



Options for the ECB to neutralise the negative effects of its monetary policy for the European energy transition

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1. Rising interest rates slow down the energy transition and thus increase risks for price stability

In response to rising inflation in the euro area the European Central Bank (ECB) has been tightening its monetary policy since July 2022. It has raised its key interest rate (deposit facility) from -0.5% to 3.25%. An unintended side effect of this policy is that the costs of the energy transition are rising relatively fast. This due to the fact that the investments needed for the energy transition are often highly capital-intensive. Investments in renewable energy generation and to increase energy efficiency in the real estate and the industry require high initial capital expenditures, while afterwards they have low operating expenditures since no or reduced input from fossil fuels is required. The cost of capital is therefore an important element in the total costs of the energy transition. Rising interest rates thus threaten to slow down the energy transition. An energy transition that is essential to safeguard future price stability as it protects the euro area against further price instability caused by fossil fuel prices.²

Research by Berenschot finds for the Netherlands that interest rate rises like the ones we have seen over the last year are causing a significant deterioration in the business case for renewable technologies. For the Netherlands the additional annual costs resulting from an interest rate increase of 3% are respectively €3.5 billion euro (+5,4%) in 2030 and €7.6 billion (+9%) in 2050. 54% of the members of the Dutch Renewable Energy Association (NVDE) indicate that they have or foresee problems with the financing of new sustainable energy in the short term. 32% of NVDE members have already delayed or called off planned investments. And all else equal, higher costs of credit for those projects will result in higher indebtedness for delivering the same assets and drain the ability of firms and households to finance further improvements or other productive investment.

By increasing the interest rates the ECB may be cutting the branch it's sitting on. As shielding the euro area against further shocks from fossil fuel prices, the prime reason for the current inflation,

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² Jourdan and van Tilburg (2022) [The ECB can help fix the energy price crisis](#): Play the long game, Energy Monitor and Voldsgaard, Egli and Pollitt (2022) [Can we avoid green collateral damage from rising interest rates?](#), UCL Institute for Innovation and Public Purpose.

requires an acceleration of the energy transition. And whereas some EU member states have sufficient fiscal capacity to compensate for the rising interest rates through higher public investments and subsidies, many do not.³

This short note discusses what the ECB can do to neutralise the negative impacts of its current monetary policy on the energy transition. We start by discussing how this relates to the ECB mandate, followed by a presentation of what the ECB is already doing to take climate into account in its monetary policies. Then we discuss what possible instruments the ECB has at its disposal to neutralize the negative effects of its monetary policy on the energy transition.

2. Mandate: Should the ECB take the energy transition into account in its monetary policy?

One of the conclusions of the ECB strategy review in 2021 was that it needed to further incorporate climate change considerations into its monetary policy framework. The ECB gave several reasons why climate is within its monetary mandate.

Price stability

First, climate is a significant factor for the ECB's main objective: to maintain price stability, defined as an inflation rate of 2% over the medium term (2-3 years): "Climate change and the transition towards a more sustainable economy affect the outlook for price stability through their impact on macroeconomic indicators such as inflation, output, employment, interest rates, investment and productivity; financial stability; and the transmission of monetary policy."⁴

