



# **THE NEW ENVIRONMENTAL INDICATORS DASHBOARD IN SPAIN**

**Antonio Martínez, INE SPAIN**

**Expert Group on Environment and Climate Change Statistics (EG-ECCS)**

**London, September 23-25**

# CONTEXT AND PURPOSE

- The **Environmental Indicators Panel** was published by Spain's National Statistics Institute (INE) **in 2024** for the first time as a experimental statistic.
- 6 blocks and 50 indicators**
- The panel is a **dynamic tool** designed to monitor progress towards the ecological transition.
- European perspective with comparisons with the EU-27 average**
- Contextualizes **Spain's performance** making possible to **identify areas of relative strength and weakness.**
- A good example of **collaboration among NSI and ONAs**

# SIX THEMATIC BLOCKS

It provides a systematic framework to track progress in **six thematic blocks**

**CLIMATE CHANGE**

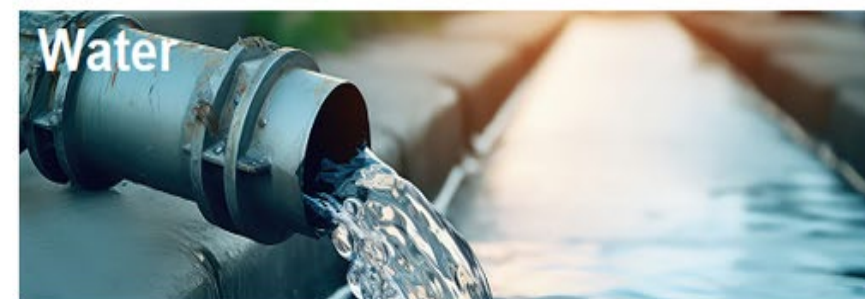
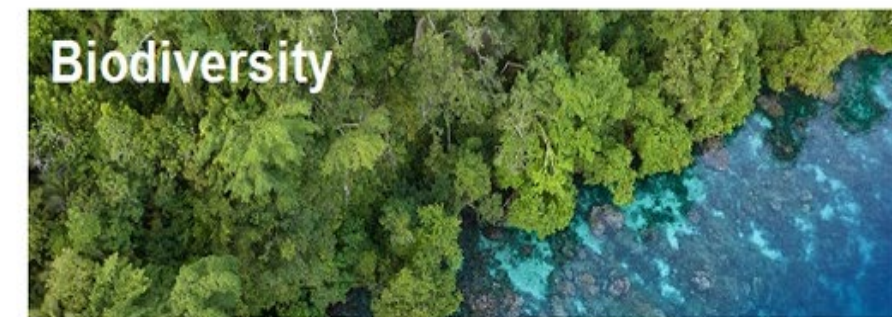
**CIRCULAR ECONOMY**

**ENERGY**

**BIODIVERSITY**

**WATER**

**ENVIRONMENTAL FOOTPRINTS**



**The most recent edition in 2025** includes two new areas—**Water and Footprints**—raising the total number of indicators **to 50, up from 39** in the previous version .

