

Soil organic carbon

[REMOVE](#) [1]

Soil organic carbon is the carbon (C) stored in soil organic matter (SOM). Organic carbon (OC) enters the soil through the decomposition of plant and animal residues, root exudates, living and dead microorganisms, and soil biota. SOM is the organic fraction of soil exclusive of nondecomposed plant and animal residues. Nevertheless, most analytical methods do not distinguish between decomposed and non-decomposed residues. SOM is a heterogeneous, dynamic substance that varies in particle size, C content, decomposition rate, and turnover time.

Data host:

Joint Research Centre

Unit of Measurement:

Percentage (%)

Link to Data:

http://eusoils.jrc.ec.europa.eu/ESDB_Archive/octop/octop_data.html [2]

Description to get data:

Go to http://eusoils.jrc.ec.europa.eu/ESDB_Archive/octop/octop_data.html, under Available Data click on "Download the Organic Carbon per Country" which opens a spread sheet with the values for each country.

Type of Indicator source:

- [Intergovernmental Organisation](#) [3]

Geographical Coverage:

Austria
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czech Republic
Denmark
Estonia
Finland
France
Germany
Hungary
Ireland
Italy
Latvia
Lithuania

Luxembourg
Malta
Netherlands
Poland
Portugal
Romania
Slovakia
Slovenia
Spain
Sweden
Switzerland

Geographical Level:

- [National](#) [4]

Same/similar indicators appears in the following sets:

- [EEA's environmental indicators/Environmental Pressure indicators](#) [5]

Methodological transparency:

- [Partial methodology available](#) [6]

Indicator relation: **Indicator:** [Topsoil organic carbon content](#) [7]
Type of relation: Similar indicator

Temporal Coverage:

2006

Frequency of Updates:

- [irregular](#) [8]

Indicator developer:

Joint Research Centre

Link to Methodology:

[Soil organic carbon](#) [9]

Aggregation level of indicator:

- [Single](#) [10]

Data quality assesment:

- [Home](#)
 - [About the website](#)
 - [About the search options](#)
 - [About the data in our Factsheets](#)

- [assessed by international institution including WTO, OECD](#) [11]

Publishing delay:

- [more than 3 years](#) [12]

Link to data quality assessment:

[Soil organic carbon \(CLIM 027\) - Assessment published Nov 2012](#) [9]

Contribution to the green economy:

Soil organic carbon is the major component of soil organic matter and it is extremely important in all soil processes. A higher value of soil organic carbon is beneficial to the availability and quality of biotic resources, therefore beneficial for the environment and to the Green Economy in general.

Cost of accessing data:

- [free of charge](#) [13]

Potential misinterpretation: The topsoil carbon content may be very different from the subsoil.

Related Indicator: [Topsoil organic carbon content](#) [7]

Potential misinterpretation: Is there carbon rich soils, but they are eroded by water?

Related Indicator: [Soil erosion by water](#) [14]

Potential misinterpretation: Is there carbon rich soils, but they are eroded intensively by water?

Related Indicator: [Soil erosion by water - area eroded by more than 10 tonnes per hectare per year](#) [15]



The NETGREEN project has received funding from the European Union's Seventh Framework Programme for Research, Technological Development and Demonstration under the Grant Agreement no. 603877.

Source URL: <https://measuring-progress.eu/soil-organic-carbon>

Links

[1] <https://measuring-progress.eu/coll-del/nojs/771>

[2] http://eusoils.jrc.ec.europa.eu/ESDB_Archive/octop/octop_data.html

[3] <https://measuring-progress.eu/taxonomy/term/52>

[4] <https://measuring-progress.eu/taxonomy/term/33>

[5] <https://measuring-progress.eu/taxonomy/term/65>

[6] <https://measuring-progress.eu/taxonomy/term/36>

- [Home](#)
 - [About the website](#)
 - [About the search options](#)
 - [About the data in our Factsheets](#)

-
- [7] <https://measuring-progress.eu/topsoil-organic-carbon-content>
 - [8] <https://measuring-progress.eu/taxonomy/term/21>
 - [9] <http://www.eea.europa.eu/data-and-maps/indicators/soil-organic-carbon-1>
 - [10] <https://measuring-progress.eu/taxonomy/term/27>
 - [11] <https://measuring-progress.eu/taxonomy/term/39>
 - [12] <https://measuring-progress.eu/taxonomy/term/26>
 - [13] <https://measuring-progress.eu/taxonomy/term/9>
 - [14] <https://measuring-progress.eu/soil-erosion-water>
 - [15] <https://measuring-progress.eu/soil-erosion-water-area-eroded-more-10-tonnes-hectare-year>