

**Question for written answer Z-000004/2024
to the European Central Bank**

Rule 140

Paul Tang (S&D)

Subject: Effects of monetary tightening on the energy transition

A growing body of research finds evidence that higher interest rates disproportionately raise the cost of sustainable investments¹, since investments in renewable energy sectors require more upfront costs than investments in sectors with higher greenhouse gas emissions, and are therefore more sensitive to changes in interest rates^{2,3}.

In the Netherlands, a study by Berenschot predicts that the cost of eight crucial renewable energy technologies will increase by an extra EUR 163 billion as a consequence of the recent ECB interest rate hikes⁴, and a survey by the Dutch Renewable Energy Association (NVDE) reveals that one third of projects have been halted or delayed because of the increasing cost of capital⁵. The offshore wind industry seems to suffer particularly greatly from the reduced profitability of these investments⁶.

As the ECB has extensively acknowledged, a delayed transition entails higher risks for price stability^{7,8}.

1. What research has the ECB produced so far to monitor the effects of its monetary tightening policy on the cost of energy transition investments?
2. Has the ECB taken these developments into account when deciding to raise interest rates in the past? Or will it do so in the future when designing its structural refinancing operations?

¹ Aguila, N. and Wullweber, J., 'Greener and cheaper: green monetary policy in the era of inflation and high interest rates', *Eurasian Economic Review*, Vol. 14, 2024, pp. 1-22,

<https://link.springer.com/article/10.1007/s40822-024-00266-y>.

² Polzin, F. et al., 'The effect of differentiating costs of capital by country and technology on the European energy transition', *Climatic Change*, Vol. 167, article 26, 2021, <https://doi.org/10.1007/s10584-021-03163-4>.

³ Monnin, P., 'The impact of interest rates on electricity production costs', Council on Economic Policies, 25 June 2015, <https://www.cepweb.org/the-impact-of-interest-rates-on-electricity-production-costs/>.

⁴ Bianchi, R. et al., 'Impact of rising interest rates on sustainable projects', Nederlandse Vereniging Duurzame Energie (NVDE), Berenschot, May 2023, <https://www.nvde.nl/wp-content/uploads/2023/06/2023-Impact-of-increased-interest-rates-on-the-businesscase-of-renewables-def.pdf>.

⁵ NVDE, 'Assessment effects high interest rate for sustainable energy sector', 14 June 2023, <https://www.nvde.nl/wp-content/uploads/2023/06/NVDE-Engelse-versie-ledeninventarisatie-rapport-def-1.pdf>.

⁶ Mathurin, P. and Millard, R., 'The struggles of the offshore wind industry', *Financial Times*, 31 October 2023, <https://www.ft.com/content/00e8af58-f2b4-4d91-9c6e-bd2045c22c20>.

⁷ Van Tilburg, R. and Schoenmaker, D., 'Price stability is all about climate change', Bruegel, 8 April 2024, <https://www.bruegel.org/first-glance/price-stability-all-about-climate-change>.

⁸ Faccia, D. et al., 'Feeling the heat: extreme temperatures and price stability', Working Paper Series No 2626, European Central Bank, December 2021, <https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2626~e86e2be2b4.en.pdf>.