8th Environment Action Programme

Gross value added of the environmental goods and services sector





Gross value added of the environmental goods and services sector in Europe

Published 26 Jun 2024

Analysis and data > Indicators > Gross value added of the environment...

The environmental goods and services sector contribution to the overall economy in the EU, in terms of value added, increased from 2.1% in 2010 to 2.5% in 2021, surpassing EUR 315 billion in 2010 prices. This was mainly caused by significant increases in environmental economy activities related to renewable energy production, energy efficiency, and waste management. The EU aims to achieve a green transition and carbon-neutral economy by 2050. This requires further significant increases in environmental economy activities. It is 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, 2010-2021



The European Green Deal and the Eighth Environment Action Programme (8th EAP) aim to accelerate the green transition of the European Union's (EU) 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 2021. Over this period, the environmental economy increased by 2.9% annually, on average, while EU GDP increased by 1.2%.

In terms of **gross value added** (GVA), the main domains of the green economy increased in the period 2010-2021. Most growth was due to increases in the GVA of renewable energy and energy efficiency activities, followed by waste management activities. In 2021, green economy activities contributed a GVA of EUR 316 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. It is expected that the contribution of the green economy to EU GDP will increase further in the coming years.

The application of **circular economy principles** across the EU economy is expected to increase EU GDP by an additional 0.5% by 2030^[1]. Significant additional economic activity will be required to implement the 'Fit for 55' package, which aims to increase output from renewable energy sources, such as solar energy or offshore wind sources, and improve energy efficiency. The Net Zero Industry Act, which aims to scale up the manufacturing of clean technologies in the EU, will also boost the competitiveness of EU industry and increase economic activity within the EU.

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 ^[2]. Grants and loans are available through the 2021-2026 EU Recovery and Resilience Facility (RRF)^[2] for climate-related activities and through the 2022-2027 REPowerEU plan 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. The REPowerEU plan was devised to rapidly reduce the EU's dependence on Russian fossil fuels following Russia's invasion of Ukraine and accelerate the clean energy transition.

Environmental economy activities are expected to increase in importance at 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^[3]. 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 2023'^[4] and 'Energy technology perspectives 2023'^[5].

Figure 2. Gross value added of the environmental goods and services sector as a share of gross domestic product, by EU Member States, 2014 and 2021



Shares of the environmental economy in the total economy increased in 19 of the EU Member States between 2014 and 2021, with the biggest increases reported for Luxembourg and Lithuania. Shares varied considerably across Member States in 2021, from approximately 0.5% in Hungary to more than 4% in Finland, Austria, Estonia, 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'^[6].

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 implicit GDP deflator series (indexed to 2010) published by Eurostat.

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' ^[7]. The European Commission communication on the 8th EAP monitoring framework specifies that this indicator should monitor the 'increase of the shares of the green economy... in the whole economy' ^[8].

Accuracy and uncertainties

Data sources and providers

- Production, value added and exports in the environmental goods and services sector (env_ac_egss2), Statistical Office of the European Union (Eurostat)
- GDP and main components (output, expenditure and income) [nama_10_gdp__custom_10844782], Statistical Office of the European Union (Eurostat)
- Production, value added and exports in the environmental goods and services sector [ENV_AC_EGSS2_custom_10778178], Statistical Office of the European Union (Eurostat)

✓ Metadata

DPSIR		
Response		
Topics		
# Sustainability solutions		
Tags		
# GDP # Gross value added # green	n economy #8th EAP #GVA	# goods and services
# environment # European Green Dea	al # environmental economy	# SUS0003 # green transition

Temporal coverage

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

SDG8: Decent work and economic growth

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

✓ References and footnotes

- 1. 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.
- EC, 2021, The EU's 2021-2027 long-term budget and NextGenerationEU facts and figures, Publications Office of the European Union, Luxembourg.
 a b
- 3. BMU, 2021, GreenTech made in Germany 2021: environmental technology atlas for Germany, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Berlin.
- 4. IEA, 2023, World Energy Outlook 2023, International Energy Agency.

- 5. IEA, 2023, Energy technology perspectives 2023, International Energy Agency.
- 6. Eurostat, 2023, 'Environmental economy statistics on employment and growth', *Eurostat Statistics Explained* (

https://ec.europa.eu/eurostat/statistics-explained/index.php?

é

é

title=Environmental_economy_%E2%80%93_statistics_on_employment_and_growth) accessed March 7, 2023.

- 7. 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.
- 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.