

(English version)

**Question for written answer E-000644/25
to the Commission
César Luena (S&D)
(12 February 2025)**

Subject: Arctic-boreal zone emissions

A study by Nature Climate Change ⁽¹⁾ has revealed significant changes in the CO₂ balance of the arctic-boreal zone between 2001 and 2020. While the region in general remains a carbon sink, more than 30% of the region is a net source of CO₂ and the trends are alarming. Tundra regions may have already started to operate on average as CO₂ sources, demonstrating a shift in carbon dynamics. What is more, when fire emissions are factored in, the zone's growing sink is no longer statistically significant and the permafrost region becomes CO₂ neutral.

1. Taking account of the crucial role played by forest fires, what specific measures is the Commission planning to improve fire prevention and management in European boreal regions?
2. Given the importance of permafrost in carbon storage, and with a view to understanding and mitigating the impacts of permafrost melting on CO₂ emissions, what research and monitoring initiatives does the Commission plan to support?
3. How does the Commission intend to address these changes in its international cooperation policies, particularly in cooperation with countries with territory in the arctic and boreal region?

Submitted: 12.2.2025

**Answer given by Ms Lahbib on behalf of the European Commission
(22 April 2025)**

1. The Commission supports Member States and third countries including through grants under the Union Civil Protection Mechanism (UCPM) ⁽¹⁾. Beneficiaries from Nordic countries are involved in wildfire-related projects to enhance cross-border cooperation, promote resilience, and enhance research and readiness for extreme wildfires. Firefighting preparedness is being reinforced since 2019 with an aircraft of the rescEU fleet positioned in Sweden. The Commission also supports institutional capacity building through the UCPM peer review programme ⁽²⁾ and the Commission's Expert Group on Forest Fires ⁽³⁾, which facilitates the exchange of good practices among the fire management services of European countries.
2. The EU has invested EUR 372 million in 139 Horizon 2020 and Horizon Europe ⁽⁴⁾ research projects covering the Arctic region. In line with the EU Arctic policy, research on permafrost thawing and informing climate mitigation strategies will continue in Horizon Europe. As of January 2025, the European Polar Coordination Office (EPCO) provides expert input to inform decisions on polar priorities and challenges. In 2024, a Commission Task Force issued a report on polar observations ⁽⁵⁾, including recommendations for permafrost and methane emissions monitoring.
3. The EU's Arctic Policy ⁽⁶⁾ and EU Green Alliances with Norway and Canada underline the EU's fundamental interest in supporting multilateral Arctic cooperation. The EU promotes strong cooperation to address climate issues in the Arctic and boreal context and regularly engages with the Arctic Council and funds its research activities. It contributes to climate efforts in multilateral fora such as the International Maritime Organisation and the United Nation's Climate Change Conferences.

¹ <https://www.nature.com/articles/s41558-024-02234-5>

⁽¹⁾ https://civil-protection-humanitarian-aid.ec.europa.eu/what/civil-protection/eu-civil-protection-mechanism_en

⁽²⁾ <https://civil-protection-knowledge-network.europa.eu/disaster-prevention-and-risk-management/ucpm-peer-review-programme>

⁽³⁾ <https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/consult?lang=en&do=groupDetail.groupDetail&groupID=416>

⁽⁴⁾ https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en

⁽⁵⁾ https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/copernicus-polar-roadmap-eu-satellite-observations-help-respond-emerging-polar-challenges-2024-09-03_en?prefLang=bg

⁽⁶⁾ JOIN (2021)27 final.