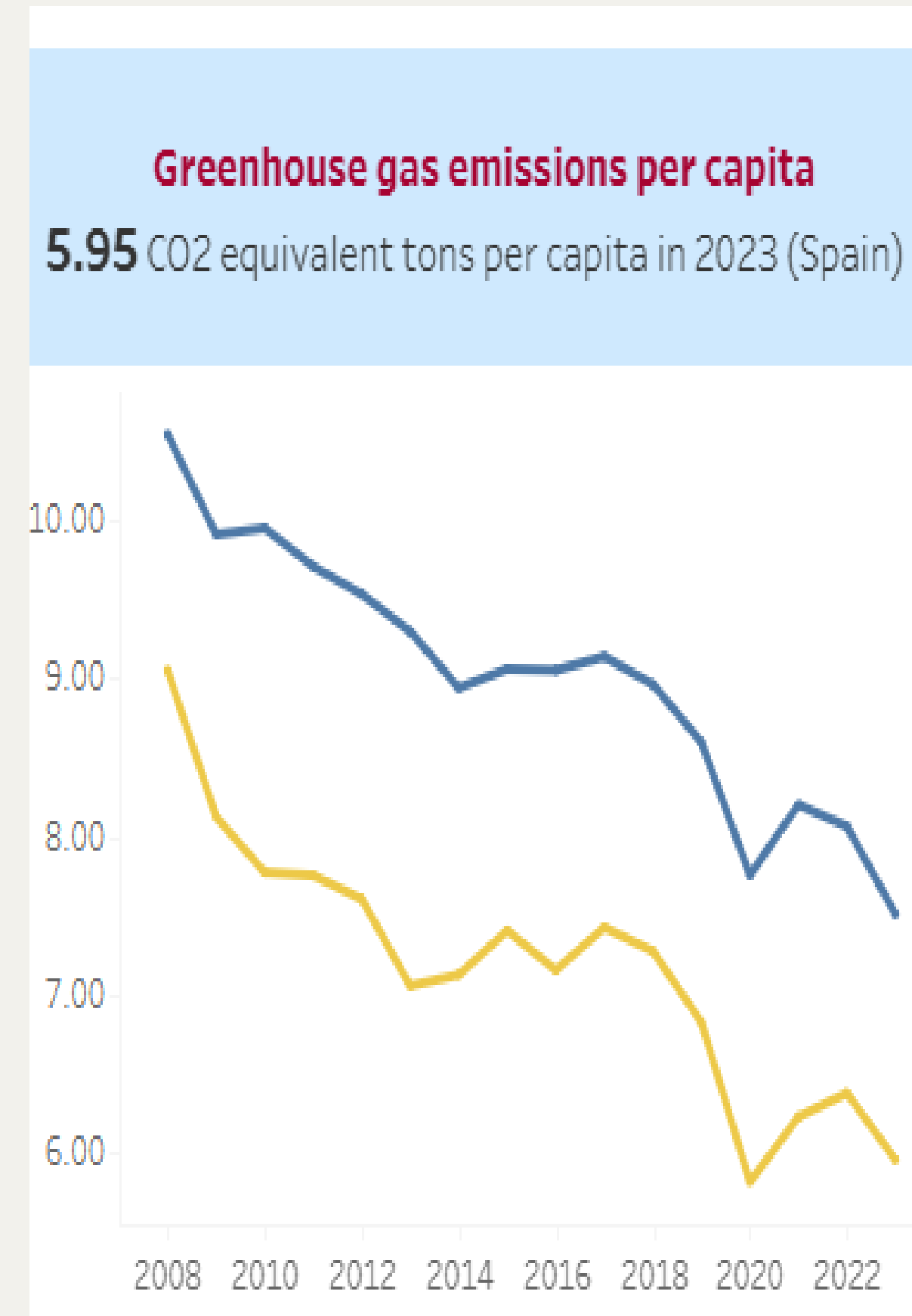
# Sectoral Overview: Climate change and water (1)

## CLIMATE CHANGE

### EVIDENCE

--The INE identifies **greenhouse gas (GHG) emissions per capita as the central climate indicator**. Between 2008 and 2023, Spain recorded a **34.3% decrease in per capita emissions, compared with a 28.8%** reduction in the EU-27.

--In 2023 alone, Spanish **emissions fell by 6.6%**, broadly in line with the EU average **decline of 6.9%**.



# Sectoral Overview: Climate change and water (2)

## CLIMATE CHANGE: FACTS/MESSAGES (STRENGTH AND WEAKNESS)

- Progressive decarbonization of electricity generation** and efficiency improvements across sectors.
- Data confirm that Spain's **main sources of emissions remain energy production and road transport.**

## LINK WITH OTHER PANEL INDICATORS

- Energy indicators:** final energy consumption per household, the dominant role of petroleum derivatives
- Environmental footprints:** per capita carbon footprint, which captures emissions associated with final consumption rather than production

