2022 and 2023 (201.0% and 19.1%, respectively). This performance was driven, in particular, by the increase in exports of electric bicycles and electric buses in the former, and by the growth in exports of equipment for renewable energy production, namely wind and photovoltaic technologies, in the latter. In contrast, exports from **noise and radiation** fell in 2023 (-24.8%), explained by the decrease in exports of certain types of automobile silencers.

Figure 6

EXPORTS OF THE ENVIRONMENTAL GOODS AND SERVICES BY ENVIRONMENTAL PURPOSE, 2022–2023



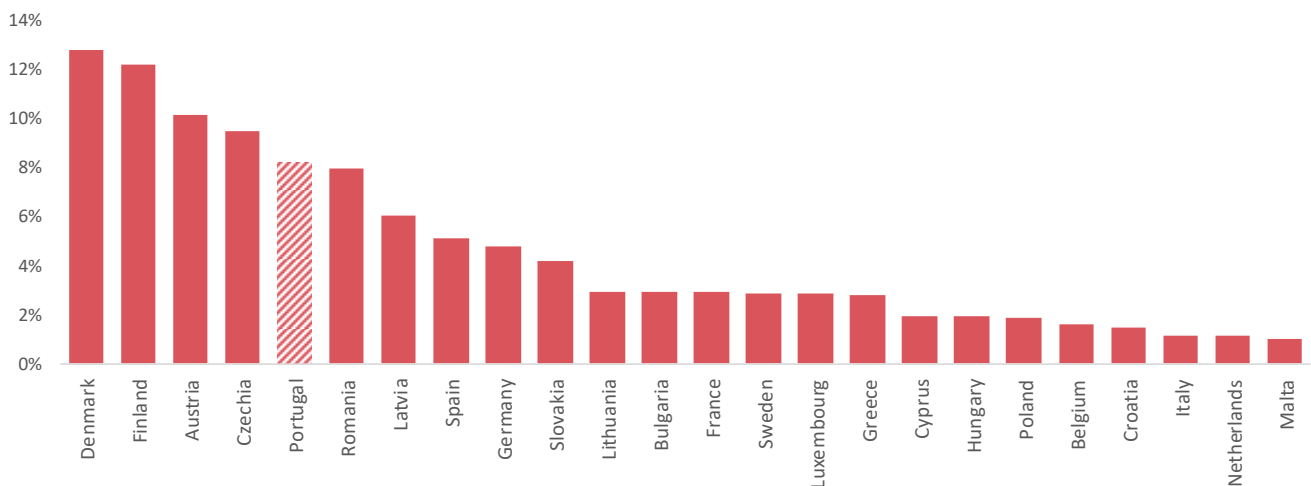
7. INTERNATIONAL COMPARISONS

In 2023, Portugal ranked fifth among the Member States with the highest share of environmental goods and services exports in total national exports (8.2%). Denmark (12.8%) and Finland (12.2%) occupied the top two positions.

Given that the introduction of NZEB buildings into the Environmental Goods and Services Sector Accounts did not occur in a synchronized way across the various European Union countries, the comparison with other variables—namely GVA—is not included in this section. Although Directive 2010/31/EU stipulates that all new buildings must meet NZEB criteria from 2021 onwards, the transposition and practical implementation varied significantly among Member States, which hinders international comparability. This difficulty is compounded by the fact that this technology became standard and was discontinued in the accounts at different moments in each country. Moreover, comparability becomes even more complex because transposition did not occur simultaneously across the EU and because several countries were already accounting for this type of building even before formal transposition, provided that information sources were available, such as the granting of subsidies or other support mechanisms.

Figure 7

EXPORTS SHARE OF THE ENVIRONMENTAL GOODS AND SERVICES SECTOR IN NATIONAL EXPORTS, IN THE EU 27 COUNTRIES, 2023



8. EXPLANATORY NOTES

The EGSS are part of the System of Environmental-Economic Accounts (SEEA) and have constituted, since 2017, a mandatory transmission module under Regulation (EU) No 691/2011 of the European Parliament and of the Council of 6 July 2011 on European environmental economic accounts. This framework was later amended by Regulation (EU) No 538/2014, Regulation (EU) 2022/125 and Commission Delegated Regulation (EU) No 2025/1131 of 26 March 2025, which introduces the Classification of Environmental Purposes (CEP) and adjusts reporting requirements, namely those relating to investments in climate change mitigation.

Environmental accounts were developed in alignment with the System of National Accounts (SNA), maintaining consistency with the international methodological frameworks: the United Nations System of National Accounts (SNA 2008) and the European System of Accounts (ESA 2010). They constitute a satellite accounting system that provides environmental information in a format compatible with National Accounts, enabling integrated analysis.

The methodological document for the EGSS is available for consultation on the INE website, in the National Accounts dissemination area ([Satellite Accounts](#) section).

9. REVISIONS

The detailed results for 2020–2022 were revised following the replacement of the CEPA and CReMA classifications with the CEP. However, the totals did not undergo any revision as a result of this change.

Exports were revised for 2021 and 2022 after a detailed analysis concluded that some previously considered exported products were not intended for environmental purposes. The remaining variables underwent minor adjustments resulting from the corrections to exports.

Figure 8

REVISIONS

| Variable | Compilation | Units | 2021 | 2022 |
|------------|--------------|----------------------|---------|---------|
| Output | 2024 edition | 10 ⁶ euro | 20,052 | 26,742 |
| | 2025 edition | | 20,066 | 26,463 |
| | Difference | % | 0.1% | -1.0% |
| GVA | 2024 edition | 10 ⁶ euro | 6,622 | 8,187 |
| | 2025 edition | | 6,626 | 8,151 |
| | Difference | % | 0.1% | -0.4% |
| Employment | 2024 edition | FTE | 166,656 | 202,569 |
| | 2025 edition | | 166,704 | 202,284 |
| | Difference | % | 0.0% | -0.1% |
| Exports | 2024 edition | 10 ⁶ euro | 4,436 | 5,246 |
| | 2025 edition | | 4,245 | 4,933 |
| | Difference | % | -4.3% | -6.0% |

10. ACRONYMS AND ABBREVIATIONS

ADENE: Agência para a Energia (Portuguese Energy Agency)

CEP: Classification of environmental purposes

CEPA: Classification of environmental protection activities

CReMA: Classification of resource management activities

EGSS: Environmental goods and services sector accounts

ESA 2010: European System of Accounts



EU: European Union

FTE: Full-time equivalent

GVA: Gross Value Added

ISBSA: Environmental Goods and Services Sector Survey (Inquérito ao Setor dos Bens e Serviços Ambientais)

NZEB: Nearly Zero Energy Buildings

SEEA: System of Environmental-Economic Accounts

SNA: System of National Accounts

SNA 2008: United Nations System of National Accounts

Next update date – to be defined
