European Environment Agency

8th Environment Action Programme

Gross value added of the environmental goods and services sector

8TH EAP HEADLINE INDICATOR, 2023

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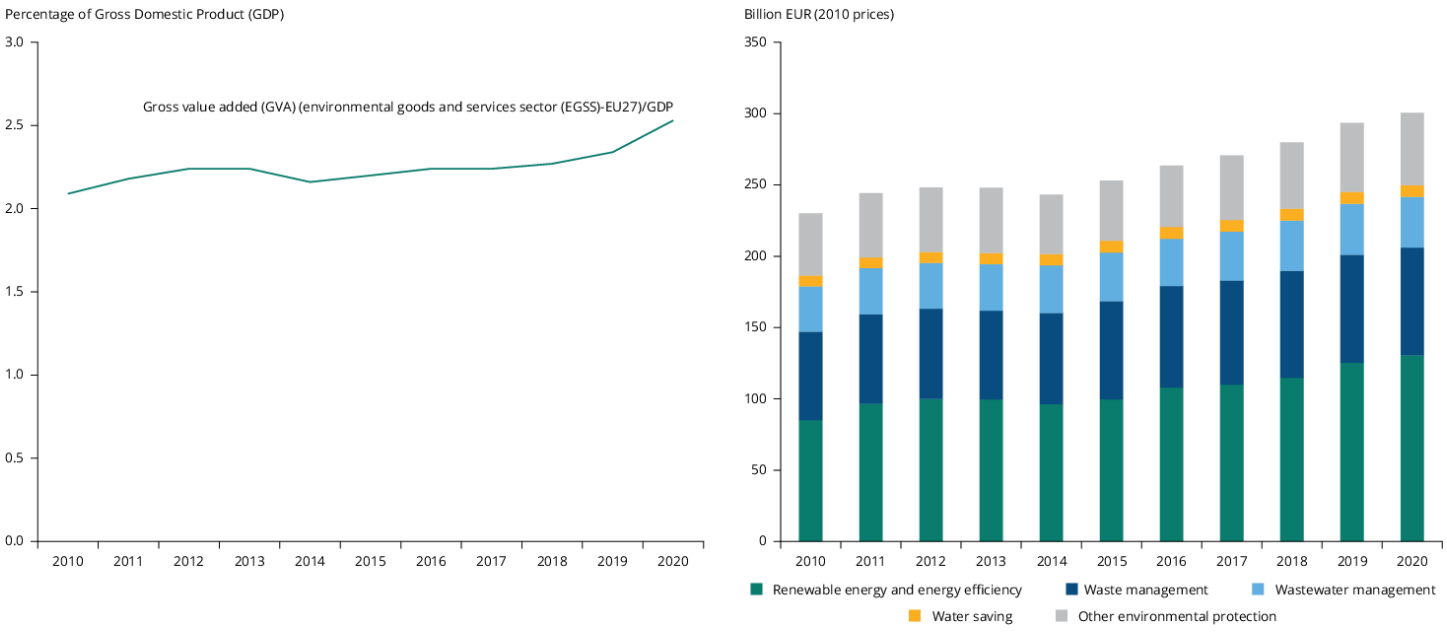
The contribution of the environmental goods and services sector (environmental or green economy) to the overall economy in the EU in terms of value added increased from 2.1% in 2010 to 2.5% in 2020, when it reached just over EUR 300 billion (2010 prices). This rise was mainly caused by significant increases in environmental economy activities related to renewable energy sources and energy efficiency and waste management. The EU aims to achieve a green transition and a carbon-neutral economy by 2050. This will require further significant increases in environmental economy activities. It is therefore expected that the EU's environmental economy will account for an increasing share of the whole economy in the coming years.

Figure 1. Gross value added of the EU's environmental goods and services sector by domain, 2010-2020



Source: Eurostat.

The European Green Deal [1] and the Eighth Environment Action Programme (8th EAP) [2] aim to accelerate the green transition of the EU's economy. The EU's environmental goods and services sector, also known as the green economy, produces goods and provides services that are used in environmental protection and resource management.

The contribution of the environmental economy to the overall economy (i.e. to gross domestic product (GDP)) in the EU increased from 2.1% in 2010 to 2.5% in 2020. Over this period, the environmental economy increased by 2.7% annually, on average, while EU GDP increased by only 0.8%.