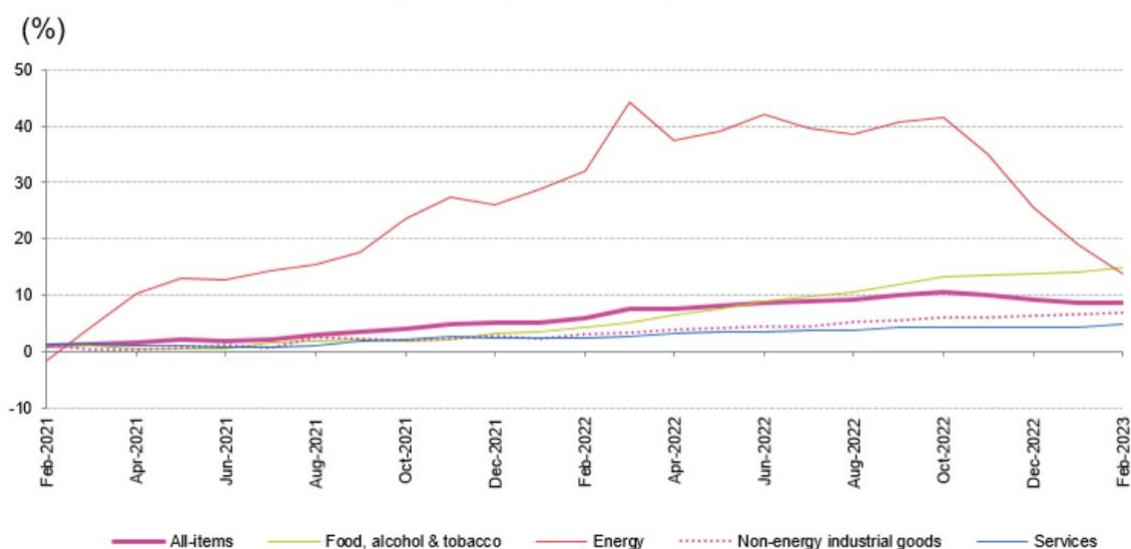
In 2021 climate impacts were still a point of discussion, with only small price effects observed during dry summers, and scenario analyses predicting inflationary effects. Since then, the strong price increases of fossil energy have made it clear to everyone that the energy transition is an important determining factor for price stability. As the figure below shows, energy prices have been since February 2021 a driving force behind the inflation in the euro area, including through secondary effects transmitting to prices of other goods and services with energy as an input. ECB Executive Board member Isabel Schnabel even coined the term 'fossilflation' for this: inflation as a result of an energy transition that is progressing too slowly.⁵

³ Van den Noord (2023) [A targeted golden rule for public investments?](#), ECON committee of the European Parliament and Mang and Dominick (2023) [Beyond the bottom line](#); How green industrial policy can drive economic change and speed up climate action, New Economics Foundation.

⁴ [ECB presents action plan to include climate change considerations in its monetary policy strategy](#), ECB press release, 8 July 2021.

⁵ Schnabel (2022) [A new age of energy inflation](#): climateflation, fossilflation and greenflation, ECB speech.

Euro area annual inflation and its main components, February 2021 - February 2023 (estimated)



eurostat 

Climate risks for the ECB balance sheet

In addition, there is also the possibility for the ECB to incur losses due to climate risk: “climate change and the carbon transition affect the value and the risk profile of the assets held on the Eurosystem’s balance sheet, potentially leading to an undesirable accumulation of climate-related financial risks.”⁶ Thus, in order to avoid losses through its monetary operations, the ECB needs to take both transition and physical climate risks into account in its asset purchase programs and collateral framework.

Support the Union’s general economic policies

The EU Treaties also oblige the ECB to “support the general economic policies in the Union”, as long as this can be done “without prejudice to the objective of price stability”.⁷ These general economic policies also includes the protection of the environment as well as objectives like energy security and strategic autonomy.

Other articles also require the ECB, if it can do so without harming price stability, to support the energy transition in the EU. These include Article 11 (on integrating environmental protection in the Union’s policies), Article 7 (“consistency between its policies”) and Article 2 (“The Union is founded on the values of (...) respect for human rights”) and the EU Charter of fundamental rights.⁸

The ECB also recognizes this, as evidenced by its desire to become a ‘Paris-aligned central bank’. Thus the ECB aims to “with reference to our secondary objective, support the green transition of the economy in line with the EU’s climate neutrality objectives”.⁹

⁶ [ECB presents action plan to include climate change considerations in its monetary policy strategy](#), ECB press release, 8 July 2021.

⁷ [Article 127](#) of the Treaty on the Functioning of the European Union.

