Quantitative easing and climate:

The ECB's dirty secret

RECLAIM Finance

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> ***"The strategic review of the ECB's monetary policy gives us the opportunity to bend the EU's monetary and prudential policies to climate imperatives."***
>
> *Paul Schreiber, in charge of the supervision of financial actors at Reclaim Finance*

EXECUTIVE SUMMARY

Used intensively and almost continuously by the European Central Bank (ECB) since 2014, and massively during the current crisis, **quantitative easing has become an unavoidable tool of European monetary policy**. Nonetheless, the ECB's asset purchases **remain opaque**.

This lack of transparency is worrying, as the few public data show that the ECB's corporate asset purchases massively finance companies that significantly contribute to global warming.

The study of the list of holdings under corporate asset purchase programs (CSPP and PEPP[1]) reveals that these programs finance **38 corporations active in fossil fuels[2], including ten in coal and four in shale oil and gas.**

Among the ten corporations active in the coal sector[3]:

- **Three play an important role in the sector[4], including Fortum, which is participating in a new German coal power plant project[5].**
- Eight contribute to the operation of coal power plants[6] and two are financial subsidiaries of groups active in coal[7].
- **Nine do not plan on closing all their coal assets following a schedule compatible with the Paris Agreement and a 1.5°C trajectory[8].**

Total installed capacity in coal power plants for these companies reaches 66,000 MW[9] and an additional 1,100 MW coming from new projects.

The ECB holds assets from **oil and gas companies like Shell and Total – which plan on increasing oil and gas production by 38 and 12%[10] from 2018 to 2030 – or Eni.** Despite the fact that we need to phase out gas only ten years after we end coal, gas companies are particularly well represented. Developing the sector is strictly incompatible with climate objectives, especially when it concerns the very energy-intensive liquified natural gas (LNG). Moreover, **four corporations are active in fracking[11], including Shell, which plans on exploiting considerable shale reserves[12].**

Beyond fossil fuels, the ECB's portfolio is mostly composed of assets from high-carbon sectors and activities like the air sector.

The analysis developed in this note highlights the climate and moral biases and limitations of "market neutrality", particularly with the financing of two arms manufacturers[13].

The Eurosystem central banks' governors and Member States must take advantage of the strategic review, launched in January and set to finish mid-2021, to align monetary and prudential policies with climate imperatives and EU objectives and values.

Recommendations

To align with European climate objectives, **the ECB must start by excluding from its list of eligible assets those corporations:**

- **That do not adopt, by 2021, a detailed plan to phase out coal by 2030 in Europe and the OECD and by 2040 worldwide. By 2022, they should adopt a similar plan to phase out oil and gas by 2040/2050.**
- **With high exposure to coal[14] or unconventional oil and gas[15].**
- **That develop new fossil fuel projects[16].**

To contribute to the emergence of sustainable finance and a sustainable economy, the ECB should:

- **Push for a "brown" taxonomy** that, together with the "green" taxonomy, will allow it to target green sectors and low-carbon activities with its asset purchases.
- **Exclude from its list of eligible assets those corporations that do not adopt an alignment plan on a 1.5°C trajectory[17].**

To uphold democratic principles and protect European values, the ECB needs to:

- **Be fully transparent about its asset purchases,** particularly by publishing the value of each asset under CSPP and PEPP.
- **Immediately exclude corporations that raise ethical or moral issues from its list of eligible assets, starting with arms manufacturers.**

QUANTITATIVE EASING: BILLIONS OUT OF SIGHT

An unavoidable tool of European monetary policy

Asset purchase programs, or quantitative easing, started in mid-2014 to complement "conventional" monetary tools and to ensure market liquidity and the price stability objective[18] – defined as an inflation close to but under 2% – assigned to the ECB.

By allowing the central bank to use monetary creation to directly buy bonds from public institutions, corporations or banks, quantitative easing injects a large quantity of liquidity into the market. Unlike "conventional" refinancing operations, it does not work on the logic of "credit" to the banking sector. Quantitative easing supplements monetary levers that are becoming less effective when the central bank's guiding rates are close to zero or negative.

Since 2014, owing to inflation that remained under the 2% mark, quantitative easing has been used extensively. At the end of March 2020, Eurosystem banks' holdings reached 2.783 trillion euros[19] (see Chart 1).

If 2019 started with the suspension of purchases (see Chart 2), a €20 billion monthly restart was decided as early as September 2019. The COVID-19 crisis marks a turning point: In 2020, asset purchases will reach 1.1 trillion euros, including €750 billion for the Pandemic Purchase Program, designed specifically to respond to the crisis.

The law of opacity

The scale of the ECB's asset purchases should demand the highest degree of transparency. However, looking into asset purchases means first confronting a wall of opacity.

Apart from the new Pandemic Emergency Purchase Program (PEPP), asset purchases (« Asset Purchase Program » or APP) are conducted through four programs (see Table 1).

The only information available on these programs concerns the PSPP – composed of public bonds – and CSPP, which is composed of corporate bonds. The list of holdings under ABSPP and CBPP3 have not been made public.