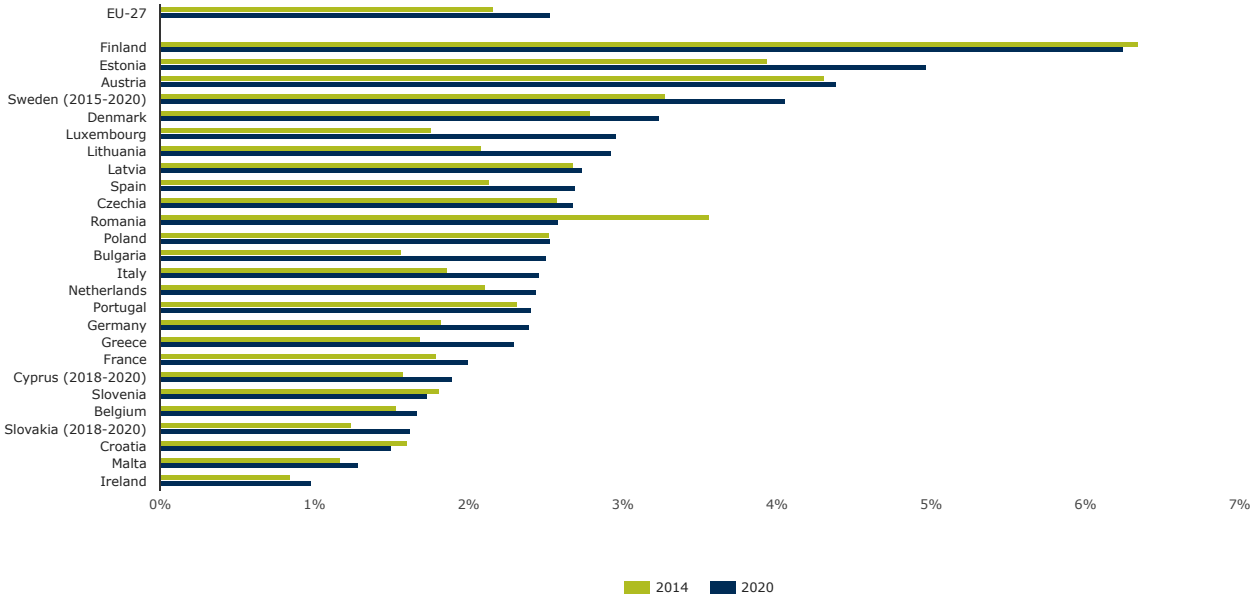
In terms of gross value added (GVA), all of the main domains of the green economy increased in the period 2010-2020. However, most growth was due to increases in the GVA of renewable energy and energy efficiency activities, followed by waste management activities. In 2020, green economy activities contributed a gross value added of EUR 301 billion (2010 prices) to the EU-27 economy.

The European Green Deal increases the ambition of EU environment and climate policy, to support the transition to a carbon-neutral, circular, green economy by 2050. As a result, it is expected that the contribution of the green economy to EU GDP will increase further in the coming years. For example, the application of circular economy principles across the EU economy is expected to increase EU GDP by an additional 0.5% by 2030 [3]. Similarly, significant additional economic activity will be required to implement the 'Fit for 55' package [4], which aims to increase output from renewable energy sources, such as solar energy or offshore wind sources, and improve energy efficiency.

Additional resources have been made available to support the expansion of the EU's environmental economy. The EU's 2021-2027 budget has earmarked additional funding for climate- and biodiversity-related activities [5]. Moreover, grants and loans are available through the 2021-2026 EU Recovery and Resilience Facility (RRF) [5]for climate-related activities and through the 2022-2027 REPowerEU plan [6] for activities related to renewable energy and energy efficiency. The RRF was created to mitigate the social and economic impacts of the COVID-19 pandemic, while the REPowerEU plan was devised to rapidly reduce the EU's dependence on Russian fossil fuels following Russia's invasion of Ukraine and to fast forward the clean energy transition.

Environmental economy activities are also expected to become more important at the global level. A recent report estimates that the global market volume for environmental technology and resource efficiency activities will increase by 7.3% per year until 2030 [7]. The increasing opportunities for the environmental economy, particularly for economic sectors that contribute to achieving net-zero emissions, are also highlighted in the International Energy Agency reports 'World energy outlook 2022' [8] and 'Energy technology perspectives 2023' [9].

Figure 2. Gross value added of the environmental goods and services sector by EU Member States, 2014 and 2020



Source: Eurostat.

Data used in the graph

Countries	2014	2020
EU-27	2.16	2.53
Finland	6.34	6.24
Estonia	3.94	4.97
Austria	4.3	4.38
Sweden (2015-2020)	3.27	4.05
Denmark	2.79	3.24
Luxembourg	1.76	2.96
Lithuania	2.08	2.92
Latvia	2.68	2.73
Spain	2.13	2.69
Czechia	2.57	2.68
Romania	3.56	2.58
Poland	2.52	2.53
Bulgaria	1.56	2.5
Italy	1.86	2.46
Netherlands	2.11	2.44
Portugal	2.31	2.4
Germany	1.82	2.39
Greece	1.68	2.29
France	1.79	2
Cyprus (2018-2020)	1.58	1.89
Slovenia	1.81	1.73

Countries	2014	2020
Belgium	1.53	1.67
Slovakia (2018-2020)	1.24	1.62
Croatia	1.6	1.5
Malta	1.16	1.28
Ireland	0.84	0.98

Shares of the environmental economy in the total economy increased in 19 of the EU Member States between 2014 and 2020, with the biggest increases reported for Luxembourg and Estonia. In contrast, shares dropped during this period in four EU Member States: Croatia, Romania, Slovenia and Finland. Shares varied considerably across Member States in 2020, from about 1% in Ireland to more than 4% in Finland, Estonia, Austria and Sweden.

