

(English version)

**Question for written answer E-004535/25
to the Commission
Moritz Körner (Renew)
(13 November 2025)**

Subject: Energy consumption

1. According to the Commission's estimates, compared with current levels, how much will energy consumption in the EU have increased by 2050 as a result of bitcoin mining and AI computing power? Please provide this information in percentage terms and in absolute figures.
2. What impact will the expected development have on the EU's 2050 climate targets?
3. If the Commission cannot answer these questions, why not?

Submitted: 13.11.2025

**Answer given by Mr Jørgensen on behalf of the European Commission
(23 March 2026)**

The impact of cryptocurrency mining and artificial intelligence (AI) on the EU policy objectives are on the Commission's radar, and an ongoing Commission study aims at estimating the current and future carbon footprint of AI ⁽¹⁾. Taking such developments into account is relevant in view of remaining committed to the 2050 climate neutrality objective.

For 2025, the EU estimated energy use can be inferred from individual Member State reports and stands at the level of 11 TWh of energy consumption (mainly for Bitcoin), or 0,38% of the total consumption ⁽²⁾.

While it is not reliable to make projections up to 2050 due to technological and regulatory uncertainties, the current trends in energy efficiency gains should not be undermined, and it can be roughly estimated that energy consumption for cryptocurrencies could go down to ≈6 TWh/year (0,12% of expected total consumption ⁽³⁾).

In 2024, AI data centres accounted for 1.5% of global electricity demand (around 400 TWh). Their electricity consumption is estimated to increase to 1000 TWh by 2030 ⁽⁴⁾.

According to industry sources, in 2024, cryptocurrency mining sourced 50% of their electricity from renewable energy ⁽⁵⁾, and AI data centres 86% ⁽⁶⁾, thereby limiting their carbon footprint.

The Commission remains committed that digital growth is powered by clean, resilient, and sustainable energy practices. The Markets in Crypto-Assets (MiCA) Regulation ⁽⁷⁾ introduced some transparency obligations on principal adverse impacts on the climate, for which the European Securities and Markets Authority published draft technical standards in July 2024 ⁽⁸⁾.

⁽¹⁾ <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/tender-details/2fb0ee23-64ae-491b-9b0a-d26ff93f9a9b-CN>.

⁽²⁾ <https://coinlaw.io/cryptocurrency-mining-energy-consumption-statistics/>.

⁽³⁾ https://commission.europa.eu/topics/climate-action/delivering-european-green-deal_en.

⁽⁴⁾ <https://www.iea.org/topics/artificial-intelligence>.

⁽⁵⁾ <https://coinlaw.io/cryptocurrency-mining-energy-consumption-statistics/>.

⁽⁶⁾ <https://op.europa.eu/s/Aa0c>.

⁽⁷⁾ Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937, <http://data.europa.eu/eli/reg/2023/1114/oj>.

⁽⁸⁾ <https://www.esma.europa.eu/press-news/esma-news/new-mica-rules-increase-transparency-retail-investors>.