The ECB provides no information regarding the climate impact of CSPP and PEPP. If the list of holdings is published, the ECB does not publish the value of each asset on that list. The refusal to disclose asset values makes it impossible to know the division of purchases under CSPP and PEPP and, therefore, to determine their social, environmental and climate impacts. For example, it is not possible to determine how much the ECB finances socially beneficial sectors, like healthcare, or sectors that block the ecological transition, like the fossil fuel sector.

Information requests have been submitted to the ECB[20]. Unfortunately, it will likely reject them, arguing that all market distortion should be avoided and that the "market neutrality" of its operations must be ensured[21]. The ECB refused a similar request regarding the publication of information on ABSPP and CBPP3 using these arguments[22].

While the ECB is using massive quantitative easing to finance corporations – thus influencing citizens' lives for decades – and has invited Europeans to participate in the review of its monetary policy that started last January, such a refusal would pose a democratic issue.

Chart 1: Asset Purchase Programs' (APP) cumulative net purchases

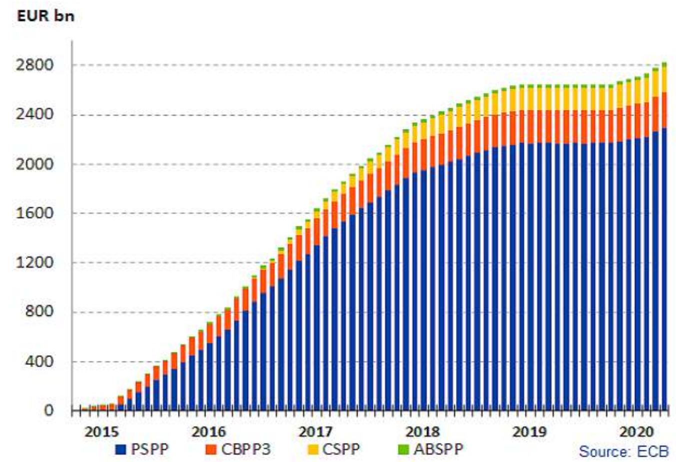


Chart 2: Net monthly asset purchases by program

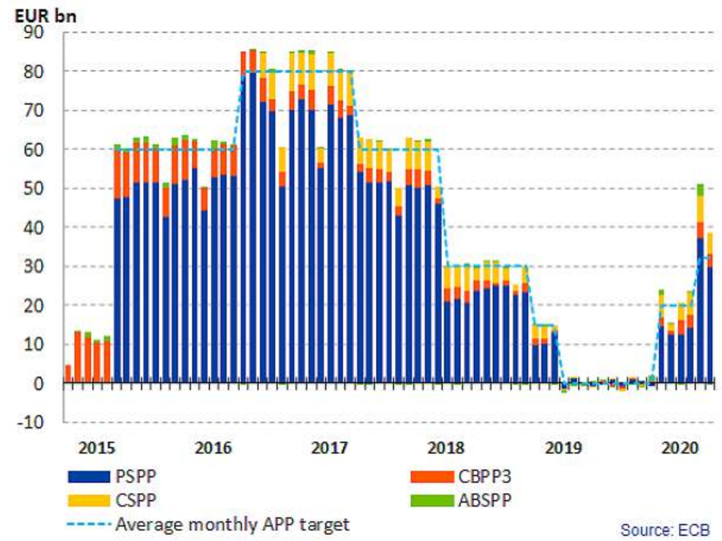


Table 1: Volume of asset purchases by program (in billions of euros)

APP Program	Corporate sector purchase programme (CSPP)	Public sector purchase programme (PSPP)	Asset-backed securities purchase programme (ABSPP)	Third covered bond purchase programme (CBPP3)	Total Asset Purchase Program (APP)
Holdings as of March 2020 (billion)	201.5	2159.6	31.2	274.1	2666.4

Source : BCE

FOSSIL FUELS HAVE A FRONT-ROW SEAT

Coal is still strong

Despite the previously mentioned opacity, the little information available on corporate asset purchases - under CSPP and PEPP - allows for a first assessment: **Quantitative easing finances all fossil fuels, even the "dirtiest" ones.**

The list of CSPP and PEPP holdings mid-April 2020 reveals that **the ECB holds assets from ten corporations active in the coal sector[23]**. The support provided to this sector is incomprehensible:

- Phasing out coal by 2030 in the OECD and Europe and by 2040 elsewhere is a prerequisite to reaching climate targets.
- Coal is responsible for 40% of the energy sector's emissions and at least 800,000 premature deaths a year[24].
- More than 120 financial actors have already adopted policies restricting their support to the sector.
- To reduce financial risks and respect its mandate, the ECB needs to take into account the high level of risk attached to coal assets, whose rentability is sharply declining[25] and which could easily become "stranded assets[26]".

Table 2 presents CSPP and PEPP firms that are active in coal and summarizes the nature of their activity in the sector.