⁸ Van Tilburg and Simic (2021) [Legally green](#); Climate change and the ECB mandate, Sustainable Finance Lab Policy Paper.

⁹ [ECB takes further steps to incorporate climate change into its monetary policy operations](#), ECB press release, 4 July 2022.

3. Instruments: What is the ECB already doing to make monetary policy Paris-aligned?

In July 2021, the ECB decided to include climate change considerations in monetary policy operations in the areas of disclosure, risk assessment, collateral framework and corporate sector asset purchases. After a year of further study, the ECB outlined its concrete plans for those policy areas.¹⁰

Decarbonisation of corporate bond holdings

Since October 2022, the Eurosystem has begun to gradually decarbonise its corporate bond holdings. To that end, the Eurosystem is tilting these holdings towards (i.e. purchase more from) issuers with better climate performance through the reinvestment of the redemptions. In February 2023 the Governing Council decided on a stronger tilting of corporate bond purchases.¹¹ However, this greening will now stall due to the decision to discontinue the reinvestments under the Asset Purchase Programme as of July 2023.¹² Recognising the shortcomings of the approach to only green 'flows' of reinvestments, Isabel Schnabel has argued for a stock-based tilting approach for greening the corporate bond portfolio,¹³ but the Governing Council is yet to act on this recommendation.

Carbon limits in collateral requirements

Before the end of 2024 the Eurosystem will limit the share of assets issued by entities with a high carbon footprint that can be pledged as collateral when borrowing from the Eurosystem. At first, the Eurosystem will apply such limits only to marketable debt instruments issued by non-financial corporations. Additional asset classes may also fall under the new limits regime as the quality of climate-related data improves. As of 2022 the Eurosystem considers climate change risks when reviewing haircuts applied to corporate bonds used as collateral. Haircuts are reductions applied to the value of collateral based on its riskiness.¹⁴ However, the ECB ended up not making any adjustments based on climate change considerations, arguing that 'the updated haircut schedule is already sufficiently protective'.¹⁵

More to come

In addition to this, the ECB has committed to regularly review all of its measures. It will assess their effects and adapt them if necessary, to confirm that they continue to fulfil their monetary policy objectives, as well as that the measures continue to support the decarbonisation path to reach the goals of the Paris Agreement and the EU climate neutrality objectives.¹⁶

¹⁰ [ECB takes further steps to incorporate climate change into its monetary policy operations](#), ECB press release, 4 July 2022.

¹¹ [ECB decides on detailed modalities for reducing asset purchase programme holdings](#), ECB press release, 2 February 2023.

¹² [Monetary policy decisions](#), ECB press release, 4 May 2023.

¹³ Schnabel (2023) [Monetary policy tightening and the green transition](#), ECB speech.

¹⁴ [ECB takes further steps to incorporate climate change into its monetary policy operations](#), ECB press release, 4 July 2022.

¹⁵ [ECB reviews its risk control framework for credit operations](#), 20 December 2022, ECB press release.

¹⁶ [ECB takes further steps to incorporate climate change into its monetary policy operations](#), ECB press release, 4 July 2022.

4. Options: what can the ECB do to neutralise its negative effect on the energy transition

Several options have been proposed as to how the ECB could more effectively live up to its aim to become a Paris aligned central bank. We present the most prominent of those proposals here and discuss whether they have the potential to effectively neutralize the current negative impact of the rising interest rate on the energy transition in the EU.

Tightening requirements for the collateral framework and corporate bond purchase programme

First, the ECB can tighten the current climate-related requirements in the collateral framework and when buying corporate bonds. Specifically, this can be done via:¹⁷

- Stronger tilting in the corporate bond purchases (including a switch to stock-based tilting) and collateral framework
- Exclusion of the most climate harmful assets (like coal and new fossil fuel developments)
- Eligibility limited to companies with Paris-aligned transition plans (science-based absolute targets for all emissions, including scope 3)

Helpful as such measures may be for the energy transition, they to a large extent work through making carbon-intensive investments relatively less attractive. However, what is also needed is an improvement in the financing conditions for positive investments in the energy transition. Also, given the largely bank-based financial system of the EU, measures aimed at financial markets like the corporate bond purchase programme indirectly impact only a limited part of the EU economy.

