

SDG Goal 9 Industry, innovation and infrastructure

SDG Target 9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending

SDG Indicator 9.5.1 Research and development expenditure as a proportion of GDP

1. Name of data series
Proportion of R&D expenditures to GDP
Compliant with SDG metadata: yes SDG Metadata

2. Definition of indicator
Research and development (R&D) expenditure as a proportion of Gross Domestic Product (GDP) is the amount of R&D expenditure divided by the total output of the economy.
3. Comparison with SDG metadata (as of 11/07/2017)
The provided time series meets the required UN-metadata.

4. Data description
Research and experimental development (R&D) comprise creative and systematic work undertaken in order to increase the stock of knowledge – including knowledge of humankind, culture and society – and to devise new applications of available knowledge. Expenditures on intramural R&D represent the amount of money spent on R&D that is performed within a reporting unit. The data on GDP is calculated by the Federal Statistical Office's National Accounts as a secondary statistic. GDP is adjusted based on a price base changing every year (previous year's price base). After several revisions due to new data input, final results are available four years after the first preliminary release.
5. Calculation method
Proportion of R&D expenditures to GDP = $\frac{\text{R\&D expenditure (Mn EUR)}}{\text{GDP (Mn EUR)}} \times 100$
6. Unit of measure
%

7. Timeliness	8. Frequency
t + 15 months	Annual
9. Last regular revision	10. Revised period
21/03/2018	Not available

11. Accessibility of source data
<p>Gross Domestic Product (GDP) (Only available in German): https://www.destatis.de/DE/Themen/Wirtschaft/Volkswirtschaftliche-Gesamtrechnungen-Inlandsprodukt/_inhalt.html</p> <p>Fachserie 18 Reihe 1.4 – 2017</p> <p>Expenditure, revenue, and human resources of public and publically funded institutions for science, research and development (Only available in German): https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bildung-Forschung-Kultur/Forschung-Entwicklung/_inhalt.html</p> <p>Fachserie 14 Reihe 3.6 – 2016</p>
12. Metadata on source data
<p>Gross Domestic Product (GDP) (Only available in German): https://www.destatis.de/DE/Themen/Wirtschaft/Volkswirtschaftliche-Gesamtrechnungen-Inlandsprodukt/_inhalt.html</p> <p>Fachserie 18 Reihe 1.4 – 2017</p> <p>Research and development (Only available in German): https://www.destatis.de/DE/Methoden/Qualitaet/Qualitaetsberichte/Bildung/einfuehrung.html</p>
13. Related SDG data series (duplicate indicators or sub-indicators to same indicator)
Not applicable

For more information please contact:

<https://www.destatis.de/EN/Service/Contact/Contact.html>