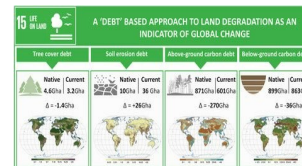


Land degradation debt data

We provide data for global land degradation in a 'debt' based approach. Environmental Debt is the difference between the natural potential condition and the current condition. Naturally, there could be 4.6 Gha of tree cover but currently there are only 3.2 Gha (Global **tree cover debt is 1.4 Gha**). The natural rate of **soil erosion** would be 10 Gt per year, but currently, it is 36 Gt (debt is 26 Gt – rising). **Above-ground biomass** would be naturally 871 Gt C, but currently, it is only 601 Gt C (debt 270 Gt C). **Below-ground carbon**, naturally, there would be 899 Gt C, but currently, there are only 863 Gt C (Debt 36 Gt C). This [study](#) contributes to the developments towards an improvement of [Land Degradation Methodologies](#).

Data: <https://esdac.jrc.ec.europa.eu/content/land-degradation-debt>



EU Soil Observatory (EUSO) Stakeholders Forum: 19-21 October 2021

The JRC has organised the first ever EU Soil Observatory (EUSO) Stakeholders Forum. This three-day event reflected the challenges facing soil within the various strategies of the Green Deal and Horizon Europe's proposed Mission on Soil Health and Food. The event was followed by 274 participants in Webex and more than 2,000 people in streaming. The programme was **recorded** and you can follow it [here](#). The forum established five **Working Groups**: soil monitoring, soil pollution, soil biodiversity, data integration, soil erosion. If you are interested to participate in any of the WG, please send an e-mail to the moderator or to the functional mail **EU-SOIL-OBSERVATORY@ec.europa.eu** by 29.11.21. <https://ec.europa.eu/jrc/en/page/presentations-1st-euso-stakeholders-forum-189661>



First Young Soil Researchers Forum: Special issue open.

The EU Soil Observatory Stakeholders Forum organized a 2.5-hours event with **young** scientists on five topics: soil biodiversity, soil erosion, soil contamination, data and soil organic carbon. The 100 young scientists who submitted an abstract for the EUSO forum are invited to submit their manuscript to an EUSO dedicated Special issue in the **European Journal of Soil Science** <https://onlinelibrary.wiley.com/journal/13652389>



EU Soil Strategy for 2030: reaping benefits of healthy soils for people, food, nature and climate

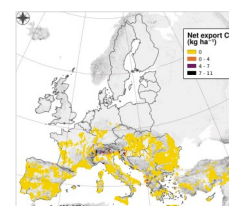
The new EU Soil Strategy sets out a framework and concrete measures for the protection, restoration and sustainable use of soils, in synergy with other European Green Deal policies. It also sets a vision and objectives to achieve healthy soils by 2050 and announces a new Soil Health Law by 2023. Key actions include: the promotion of Sustainable Soil Management, boosting the circular economy, restoration of degraded soils, prevent desertification, increase of research, the monitoring of soil and associated data collection, mitigation and adaption in relation to Climate change and the mobilisation of societal engagement and financial resources

https://ec.europa.eu/environment/publications/eu-soil-strategy-2030_en



Copper accumulation and export in European vineyard Soils

Copper-based fungicides are used in European (EU) vineyards to prevent fungal diseases. Soil physicochemical properties locally govern the variation of the total copper content in vineyards. Using a machine learning model, a [study](#) found that the main variables to predict the Cu distribution in EU vineyards are precipitation, aridity and soil organic carbon. The estimated average net accumulation and net export of Cu in topsoil in European vineyards are respectively 24.8 and 0.29 kg Cu ha⁻¹. Data: <https://esdac.jrc.ec.europa.eu/content/copper-distribution-topsoils>



More Details

Download the ESDAC Newsletter: [PDF Format](#). **Feedback:** panos.panagos@ec.europa.eu

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