

5 June 2024

Environmental Indicators Dashboard
Climate change, Circular economy, Energy and Biodiversity



Main results

- Emissions of greenhouse gases per inhabitant decreased by 29.7% in the last 15 years and are 21.2% less than the EU average.
- In 2022, the Spanish economy reduced the use of materials per unit of GDP by 9.6%. Since in 2008 it has accumulated a decrease of 51.6%, compared to the European average of 24.9%.
- The renewable energy in the Spanish electricity mix increased by 17.0% in 2023. Since 2008, it has increased by 129.6%.
- The percentage of forest area in Spain in 2021 rose to 38.0%, with an increase of 4.2% compared to 2018.

More information

- [Environmental Indicator Portal](#)
- [Technical project](#)

The INE publishes today the new provisional statistics on Environmental Indicators online, which includes 39 indicators on Climate Change, Circular Economy, Energy and Biodiversity.

Each section presents interactive graphs, descriptions, results tables and metadata, all of them downloadable.

For context, the evolution of the indicators in Spain is compared with the European Union (EU-27) average where available.

Climate change

The European Green Pact seeks to address climate change as a global threat by moving towards a modern, resource-efficient and competitive economy. To this end, data is collected to analyse environmental pressures, assess the evolution and adaptation to Climate Change and verify the mitigation of Climate Change and the observance of planetary boundaries.

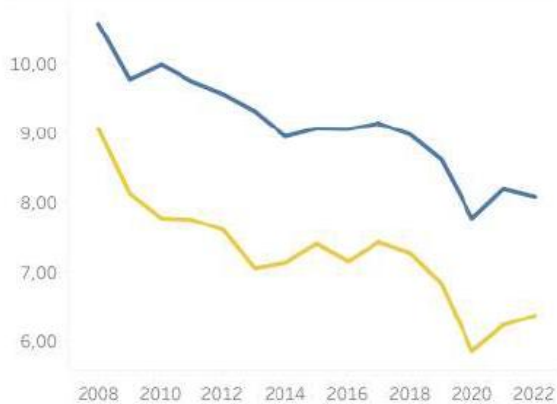
In the last 15 years, Greenhouse Gas (GHG) emissions from resident units per capita have decreased both in Spain (by 29.7%) and in the European Union (by 23.6%). But compared to 2021, in Spain the emissions per capita increased by 2.3%, while in the EU they decreased by 1.4%.

The proportion of fossil fuels in the energy supply has also been reduced, accounting for 70.91% of the total in 2022 (13.3% less than in 2008). In the same period, the European decrease was 9.2%.

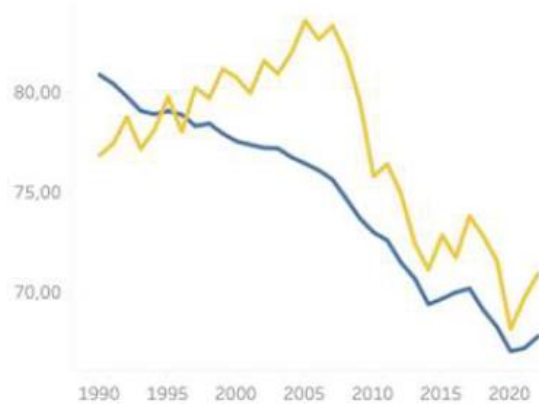
In 2022, National Environmental Protection Expenditure represented 1.84% of Gross Domestic Product (GDP), 5.7% more than in 2010. The increase over the same period in the European average expenditure on environmental protection per unit of GDP was 10.0%.

All of this stands in contrast to the decrease in the share of environmental taxes in total tax revenues, which in 2022 represented 20.4% less than in 2008 in Spain, a slightly larger decrease than the European 16.2%.