Among these ten companies:

- **Three are significantly active in the coal sector[27], including Fortum, which is working on the development of a new German fossil fuel project.**
- Eight are operating coal power plants and two are financial subsidiaries of corporations active in the coal sector.
- **Nine are not planning on closing all of their coal assets following a calendar aligned with the Paris Agreement and a 1.5°C trajectory.**

Table 2: CSPP and PEPP corporations active in coal

Corporations on the CSPP and PEPP list of holdings	Activity in the coal sector	Installed coal power capacity of plants controlled by the corporation (MW)	Installed coal power capacity of plants partially controlled by the corporation (MW)	Installed coal power capacity from new coal projects (en MW)
A2A	Despite the recent reduction of its coal activities, the company is still involved in two Italian power plants. As part of the Italian coal phase-out, these plants should close by 2025.	970	X	X
EDF (Electricité de France)	EDF operates coal power plants that should be closed by 2022 and 2025 in France and the United Kingdom. With Datang, it holds a large share of Chinese power plants.	3800	6260	X
EnBW International Finance	The company is a financial subsidiary of EnBW Energie Baden-Württemberg which operates German coal plants.	X	4366 (Energie Baden-Württemberg AG)	X
Energias de Portugal (EDP)	EDP will close its last Portuguese power plant in 2023 but will continue to be involved in coal with its subsidiaries EDP Brasil and EDP Spain.	1260	1944 (EDP brasil et EDP Spain)	X
Enel	Enel and its subsidiaries operate several coal power plants. Following the Italian governement's decision, it should close its Italian plants by 2025 but will continue to run its other plants, notably in Chile. Furthermore, the corporation offers financial services that contribute to the development of coal, especially with Enel Finance International NV, which benefits directly from CSPP and PEPP purchases.	15828	11983 (subsidiaries)	X
Engie SA	Engie runs ten coal power plants, seven of which have no closing date. As it previously did, the company could sell its plants or convert them to gas or biomass.	6368	X	X
EVN AG	In spite of the early closing of its Austrian power plant, the company keeps shares in a German power plant.	X	750	X
Fortum Oyj	Despite its climate commitments, Fortum still operates coal power plants and is the majority shareholder of Uniper, which runs several plants and is developing a new German project."	1709	10345 (Uniper)	1100
Veolia Environnement	Veolia Environnement includes Veolia Polska and operates coal power plants in Eastern Europe. Veolia committed to exit coal but plans on doing it by converting its power plants.	X	785 (Veolia Polska)	X

Sources : ECB, Global Coal Exit List (GCEL), Global Coal Plant Tracker

Notes : The table indicates, in green, coal power plants that are set to close on a timeline aligned with the 1.5°C trajectory; in orange, the absence of closing dates; and, in red, the involvement in new coal projects. The corporation is considered to be partially involved in a coal power plant if it is the parent company of firms that run the plant, is a significant shareholder of the plant, or is the financial subsidiary of a corporation active in coal and provides financial services in the sector.

The total installed coal power capacity of CSPP and PEPP corporations reaches 66,000 MW, plus 1,100 MW from newly-planned projects. This power capacity exceeds that of the fifty-eight French nuclear reactors in service[28].

The case of three corporations, listed on the Global Coal Exit List and significantly contributing to the coal sector, deserves attention:

- **Fortum Oyj** committed to a coal phase out for its own installations – which account for a very small portion of its electricity production (3%) – but became the majority shareholder of Uniper in 2019. These changes are contradictory: Uniper relies heavily on coal (28% of its electricity production), notably because it bought power plants, and the two firms want to develop a new plant in Germany[29]. Fortum has also threatened the Netherlands with legal action to oppose their decision to exit coal by 2030.
- **Enel** is widely involved in the coal sector, mainly in Europe, and gets a significant portion of its electricity production from it (28% in 2018[30]). The corporation announced its desire to close its European plants by 2030 but gave no further detail and didn't include its Chilean power plant.
- **EnBW** runs several coal power plants in Germany and gets 35% of its electricity from coal. The firm has no phase-out plan, and the German national objective of a coal exit in 2038 is incompatible with a 1.5°C trajectory.

Besides these three companies, most of the energy corporations align their practices with national objectives and only close coal power plants that fall within national phase-out plans. They keep on running plants that are exempted from such constraints, especially outside of Europe.

Moreover, **the reduction of coal activities planned by some of them - including Engie and Veolia[31] – might not entail closing power plants but selling or converting them instead. This choice perpetuates environmental damage and a dependence on fossil fuels.**

Three cases illustrate these tendencies:

- **Engie** still operates ten coal power plants and has set closing dates for only three of them. The company distinguished itself by selling its installations[32] instead of closing them.
- **EDF** plans on phasing out coal by 2025, but this commitment does not apply to its involvement in Chinese power plants[33]. The firm works with the Chinese company Datang, the world's third-largest coal project developer. Moreover, the energy company is in favor of extending the Cordemais power plant until 2024[34], two years later than France's planned exit from coal.
- **Energias de Portugal (EDP) will close its last Portuguese coal power plant in 2023** and largely invests in renewable energies. However, its Brazilian and Spanish subsidiaries still get 47% and 37% of their electricity respectively from coal.

Oil and gas waiting to take over

The presence of coal in the ECB's holdings is especially worrying but should not conceal the much larger presence of oil and gas companies. Thus, **38 corporations[35] active in the oil and gas sector are listed in the ECB's holdings, including major producers like Shell, Total and Eni.**

This high presence goes against all environmental data and jeopardizes climate objectives. In fact, the transition entails the phasing out of all fossil fuels:

- Burning all coal, oil and gas reserves already in production would exhaust a 2°C carbon budget, while burning in-production oil and gas alone would take us past 1.5°C. Despite this, governments and companies currently plan to extract 120% more fossil fuels by 2030 than what a 1.5°C carbon budget allows[36].
- Global emissions must be reduced by roughly half of 2010 levels by 2030 and further reduced to effectively zero levels by 2050 to have even a 50% chance of limiting global warming to 1.5°C[37].