# Sectoral Overview: Climate change and water (3)

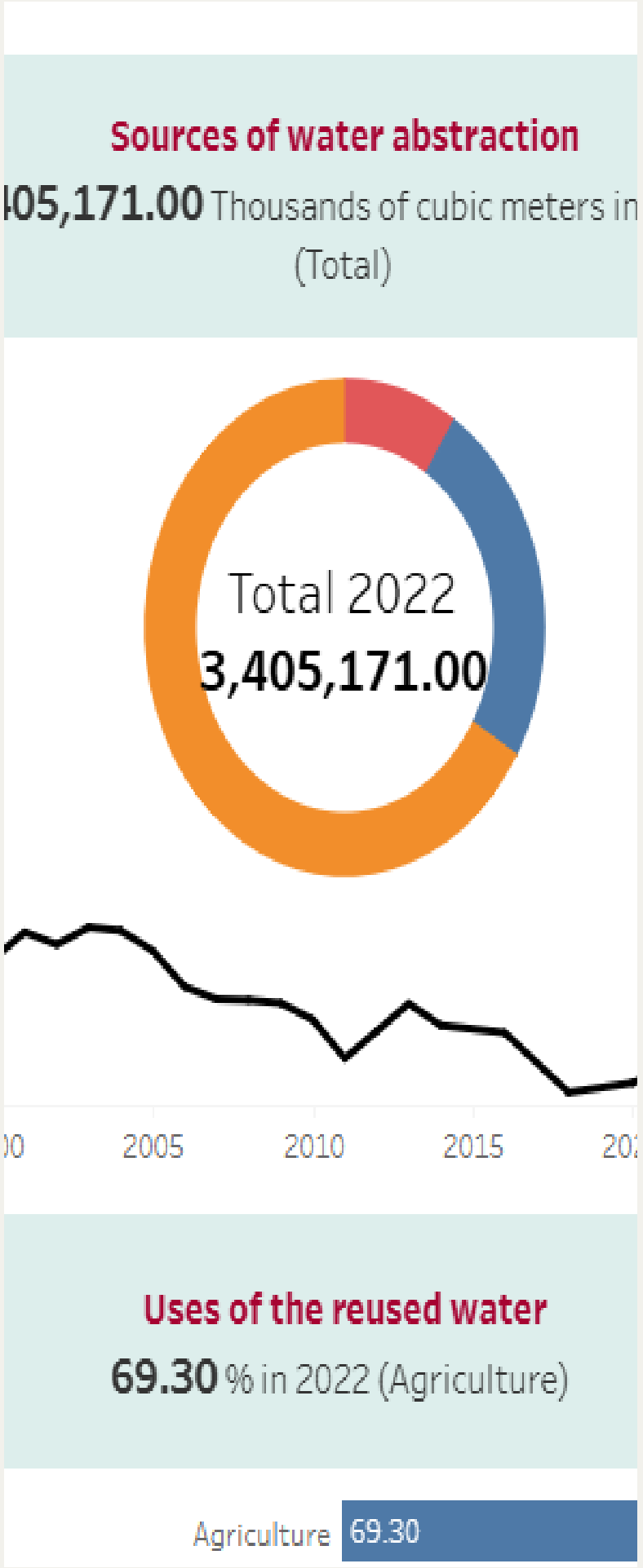
## WATER

The inclusion of **water indicators (2025)** marks a turning point in the panel, given **Spain's structural vulnerability to water scarcity and droughts.**

## EVIDENCE

**-Surface water accounted for 66.4% of total extractions**, making rivers, lakes, and reservoirs the backbone of water supply for households, agriculture, and industry. The remaining **33.6%** came **from groundwater sources**, particularly relevant in arid regions with intensive irrigation systems

**-69,30% of reused water in agriculture**



# Sectoral Overview: Climate change and water (4)

## CLIMATE CHANGE: FACTS/MESSAGES (STRENGTH AND WEAKNESS)

- This dual dependence highlights the **strategic importance of surface water regulation**, as well as the crucial role of aquifers in areas subject to recurrent shortages.
- Fluctuations in availability are not merely cyclical but **linked to climate variability and rising evapotranspiration** rates associated with climate change.

## LINK WITH OTHER PANEL INDICATORS

- With **climate change**, because precipitation patterns/cycles directly affect water availability.
- With **biodiversity**, since ecological flows in rivers and wetlands depend on balanced extractions.
- With **footprints**, as water use intensity can be connected to consumption-based measures such as the water footprint (not yet included in the panel but conceptually aligned).

# Relation to International Standards

-The **SEEA** promotes integrated accounts that link environmental flows with economic data. The INE's panel is consistent with this approach. The water block, by quantifying extractions from surface and groundwater, further aligns Spain's statistics with SEEA methodologies

-By using **comparable definitions and classifications**, the panel facilitates integration into European and international reporting systems, while also supporting the monitoring of commitments under the **European Green Deal and the Sustainable Development Goals**



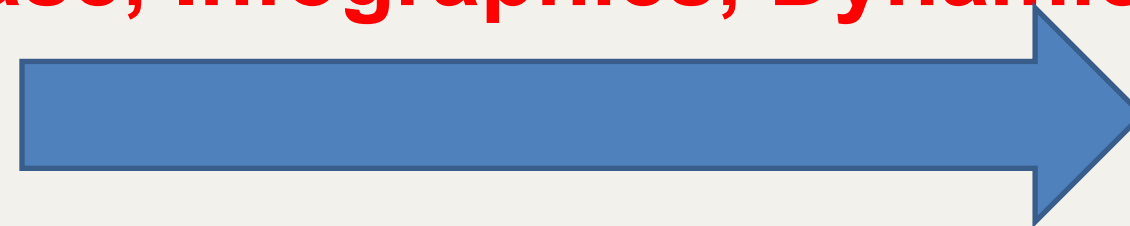
# Strengths of the Panel

--**Integration of sources (not only INE) and comparability**: Covering six thematic areas, it offers a **comprehensive vision of environmental performance** while ensuring **comparability with EU averages**