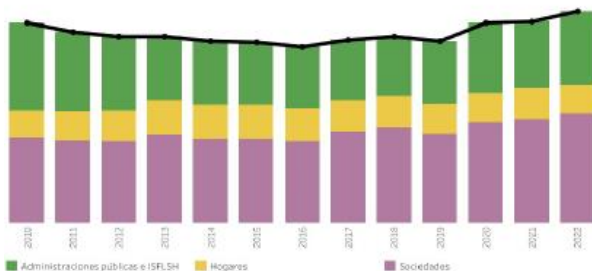
Emisiones totales de gases de efecto invernadero de las unidades residentes per cápita
6,37 Toneladas CO2 equivalente per cápita en 2022 (España)



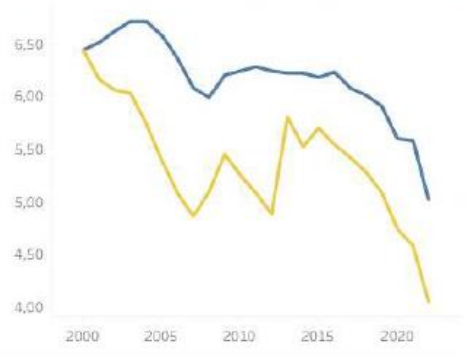
Proporción de combustibles fósiles en el suministro total de energía
70,91 % en 2022 (España)



Gasto nacional en protección ambiental por sector institucional y porcentaje del PIB
1,84 % en 2022 (España)



Proporción de impuestos ambientales en los ingresos fiscales totales (en %)
4,05 % en 2022 (España)