Shell and Total's ambitions to increase their oil and gas production by 38% and 12%[38] respectively between 2018 and 2030 are at odds with these orientations.

The gas sector is especially well-represented in the ECB's list of holdings. Listed corporations plan on expanding this activity in the coming years to replace coal. For example, OMV plans on "increasing the share of gas in its portfolio to 50% and to double its sales in Europe"[39].

However, measuring gas emissions through all of its life-cycle reveals its environmental harm[40]. Gas is made of 95% methane, a gas whose global warming potential is eighty times higher than carbon dioxide in the first twenty years[41], and its exploitation causes numerous methane spills along the supply chain. These spills are worsened by the venting practices linked to fracking, and the oil and gas industry is to blame for the extreme rise in methane concentration in the atmosphere[42]. The development of liquified natural gas (LNG) emits even more GHG, as it is an energy-intensive process. Life-cycle LNG emissions amount to 134% of combustion emissions[43].

Table 3: CSPP and PEPP corporations active in shale oil and gas

Corporation active in shale oil and gas	World rank in reserves of shale oil and gas (under production and expansion reserves)	Share of shale oil and gas in the corporation's oil and gas reserves
Eni	225	1%
Repsol	40	23%
Royal Dutch Shell	3	31%
Total	61	2%

Source : data from Rystad Energy in october 2019 provided by the NGO Oil Change International

Even more worrying is the fact that the **ECB finances four corporations[44] active in shale oil and gas: Shell, Repsol, Total and Eni** (See Table 3)**. Shell is especially problematic. More than 30% of its reserves is made of shale oil and gas. It could exploit considerable reserves – 12 times its current production in the area – that would make it the world's third-largest producer of shale oil and gas.**

A POLLUTING PORTFOLIO THAT OPPOSES EUROPEAN OBJECTIVES

From automobiles to arms, via the air sector

Fossil fuels are not the only polluting activities to benefit from asset purchases. Construction companies (Saint-Gobain, Vinci…), the automobile sector (Daimler, BMW, Volkswagen, Peugeot, Renault), the food and alcohol industry (Nestlé, Unilever, Heineken, Pernod Ricard…) or pharmaceutical companies (Bayer…) are all listed in ECB's corporate purchases.

While the European air sector is currently awaiting massive public support[45], it has long been a key benefactor of the ECB's asset purchases with airlines (Ryanair, Lufthansa, International Consolidated Airlines Group), a plane manufacturer (Airbus) and airports (ADP, Brussels Airport Company, Royal Schiphol Group).

Finally, **the asset purchases of two arms manufacturers raise an ethical issue**. By buying assets from Dassault Systèmes and Thalès, the ECB shows the limits of its own reasoning. How could the central bank of a union that puts the promotion of peace, people's well-being[46] and the respect of human rights[47] among its key objectives finance two of the world's biggest arms producers?

A non-neutral portfolio that favors polluting sectors

Our findings on the presence of fossil fuel companies in the ECB's list of holdings are largely confirmed by several studies: Corporate asset purchases massively benefit high-carbon sectors and activities.

As recently as 2017, a study from the London School of Economics and the Grantham Research Institute[48] showed that 62.1 % of purchased assets came from the coal industry and electricity or gas production. Renewable energy only marginally benefited from the ECB's asset purchases and the oil and gas sector benefited from 8.4% of purchases.