--**Dynamic update capacity**: The addition of new blocks such as water and footprints reflects its adaptability to **emerging policy priorities**

--**Statistical innovation**: The adoption of footprint indicators and the inclusion of water data align with international efforts to harmonize environmental and economic statistics, particularly under **the System of Environmental-Economic Accounting (SEEA)**

--**New ways of dissemination: Press Release, Infographics, Dynamic Graphs, Videos...**



# PRESS RELEASE

## Environmental Indicators Dashboard Climate Change, Circular Economy, Energy, Biodiversity, Water and Footprints

### Main results

- Greenhouse gas emissions per inhabitant decreased by 6.6% in Spain in 2023. They have fallen 34.3% since 2008.
- In 2023, the economy reduced the use of materials per unit of GDP by 5.8%. It had fallen 53.6% since in 2008, compared to the European average of 28.4%.
- Total final consumption of household energy increased by 0.06% in 2022. It has decreased by 4.4% since 2015.
- The percentage of cropland being farmed organically increased by 15.5% in 2023, reaching 12.5%.
- Surface water was the main source of water in 2022, accounting for 66.4% of the total.
- Spain's carbon footprint increased by 6.2% in 2022 compared to the previous year.

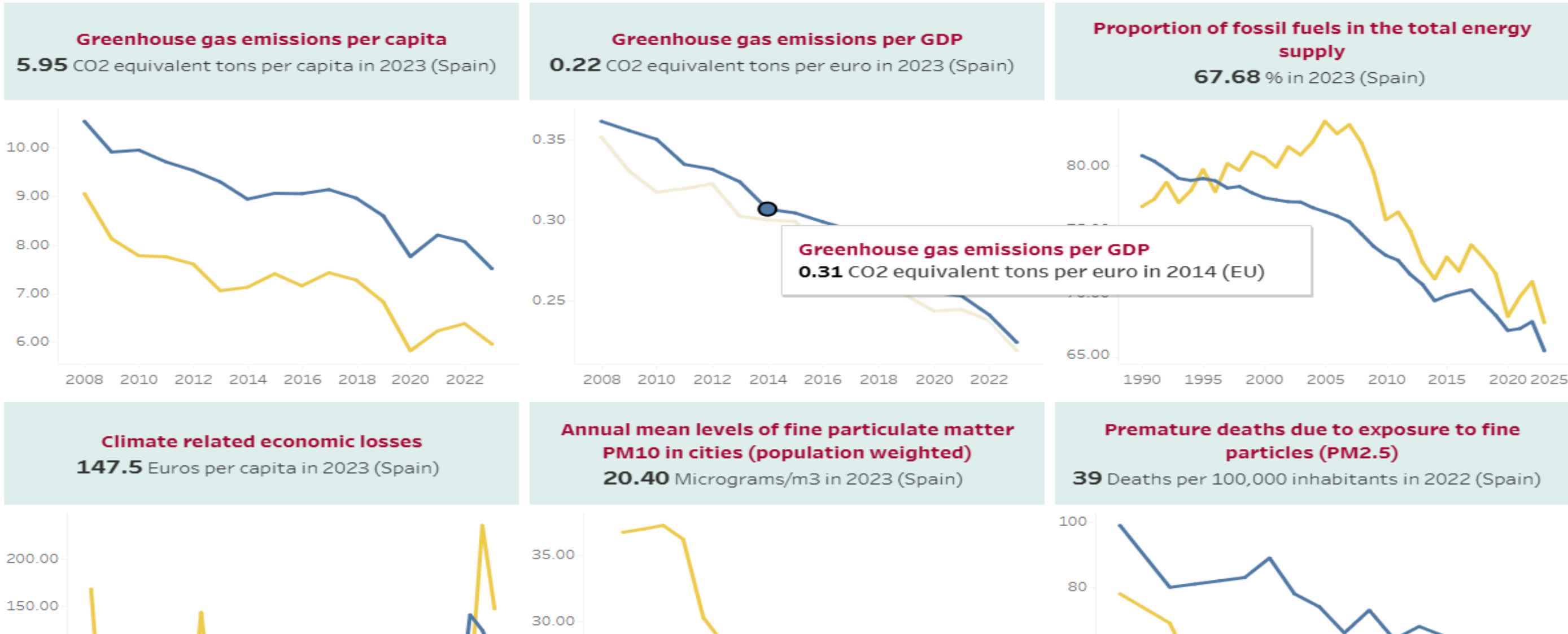
# INFOGRAPHS

## PANEL DE INDICADORES AMBIENTALES 2025 5 DE JUNIO - DÍA MUNDIAL DEL MEDIO AMBIENTE



# DYNAMIC GRAPHS

Climate change and environmental degradation are existential threats facing Europe and the rest of the world. To overcome these challenges, the European Green Deal will transform the EU into a modern, resource-efficient, and competitive economy, ensuring that: net greenhouse gas emissions are eliminated by 2050; economic growth is decoupled from resource use; no person or place is left behind.