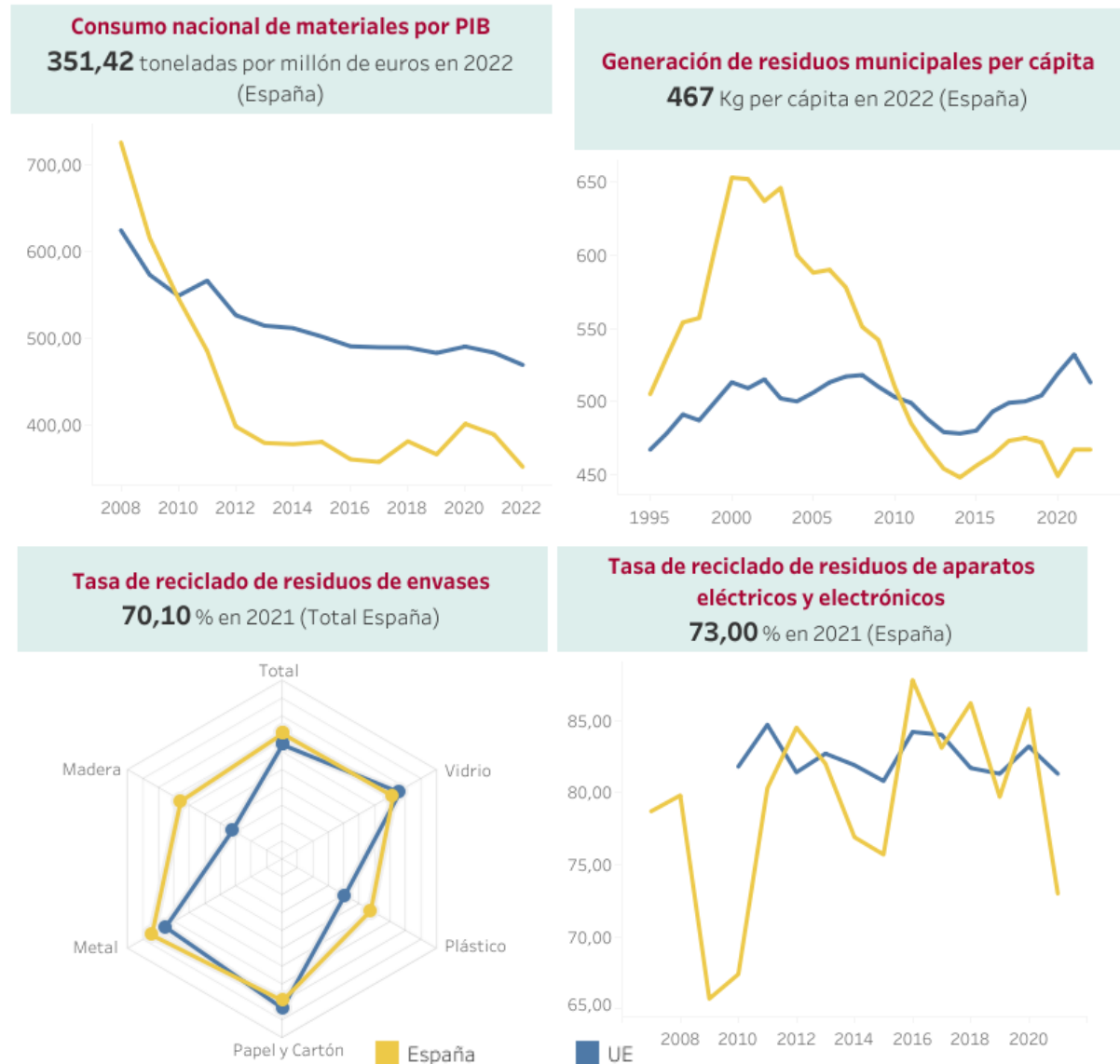
Circular Economy

Faced with concerns about the depletion of natural resources and the reduction of waste generated in production and consumption, the Circular Economy is the alternative to the traditional model. This model aims to reduce the consumption of raw materials and preserve the value of products, materials and resources as long as possible, then returning them to the production cycle, while at the same time minimising the generation of waste.

The use of materials per GDP decreased in 2022 compared to the previous year by 9.6%, reaching 351.4 tonnes per million euros. It is 51.6% lower than in 2008. The European data also show a decrease in the economic dependence on materials, but not by as much (2.9% and 24.9%, respectively).