Dual interest rates

The most direct way in which the ECB can influence the costs of the energy transition is through the interest it charges to banks in the eurozone. This instrument is known as refinancing operations, which is always open to banks for the short term. In order to stimulate economic activity, the ECB has in recent years given banks the option of borrowing at more attractive rates, provided they achieve a specific target, here: to maintain their lending to businesses and households. This so-called Targeted Longer Term Refinancing Operation (TLTRO), with a size of more than 2000 billion euros at its peak, will be phased out in 2024.

Proposals have been put forward to green the TLTRO by think tanks¹⁸ and by bank economists.¹⁹ The central banks of the Network for Greening the Financial System assessed adjusting pricing in credit operations on the basis of a climate lending benchmark as being strongly positive in contributing to mitigating climate change.²⁰ Central banks of Japan and China have already introduced green targeted lending operations.²¹

However, the ECB has so far not added any climate considerations to the TLTRO criteria. Recently, a first assessment has been made of the climate impact of the loans issued by banks participating in the ECB's TLTRO III programme that ran from March 2020 to March 2021. It found that additional

¹⁷ Think tank and NGO [Open letter to the ECB Governing Council](#), 8 September 2022.

¹⁸ Van 't Klooster and van Tilburg (2020) [Targeting a sustainable recovery with green TLTROs](#), Positive Money and Sustainable Finance Lab and Batsaikhan and Jourdan (2021) [Money looking for a home](#), Positive Money Europe, see also <https://unlock.green/>.

¹⁹ [R.I.P. TLTROs, long live green dual rates](#), Open letter to the European Central Bank's Governing Council, 1 June 2022.

²⁰ NGFS (2021) [Adapting central bank operations to a hotter world](#); Reviewing some options.

²¹ [BoJ green loans scheme gets underway](#), 20 January 2022 and [PBoC launches targeted green lending](#) 10 November 2021, both Green Central Banking.

lending under the programme drove loans to more polluting sectors, while lending to less-polluting sectors was almost identical across participating and non-participating banks.²²

In order to neutralize the negative effects the current monetary tightening has on the energy transition in the EU, the ECB has the option of retaining the element of a targeted interest rate differential for desirable lending. In this case the target would be that banks provide cheaper and more loans that accelerate the energy transition, thus contributing to price stability in the EU by reducing reliance on volatile fossil fuel energy.

To this end, the ECB could introduce a green discount interest rate on refinancing operations, designed to incentivise banks to increase their lending towards supply side sectors where inadequate investment contributes to inflationary pressure: clean energy production and energy efficiency renovations. Cheaper capital costs for these investments would directly stimulate the supply of green domestic energy and renovation measures, reducing the reliance on fossil fuels.

To this end banks need to categorise their loan books. This is something banks are already expected to do under current EU regulation like the Sustainable Finance Disclosure Regulation (SFDR), Corporate Sustainability Reporting Directive (CSRD), EU taxonomy and the ECB's supervisory expectations. It is important that this categorisation is independently assessed.

Conclusion

Not slowing down the energy transition in the euro area and wider EU falls within the mandate of the ECB. High and volatile fossil fuel prices have proven to be a clear threat for price stability in the euro area. With a green differentiated lending scheme the ECB has a potentially effective instrument at its disposal to both promote the energy transition and achieve its primary objective of price stability.

²² Colesanti Senni, Sole Pagliari and van 't Klooster (2023) [The CO2 content of the TLTRO III scheme and its greening](#), Centre for Climate Change Economics and Policy Working Paper 422.