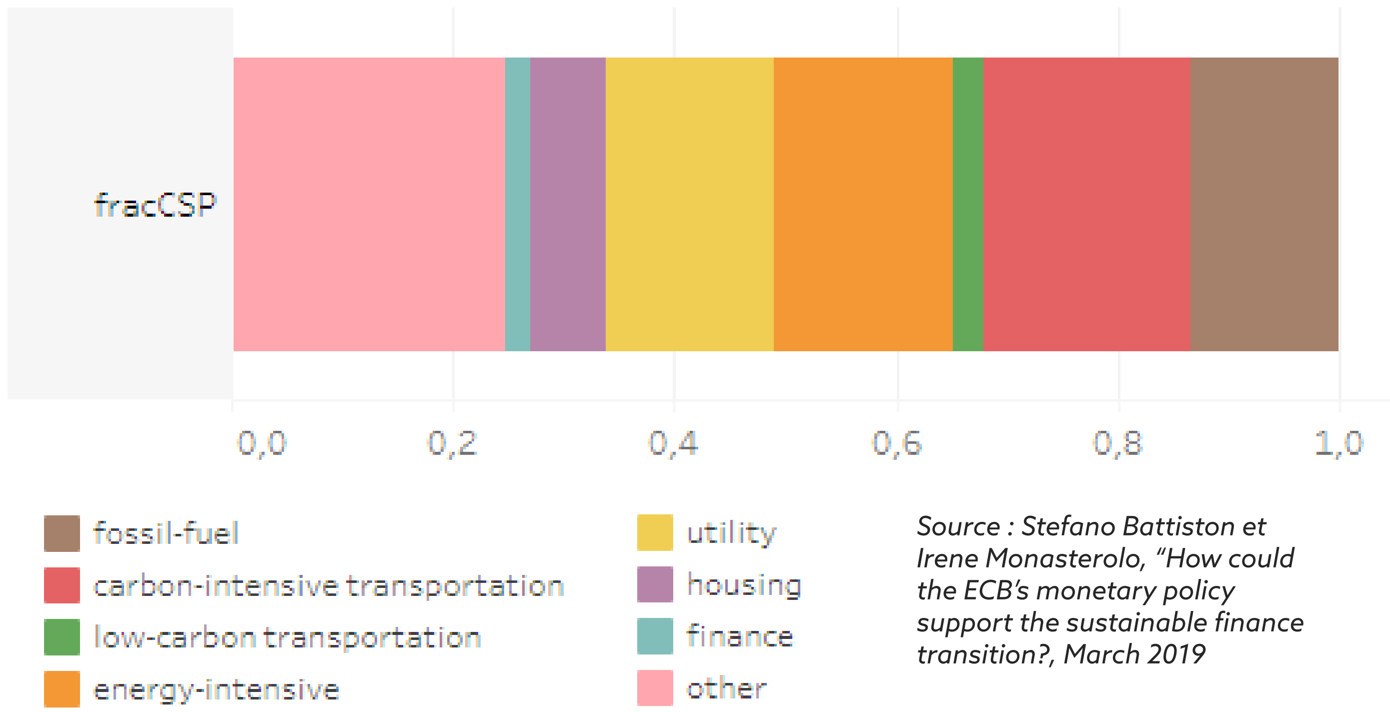
Two years later, Battiston and Monasterolo's[49] work underlined that **the ECB's portfolio is mainly composed of carbon-intensive sectors, is more exposed to fossil fuels and less to low-carbon transports than the rest of the market, and is not aligned with the European climate targets.**

63% of assets bought under CSPP belong to corporations with high GHG emissions[50]. More precisely (see Chart 3):

- Fossil fuels account for 13.5% of the portfolio;
- Carbon-intensive transports account for 18%;
- Energy-intensive sectors account for 16%;
- Utilities – including companies producing electricity with fossil fuels – account for 15.3%.

These elements show that the principle of market neutrality, which guides quantitative easing and aims to limit its impact on the functioning and composition of the market, is not climate neutral. On the contrary, the fact that the ECB's corporate asset portfolio is more carbon-intensive than the market reveals an anti-climate bias.

Chart 3: CSPP asset distribution by sector



Source : Stefano Battiston et Irene Monasterolo, "How could the ECB's monetary policy support the sustainable finance transition?, March 2019

Putting an end to the market neutrality dogma

Erected as a dogma[51], market neutrality negates the political dimension of monetary creation and is totally anachronistic in the context of the climate emergency.

Getting on track for the COP21 climate objectives requires institutions to redirect financial flows to support a 1.5°C trajectory. The notion of the transition itself implies both exiting unsustainable sectors and developing sustainable alternatives. Yet, **by trying to reproduce the market, the principle of market neutrality reinforces a polluting and fossil fuel-dependent economy.**

This principle is out of step with mechanisms that are currently developing to integrate climate risks, with the Task Force On Financial Disclosure (TCFD) at the European level, the Science Based Target Initiative (SBTI) internationally, or Article 173 of the energy transition law (LTECV) in France.