For Spain, there is also a 15.2% decrease in municipal waste generation per capita compared to 2008 (which contrasts with the 1.0% decrease in the EU over the same period).

Meanwhile, the percentage of recycling in packaging waste and waste electrical and electronic equipment increased by 13.2% and 9.3%, respectively, between 2021 and 2010, while the overall recycling rate (excluding large mineral waste) remained stable, reaching 50.9% in 2021.



Energy

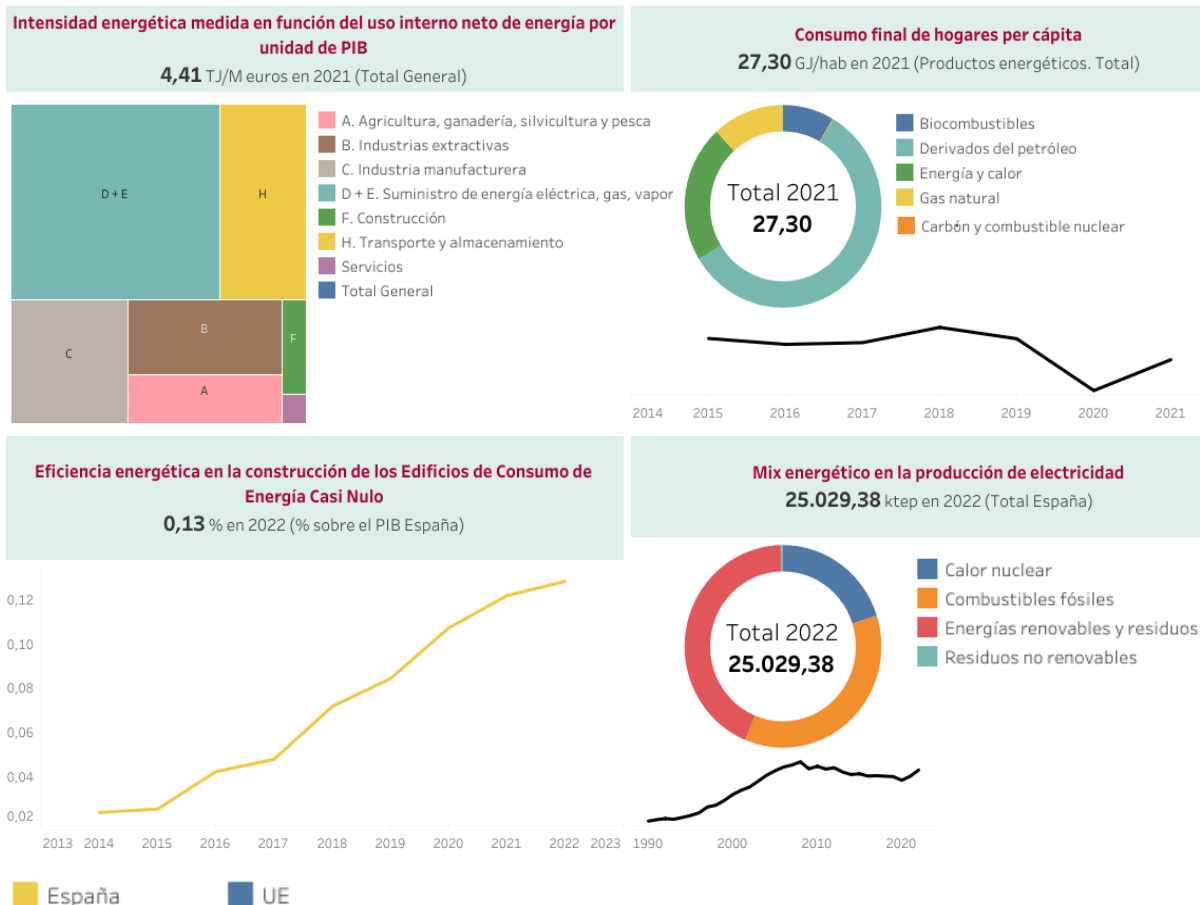
The EU's energy strategy seeks to ensure a safe, sustainable and competitive energy supply through the clean energy transition, a single energy market, energy security, energy efficiency and decarbonisation, among others.

