

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 6.4.2 **Level of water stress: freshwater withdrawal as a proportion of available freshwater resources**

Time series **Level of water stress: share of withdrawal in renewable water resources**

1. General information on the time series

- Date of national metadata: 7 June 2023
- National data: <http://sdg-indicators.de/6-4-2/>
- Definition: The time series measures how much freshwater is withdrawn in relation to the total renewable freshwater resources.
- Disaggregation: water use index

2. Comparability with the UN metadata

- Date of UN metadata: May 2023
- UN metadata: <https://unstats.un.org/sdgs/metadata/files/Metadata-06-04-02.pdf>
- The time series is not compliant with the UN metadata. The total renewable freshwater resources are used as denominator - without subtracting the environmental water requirements.

3. Data description

- The data is based on a special evaluation. Data on the quantities withdrawn from the environment is available separately for public water supply companies and the non-public sector. Water on total renewable freshwater resources includes incoming water from neighbouring countries. The quantity of water for environmental water requirements is not deduced from the total renewable freshwater resources.
Data on the total renewable freshwater resources stems from the German Federal Institute of Hydrology (BfG) but is not publicly available.

4. Access to data source

- Non-public water supply and non-public waste water disposal (only available in German):
https://www.statistischebibliothek.de/mir/receive/DESerie_mods_00000204
- Public water supply and public waste water disposal (only available in German):
https://www.statistischebibliothek.de/mir/receive/DESerie_mods_00000931

5. Metadata on source data

- Quality report – Survey on public water supply and public waste water disposal 2016 (only available in German):
<https://www.destatis.de/DE/Methoden/Qualitaet/Qualitaetsberichte/Umwelt/oeffentliche-wasserversorgung-abwasserentsorgung.pdf?>
- Quality report – Survey on non-public water supply and non-public waste water disposal 2016 (only available in German):
<https://www.destatis.de/DE/Methoden/Qualitaet/Qualitaetsberichte/Umwelt/nichtoeffentliche-wasserversorgung-abwasserentsorgung.pdf?>

6. Timeliness and frequency

- Timeliness: t + 18 months
- Frequency: Every 3 years

7. Calculation method

- Unit of measurement: Percentage
- Calculation:

$$\text{Level of water stress} = \frac{\text{Freshwater withdrawn from the environment [1,000 m}^3\text{]}}{\text{Total renewable freshwater resources [1,000 m}^3\text{]}} \cdot 100 [\%]$$

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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 6.4.2	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources
Time series	Level of water stress: share of withdrawal in renewable water resources, excluding cooling water

1. General information on the time series

- Date of national metadata: 7 June 2023
- National data: <http://sdg-indicators.de/6-4-2/>
- Definition: The time series measures how much freshwater is withdrawn in relation to the total renewable freshwater resources, without taking into account the water used for cooling purposes.
- Disaggregation: water use index

2. Comparability with the UN metadata

- Date of UN metadata: May 2023
- UN metadata: <https://unstats.un.org/sdgs/metadata/files/Metadata-06-04-02.pdf>
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6. Timeliness and frequency

- Timeliness: t + 18 months
- Frequency: Every 3 years

7. Calculation method

- Unit of measurement: Percentage
- Calculation:

$$\text{Level of water stress} = \frac{\text{Freshwater withdrawn from the environment} - \text{Cooling water [1,000 m}^3\text{]}}{\text{Total renewable freshwater resources [1,000 m}^3\text{]}} \cdot 100 [\%]$$