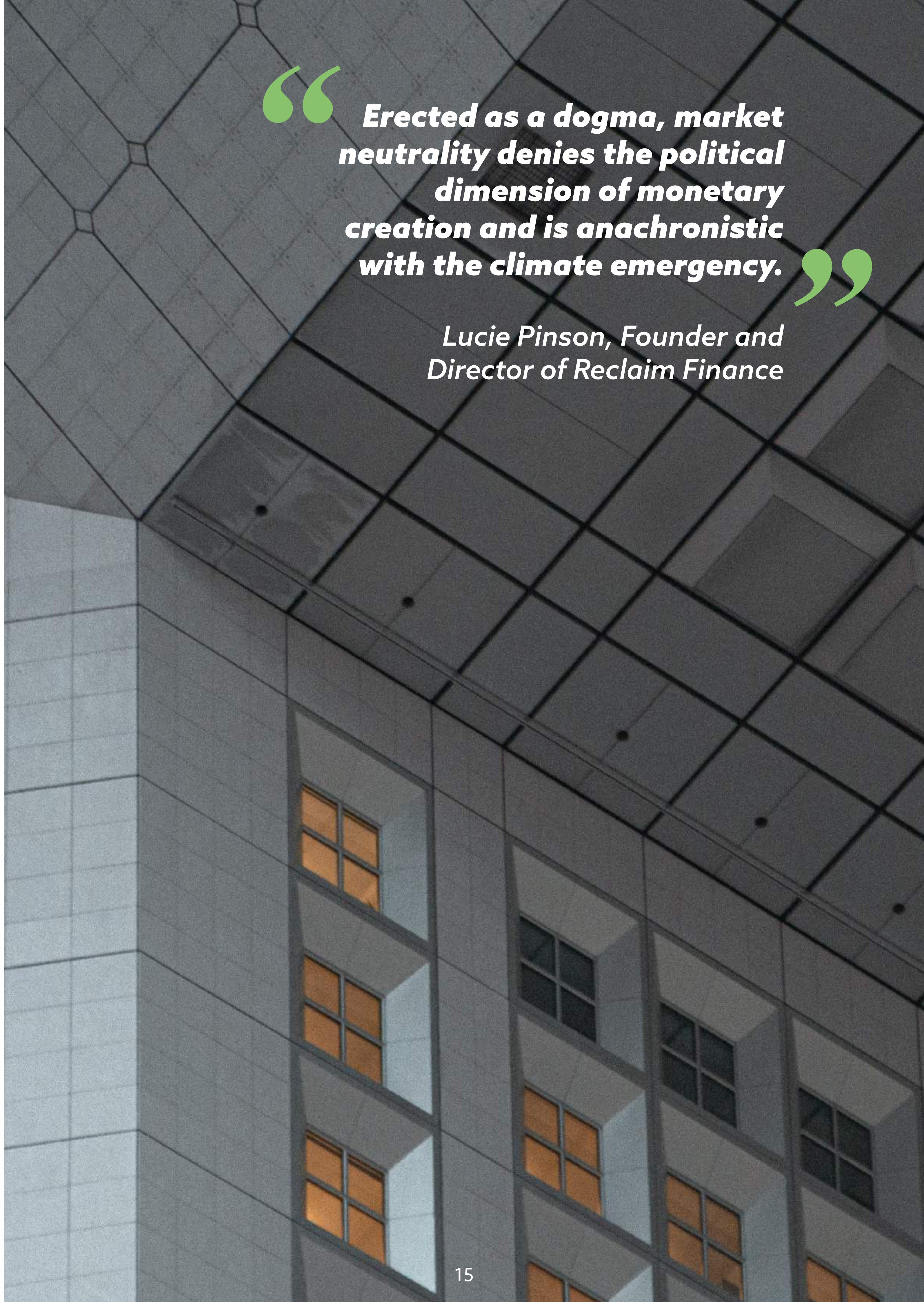
Three points deserve to be stressed:

- In its current form, **"market neutrality" does not mean that it has no impact on the market**, including on asset value. The use of quantitative easing is not neutral and originates from a political and economic intention to maintain inflation at a level close to 2%. **The question is not whether quantitative easing impacts the market, but how and why it does so.**
- By allowing for carbon-intensive assets to accumulate on the ECB's balance, it **exposes the ECB to important and unaccounted financial risks** that could limit its ability to act in future crises.
- By encouraging an indiscriminate deployment of quantitative easing in the current crisis, **it signals to the market that the ECB will save the financial sector and the economy regardless of financial risks taken and damages dealt to the environment.**

In this context, the ECB's strategic review must put an end to market neutrality and participate in the construction of an ecologically-resilient economic and financial system.

The ECB's climate intervention is fully justified by European law. It would contribute to the EU's objectives[52], favor the emergence of sustainable growth[53], and respect the Paris Agreement. By intervening, the ECB would follow the EU's key objectives and principles: It would protect Europe from future COVID-like disasters[54], with their unprecedented economic and financial consequences[55].

Market neutrality props up a system favorable to fossil fuels and already has real consequences on the market. It is time to accept a responsible and sustainable quantitative easing that better serves the EU and its inhabitants.



CONCLUSION

Toward a decarbonized quantitative easing

For several years, and even more today, the ECB has been using quantitative easing to fulfill its mission. With the Eurosystem banks, it held €2.783 trillion at the end of March and plans on buying €1.1 trillion in assets in 2020.

However, this tool remains particularly opaque, and information accessible to European citizens is very limited. In the context of the economic crisis and the ecological emergency, this lack of transparency is more than worrying and becomes a democratic issue.

Furthermore, while corporate asset purchases provide a major support to the most polluting firms, including fossil fuel companies, using market neutrality to hinder any change is irresponsible and incoherent. As the ECB's asset purchases of bonds from companies that do not plan on phasing out coal by 2030 or that are even developing new projects strikingly shows, asset purchases contribute to climate change and jeopardize European climate objectives.

Central bank governors and member states need to take advantage of the strategic review, which started in January and will end in mid-2021, to bend the ECB's monetary and prudential policies to climate imperatives as well as European objectives and core values.

If **greatly improving transparency** is essential, notably by publishing the value of each asset under CSPP and PEPP[56], taking immediate, concrete actions is necessary. To align with European climate objectives, **the ECB must start by excluding from its list of eligible assets those corporations:**

- **That do not adopt, by 2021, a detailed plan to phase out coal by 2030 in Europe and the OECD and by 2040 worldwide. By 2022, they should adopt a similar plan to phase out oil and gas by 2040/2050.**
- **With high exposure to coal[57] or unconventional oil and gas[58].**
- **That develop new fossil fuel projects[59].**

To go further and contribute to the emergence of sustainable finance and a sustainable economy, the ECB should:

- **Push for a "brown" taxonomy** that, together with the "green" taxonomy, will allow it to target green sectors and low-carbon activities with its asset purchases.
- **Exclude from its list of eligible assets those corporations that do not adopt an alignment plan with a 1.5°C trajectory.**

These measures may require longer than the previously mentioned exclusions to be set up. Exclusions have the advantage of being easy to put in place and of having an immediate positive effect on the reduction of carbon emissions and therefore must be the absolute priority. However, alignment plans with a 1.5°C trajectory for all businesses – and not only the energy sector – must be required immediately. Several firms have already committed to this path[60].