Supporting information

Definition

The indicator 'Gross value added of the environmental goods and services sector' monitors the gross value added of the economic activities of the EU's environmental (or green) economy. The indicator builds on Eurostat statistics on employment and growth in the EU's environmental economy, as they are defined in the European environmental goods and services sector accounts. 'The environmental economy encompasses activities and products that serve either of two purposes: "environmental protection" — that is, preventing, reducing and eliminating pollution or any other degradation of the environment, or "resource management" — that is, preserving natural resources and safeguarding them against depletion'[10].

For further information, see Eurostat (2016).

Methodology

This indicator is directly based on data published by Eurostat, and the underpinning methodology can be found in Eurostat (2023). EU-level data are based on Eurostat

estimates. A detailed discussion of statistics on the environmental goods and services sector can be found in Eurostat (2016).

The data were deflated to 2010 prices by using the GDP deflator.

Policy/environmental relevance

This indicator is a headline indicator for monitoring progress towards meeting targets of the 8th EAP. It contributes mainly to monitoring progress in relation to aspects of Article 2.1, which requires that, 'by 2050 at the latest, people live well, within the planetary boundaries in a well-being economy where nothing is wasted, growth is regenerative, climate neutrality in the Union has been achieved and inequalities have been significantly reduced. A healthy environment underpins the well-being of all people and is an environment in which biodiversity is conserved, ecosystems thrive, and nature is protected and restored, leading to increased resilience to climate change, weather- and climate-related disasters and other environmental risks. The Union sets the pace for ensuring the prosperity of present and future generations globally, guided by intergenerational responsibility' [11]. The European Commission communication on the 8th EAP monitoring framework specifies that this indicator should monitor the 'increase ofthe shares of the green economy... in the whole economy' [2].

Accuracy and uncertainties

Data sources and providers

- Production, value added and exports in the environmental goods and services sector [ENV_AC_EGSS2__custom_3494226], Statistical Office of the European Union (Eurostat)
- GDP and main components (output, expenditure and income) [NAMA_10_GDP__custom_3489075], Statistical Office of the European Union (Eurostat)

Metadata

DPSIR

Response

Topics

 # Sustainability solutions

Tags

 # GDP # Gross value added # green economy # 8th EAP # GVA

 # goods and services # environment # European Green Deal

 # environmental economy # SUSO003 # green transition

Temporal coverage

2010-2020

Geographic coverage

Austria
Belgium
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Ireland
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Poland
Portugal
Romania
Slovakia
Slovenia
Spain
Sweden

Typology

Descriptive indicator (Type A - What is happening to the environment and to humans?)

UN SDGs

Sustainable cities and communities

Unit of measure

The gross value added of the environmental goods and services sector is measured in billion euros (EUR) and as a share (%) of total economy GDP.

Frequency of dissemination

Once a year

Contact

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References and footnotes

1. EC, 2019, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions 'The European Green Deal', COM (2019) 640 final of 11 December 2019.
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2. EC, 2022, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the monitoring framework for the 8th Environment Action Programme: measuring progress towards the attainment of the programme's 2030 and 2050 priority objectives, COM (2022) 357 final of 26 July 2022.
a b

3. EC, 2020, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 'A new circular economy action plan for a cleaner and more competitive Europe', COM(2020) 98 final of 11 March 2020.
↵

4. EC, 2021, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions '"Fit for 55": delivering the EU's 2030 climate target on the way to climate neutrality', COM(2021) 550 final of 14 July 2021.
↵

5. EC, 2021, *The EU's 2021-2027 long-term budget and NextGenerationEU — facts and figures*, Publications Office of the European Union, Luxembourg.
a b

6. EC, 2022, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions 'REPowerEU plan', COM (2022) 230 final of 18 May 2022
↵

7. BMU, 2021, *GreenTech made in Germany 2021: environmental technology atlas for Germany*, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Berlin.
↵

8. IEA, 2022, *World energy outlook 2022*, International Energy Agency.
↵

9. IEA, 2023, *Energy technology perspectives 2023*, International Energy Agency.
↵

10. Eurostat, 2023, 'Environmental economy — statistics on employment and growth', *Eurostat Statistics Explained* (https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Environmental_economy_%E2%80%93_statistics_on_employment_and_growth) accessed March 7, 2023.
↵
11. EU, 2022, Decision (EU) 2022/591 of the European Parliament and of the Council of 6 April 2022 on a General Union Environment Action Programme to 2030, OJ L 114, 12.4.2022, p. 22-36.
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