# VIDEOS

INE English

Escriba el texto para buscar

Panel de indicadores ambientales

Conoce nuestra web: Panel de Indicadores Ambientales

Cambio climático • El cambio climático se refiere a los cambios a largo plazo de las...

## Panel de Indicadores Ambientales

Más vídeos

- 100% hechos de TALENTO
- Funciones de la OCE en procesos electorales
- Sede Electrónica <https://sede.ine.gob.es/>
- BETTER DATA. BETTER LIVES.
- 

0:15 / 6:17

YouTube

Las Cuentas Ambientales en España [↗](#)

Panel de indicadores ambientales [↗](#)

Infografías:

# Strategic Applications

**-Climate policy:** Measuring progress in emission reductions and situating Spain within the EU trajectory.

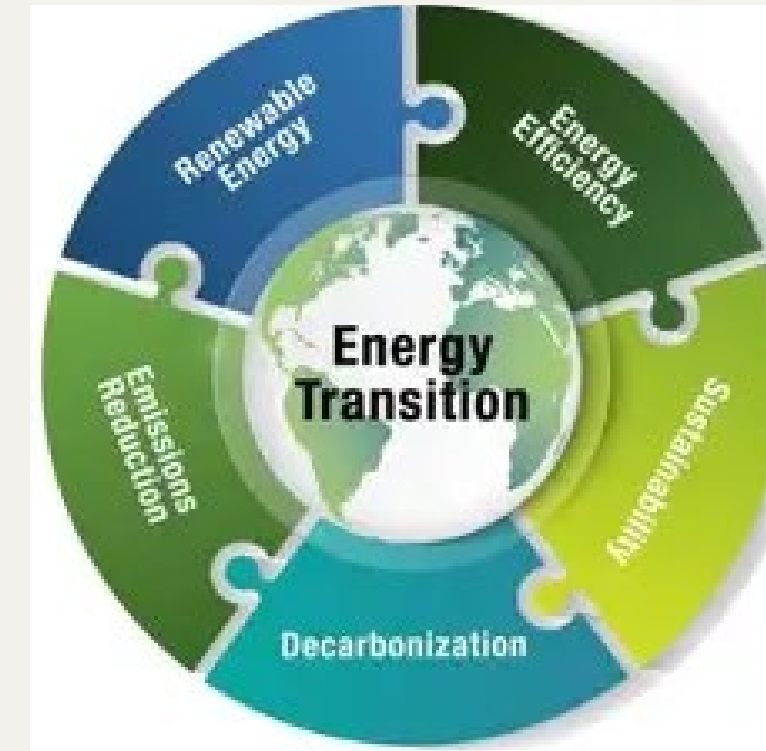
**-Circular economy:** Assessing efficiency gains in material use.

**-Energy transition:** Monitoring consumption patterns and the continuing dominance of fossil fuels.

**-Agricultural sustainability:** Tracking the expansion of organic farming.

**-Water management:** Highlighting the central role of surface waters and the complementary role of groundwater.

**-Consumption-based impacts:** Interpreting the carbon footprint as a proxy for global pressures linked to domestic demand.



# MAIN CONCLUSIONS

- The **Environmental Indicators Panel** of the INE is a robust statistical instrument with six thematic dimensions and **50 indicators into a coherent framework**
- Climate change and water blocks are particularly relevant for Spain**, given the country's commitments to climate neutrality and its exposure to hydrological stress
- Benchmarking **Spain against the EU average**, the panel provides a picture of **environmental performance**
- It is not just a statistical product but a **strategic instrument for public policy**

[https://ine.es/dyngs/INEbase/en/operacion.htm?c=Estadistica\\_C&cid=1254736177113&menu=ultiDatos&idp=1254735976603](https://ine.es/dyngs/INEbase/en/operacion.htm?c=Estadistica_C&cid=1254736177113&menu=ultiDatos&idp=1254735976603)



# **THE NEW ENVIRONMENTAL INDICATORS DASHBOARD IN SPAIN**

**Antonio Martínez, INE SPAIN**

**Expert Group on Environment and Climate Change Statistics (EG-ECCS)**

**London, September 23-25**