Finally, the ECB should fully take the founding values of the European Union into account. **Activities that may harm human rights must be excluded, starting with arms production and sale.**

Methodology

Data originates from the ECB and concerns assets held by the central bank under the Corporate Sector Purchase Program (CSPP) and the Pandemic Emergency Purchase Program (PEPP) on April 17, 2020.

They were compared to information from the Global Coal Exit List, the Global Coal Plant Tracker and Rystad Energy – provided by the NGO Oil Change International – and supplemented with additional research on energy companies.

The Global Coal Exit List is a database kept by the NGO Urgewald that regroups companies whose revenues or activity is significantly linked to coal or that contribute to the development of the coal sector. The methodology is available at coalexit.org.

The Global Coal Plant Tracker is a tool published by the Global Energy Monitor that lists coal power plants being developed, currently in service or frozen. The methodology is available at endcoal.org.

APPENDIX

List of CSPP and PEPP companies active in the fossil fuel sector

- 2i Rete Gas
- A2A
- ACEA
- Cepsa Finance
- Co-entreprise de Transport d'Electricité
- E.On
- E.On Intel Finance B.V
- Electricité de France
- Enagás Financiaciones
- EnBW International Finance
- ENEL
- ENEL Finance International
- Energie AG Oberösterreich
- Engie
- Eni
- Erdöl-Lagergesellschaft
- ERG
- EVN AG
- Gas Natural CM
- Gas Networks Ireland
- HERA
- Italgas
- Iren
- KELAG-Kärntner Elektrizitäts- Aktiengesellschaft
- Madrileña Red de Gas Fin. B.V
- Nederlandse Gasunie
- OMV
- Red Eléctrica Finance
- Redexis Gas Finance
- Repsol International Finance
- RTE Réseau de Transport d'Électricité
- Schneider electric
- Shell International Finance
- Snam
- Total Capital
- Total Infrastructures Gaz France
- Vier Gas Transport
- Západoslovenská energetika.

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Sources

1. List of holdings under CSPP and PEPP, April 17th 2020
2. To see the full list, see the appendix
3. Firms that operate coal power plants are parent companies of firms that operate coal power plants, are significant shareholders of companies that operate coal power plants or are financial subsidiaries of corporations that operate coal power plants : A2A, EDF, EnBW International Finance, Energias de Portugal, Enel, Enel Finance International NV, Engie, EVN AG, Fortum Oyj, Veolia Environnement.
4. These three corporations are listed on the Global Coal Exit List : Enel, EnBW, Fortum.
5. For the link between Fortum, Uniper and the new Datteln 4 plant, see the NGO letter to the Finish government.
6. A2A, EDF, Energias de Portugal, Enel, Engie, EVN AG, Fortum Oyj, Veolia Environnement
7. EnBW International Finance, Enel Finance International NV
8. A2A is only involved in Italian coal power plants that are set to close by 2025.
9. As a guide, the total capacity of all French nuclear power plants was 62,400 MW in 2018.
10. https://brightnow.org.uk/resource/church-investments-in-oil-paris-compliant-or-paris-defiant/
11. Total Capital, Shell International Finance, Repsol International Finance, Eni
12. Shell's shale reserves amount to 12 times its current production.
13. Dassault System and Thales
14. Firms with high exposure to coal derive at least 20% of their revenues or electricity production from coal or produce more than 10 million tonnes of coal per year or operate coal power plants with a capacity of more than 5 GW.
15. Firms with high exposure to unconventional oil and gas hold at least 15% of their reserves in oil sands, shale oil and gas, and/or Arctic and deep-water extraction.
16. This is especially aimed at companies that:
    - are investing in the exploration of fossil fuels;
    - are developing new coal mines, power plants and infrastructure projects (lift the moratorium only after a commitment by such companies to cease such activities);
    - sell equipment for the construction of new coal projects or purchase existing coal assets (lift the moratorium only after a commitment by such companies to cease such activities);
    - plan to develop, by 2050, the equivalent of more than 500 millions barrels of heavy oil; unconventional oil and gas, including shale oil and gas or oil sands; or oil and gas through drilling in deep waters or in the Arctic;
    - plan new oil or gas pipelines linked to the opening of new fossil fuel reserves, or new terminals for the export of liquefied natural gas.
17. For examples of companies committed to a 1.5°C target, see https://sciencebasedtargets.org/companies-taking-action/
18. For additional information on price stability, see the ECB's explanations https://www.ecb.europa.eu/explainers/tell-me-more/html/stableprices.fr.html
19. https://www.ecb.europa.eu/mopo/implement/omt/html/index.en.html
20. https://reclaimfinance.org/site/en/2020/04/22/we-ask-the-european-central-bank-for-transparency/
21. The principle of market neutrality is discussed further in the subsection "A non-neutral portfolio that favors polluting sectors".
22. https://www.asktheeu.org/en/request/lists_of_securities_held_under_c
23. This analysis was made comparing the list of CSPP and PEPP holdings to the Global Coal Exit List (GCEL) and elements from the Global Coal Plant Tracker.
24. https://reclaimfinance.org/site/en/end-of-coal/
25. https://carbontracker.org/reports/how-to-waste-over-half-a-trillion-dollars/
26. For information on "stranded assets", see https://www.chaireeconomieduclimat.org/wp-content/uploads/2019/10/ID-61.pdf