Energy intensity - or net inland energy use per unit of GDP - reached 4.4 Terajoules (TJ) per million euros in 2021, a decrease of 8.0% compared to 2015 and 0.2% compared to 2020).

The ongoing energy efficiency measures in the construction of new near-zero net energy consumption buildings have resulted in the production within the construction sector for energy efficiency in those buildings amounting to €1,727.2 million in 2022, 16.1% more than the previous year.

Household energy consumption per capita increased by 7.9% in 2021 to 27.3 GJ per capita. Compared to 2015, consumption has decreased by 4.8%. *Carbon and nuclear fuel* is the energy flow that has decreased the most in this period, by 57.6%. *Natural gas* registered the highest increase, at 7.3%.

In 2023, the share of renewable energy in the energy mix of electricity production increased by 17.0% compared to the previous year, reaching 52.4% of the *share*. Compared to 2008, it increased by 129.6%.



Biodiversity and Ecosystems

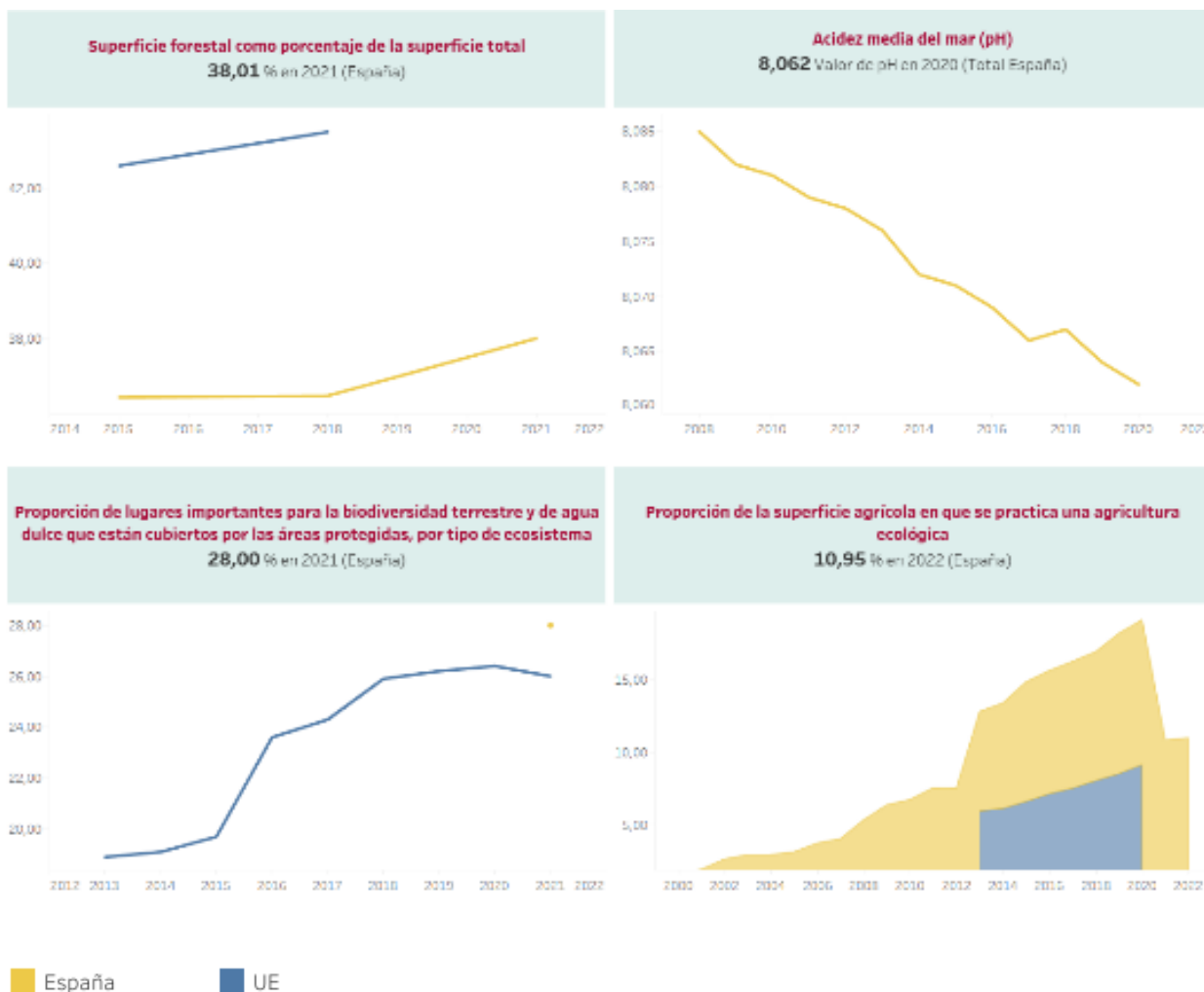
One of the fundamental components of the European Green Deal is the preservation and restoration of ecosystems and biodiversity. It is not only about protecting species and habitats, but also about reducing pressures on biodiversity and restoring degraded ecosystems.

The proportion of significant land and freshwater biodiversity sites covered by protected areas reached 28.0% in 2021, 7.7% higher than in Europe.

The percentage of forest area in Spain in 2021 rose to 38.0%, with an increase of 4.2% compared to 2018.

Also, there is a continuous growth in the share of agricultural land under organic farming, both in the EU and in Spain. Since 2000, the percentage of this area in Spain has increased by a factor of 10.

Over the last decade, the highest year of growth was 2016 in the EU (8.1%) and 2015 in Spain (13.5%).



Methodological note

The Environmental Indicators portal is intended to provide an overview of the different indicators published by INE on biodiversity, climate change, circular economy and energy. This project makes it possible to quantify and monitor the objectives set on the basis of the 39 indicators published, with full freedom to incorporate new indicators as new needs for measuring the different environmental aspects are detected.

Each section of the portal includes a main panel divided into sub-panels with interactive graphs that show the evolution of the indicators, the description of each indicator, results tables and metadata. This information can be downloaded.

Many of the indicators produced by the INE provide information for measuring the objectives of the European Green Pact, the 2030 Agenda for Sustainable Development, the European Biodiversity Conservation Strategy 2030, the RePowerEU Plan and the Spanish Circular Economy Strategy. This series of experimental statistics is inspired by the desire to monitor these objectives through indicators that can reflect the national position on an annual basis in comparison with the trends of the European average.

Type of operation: Drawing up of summary and analysis with results from various sources.

Population scope: Spanish economy as a whole.

Geographical scope: National territory and the European Union.

Reference period: since this is a statistic that combines a multitude of sources, each of the indicators has a different reference period. The most current indicators, which are the majority, refer to the year 2022.

Disaggregation variables: depending on the statistic from which the indicator is derived.

Dissemination frequency: Ongoing from 2024, updated quarterly.

For further information, please consult the [technical project](#)

INE statistics are produced in accordance with the Code of Good Practice for European Statistics. More information on [Quality at INE and the Code of Best Practices](#).

For further information see [INĒbase](#) Official account for INE  [@es_ine](#)

All press releases at: ine.es/en/prensa/prensa_en.htm

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