

EN
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Answer given by Mr Jørgensen
on behalf of the European Commission
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Heat pump is a key technology to decarbonise the heating and cooling sector¹. In the building sector, replacing a boiler by a heat pump in the EU allows to reduce the gas consumption by 95% or more and has thus been identified in the REPowerEU plan² as one of the means to reduce fossil fuel consumption, gas in particular. The Commission is working on reducing the environmental impacts of heat pumps beyond their effect on gas consumption and on their CO₂ emission reduction and will present in that direction revised ecodesign requirements for space heaters, including heat pumps, in 2025.

Environmental impacts and circularity of wind turbines are extensively studied and covered in Commission's reports³. A sustainability assessment is given in the Annex 2 of the Clean Energy Technology Observatory (CETO)⁴. As regards cars, a study on the life-cycle assessment of conventional and alternatively fuelled vehicles showed that battery electric vehicles score best for most of the environmental impact categories⁵. The Commission is working on the development of a methodology for the assessment and the consistent data reporting of the full life-cycle CO₂ emissions of passenger cars and light commercial vehicles under Regulation (EU) 2019/631⁶.

The Commission evaluated the REPowerEU plan in 2024⁷. Over the past 2 years, it has helped the EU save energy (including 18 % natural gas savings), diversify its supplies, reduce energy prices, produce clean energy and smartly combine investments and reforms.

¹ IEA, 2024, Energy technology perspectives.

² Communication REPowerEU Plan COM(2022)230.

³ https://www.europarl.europa.eu/doceo/document/E-9-2024-000347-ASW_EN.html#def1

⁴ European Commission, Joint Research Centre, Mc Govern, L., Tapoglou, E., Georgakaki, A., Mountraki, A., Letout, S., Ince, E., Gea Bermudez, J., Schmitz, A. and Grabowska, M., Clean Energy Technology Observatory: Wind Energy in the European Union - 2024 Status Report on Technology Development, Trends, Value Chains and Markets, Publications Office of the European Union, Luxembourg, 2024, <https://data.europa.eu/doi/10.2760/0882709>, JRC139320.

⁵ European Commission: Directorate-General for Climate Action, Hill, N., Amaral, S., Morgan-Price, S., Nokes, T. et al., Determining the environmental impacts of conventional and alternatively fuelled vehicles through LCA – Final report, Publications Office of the European Union, 2020, <https://data.europa.eu/doi/10.2834/91418>

⁶ Regulation (EU) 2019/631 of the European Parliament and of the Council of 17 April 2019 setting CO₂ emission performance standards for new passenger cars and for new light commercial vehicles.

⁷ https://energy.ec.europa.eu/topics/markets-and-consumers/actions-and-measures-energy-prices/repowereu-2-years_en