SDG Goal 6	**Clean water and sanitation**
SDG Target 6.4	**By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity**
SDG Indicator 6.4.1	**Change in water-use efficiency over time**
Time series	**Change in water-use efficiency**

1. General information on the time series

- Date of national metadata: 22 February 2024
- National data: http://sdg-indicators.de/6-4-1/
- Definition: The time series measures the change in water use efficiency (CWUE) over time.
- Disaggregation: economic activity

2. Comparability with the UN metadata

- Date of UN metadata: July 2024
- UN metadata: https://unstats.un.org/sdgs/metadata/files/Metadata-06-04-01.pdf
- The time series is compliant with the UN metadata.

3. Data description

- Water-use efficiency (WUE) is the gross value added (GVA) in Euro per m³ used water. The change in water use efficiency (CWUE) is calculatet to the previous year. The sectors included in the calculation are: agriculture (including forestry and fishery); mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; constructions and all service sectors. The sectors correspond to the ISIC classification A-T. For the agriculture the calculation are without bottom water and for GVA in the agriculture are only the irrigated area included.

  The data for the used water is derived from the water accounts of the Federal Statistical Office. The water accounts bades all three years on the water statistics (here started with 2010). The intermediated years are back-caltulated and have therefore a greater inaccuracy.

  The data on GVA is calculated by the Federal Statistical Office's National Accounts. GVA based on a each year adjusted price basis (previous year's price base). After several revisions due to new data input, final results are available four years after the first preliminary release.

  The data for the irrigated area is derived from the agricultural structure survey of the Federal Statistical Office.

4. Access to data source

- Water accounts (only available in German): https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Umwelt/UGR/rohstoffe-materialfluesse-wasser/Publikationen/Downloads/statistischer-bericht-ugr-wassergesamtrechnung-5851401199005.xlsx
- Data on the gross value added for each sector (only available in German): https://www.destatis.de/DE/Themen/Wirtschaft/Volkswirtschaftliche-Gesamtrechnungen-Inlandsprodukt/_inhalt.html

5. Metadata on source data

- Quality Report – National Accounts: https://www.destatis.de/EN/Methods/Quality/QualityReports/National-Accounts-Domestic-Product/national-accounts.pdf

6. Timeliness and frequency

- Timeliness: Not available.
- Frequency: Every 3 years

7. Calculation method

- Unit of measurement: Percentage
- Calculation:

$$\textbf{Change in water-use efficiency}_{t} = \frac{\text{Water-use efficiency}_{t} - \text{Water-use efficiency}_{t-1}}{\text{Water-use efficiency}_{t-1}} \cdot 100\ [\%]$$

With

t = reporting year

$$\textbf{Water-use efficiency} = \frac{\text{Gross Value Added [€]}}{\text{Water used [m³]}}$$

SDG Goal 6	**Clean water and sanitation**
SDG Target 6.4	**By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity**
SDG Indicator 6.4.1	**Change in water-use efficiency over time**
Time series	**Water-use efficiency**

1. General information on the time series

- Date of national metadata: 22 February 2024
- National data: http://sdg-indicators.de/6-4-1/
- Definition: The time series measures the Water-use efficiency (WUE).
- Disaggregation: economic activity

2. Comparability with the UN metadata

- Date of UN metadata: July 2024
- UN metadata: https://unstats.un.org/sdgs/metadata/files/Metadata-06-04-01.pdf
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3. Data description

- Water-use efficiency (WUE) is the gross value added (GVA) in Euro per m³ used water. The sectors included in the calculation are: agriculture (including forestry and fishery); mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; constructions and all service sectors. The sectors correspond to the ISIC classification A-T. For the agriculture the calculation are without bottom water and for GVA in the agriculture are only the irrigated area included.

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$$\textbf{Water-use efficiency} = \frac{\text{Gross Value Added [€]}}{\text{Water used [m}^3\text{]}}$$