27. These three corporations are listed on the Global Coal Exit List.
28. 62,400 MW according to EDF, see https://www.edf.fr/groupe-edf/espaces-dedies/l-energie-de-a-a-z/tout-sur-l-energie/produire-de-l-electricite/le-nucleaire-en-chiffres
29. See https://reclaimfinance.org/site/en/2020/03/18/investors-call-on-fortum-to-publish-a-plan-to-exit-coal-by-2030/ and https://www.lemonde.fr/economie/article/2019/11/13/en-allemagne-une-nouvelle-centrale-a-charbon-echauffe-les-esprits_6018996_3234.html
30. https://sustainabilityreport2018.enel.com/en/sustainable-value-created/growth-across-low-carbon-technologies-and-services/metrics-and-targets
31. https://www.veolia.com/fr/rse-dereglement-climatique/dereglement-climatique/que-fait-veolia-pour-aligner-sa-strategie-sur-lobjectif-de-ne-pas-depasser-un-rechauffement-de
32. See https://www.lemonde.fr/economie/article/2019/01/23/engie-vend-ses-centrales-a-charbon-en-allemagne-et-aux-pays-bas_5413304_3234.html and https://www.engie.com/journalistes/communiques-de-presse/centrale-production-electricite-polaniec-a-enea
33. Shandong Zhonghua Power Company, Datang Sanmenxia Power Generation Co, Datang International Fuzhou Power Generation Company Ltd
34. https://www.lesechos.fr/industrie-services/energie-environnement/exclusif-edf-veut-faire-fonctionner-la-centrale-a-charbon-de-cordemais-jusquen-2024-1155682
35. See appendix for the list of the 38 corporations.
36. https://www.ran.org/wp-content/uploads/2020/03/Banking_on_Climate_Change__2020_vF.pdf
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43. P. Balcombe. 2016. The natural gas supply chain: The importance of methane and carbon dioxide emissions https://www.unece.org/fileadmin/DAM/energy/se/pp/geg/geg3_April.2016/21pm/7_Balcombe.pdf
44. Eni and the three financial subsidiaries Shell International Finance, Repsol International Finance, Total Capital.
45. https://www.euractiv.com/section/aviation/news/air-france-klm-gets-virus-bailout-green-conditions-still-pending/?utm_source=EURACTIV&utm_campaign=f06df10392-RSS_EMAIL_EN_Daily_Update&utm_medium=email&utm_term=0_c59e2fd7a9-f06df10392-116360444
46. Article 3 of the Treaty on European Union (TUE)
47. Article 2 of the Treaty on European Union (TUE)
48. http://www.lse.ac.uk/GranthamInstitute/publication/the-climate-impact-of-quantitative-easing/
49. See https://www.finexus.uzh.ch/en/news/cspp_sustainable_finance.html and https://www.veblen-institute.org/Rapport-Aligner-la-politique-monetaire-sur-les-objectifs-climatiques-de-l-Union.html
50. This classification relies on the Nace taxonomy, an especially unfit tool to identify ecological impacts. For methodology, see https://www.finexus.uzh.ch/dam/jcr:0103ed7b-71e9-4e81-9941-ee61feefd851/ECB%20sustainable%20finance%2022%20MarchIM.pdf
51. https://www.positivemoney.eu/2019/09/ecb-market-neutrality-doctrine/
52. Article 127 Treaty on the Functioning of the European Union (TFUE)
53. Article 3 Treaty on European Union (TUE)
54. https://reclaimfinance.org/site/2020/04/17/covid-19-le-climat-ne-doit-pas-etre-remis-a-plus-tard-dapres-la-banque-de-france/
55. The cost of climate inaction is six to ten times the cost of alignment on the Paris Agreement, see https://www.nature.com/articles/s41467-020-15453-z
56. https://reclaimfinance.org/site/en/2020/04/22/we-ask-the-european-central-bank-for-transparency/
57. Firms with high exposure to coal derive at least 20% of their revenues or electricity production from coal or produce more than 10 million tonnes of coal per year or operate coal power plants with a capacity of more than 5 GW.
58. Firms with high exposure to unconventional oil and gas hold at least 15% of their reserves in oil sands, shale oil and gas, and/or Arctic and deep-water extraction.

59. This is especially aimed at companies that:

- are investing in the exploration of fossil fuels;
- are developing new coal mines, power plants and infrastructure projects (lift the moratorium only after a commitment by such companies to cease such activities);
- sell equipment for the construction of new coal projects or purchase existing coal assets (lift the moratorium only after a commitment by such companies to cease such activities);
- plan to develop, by 2050, the equivalent of more than 500 millions barrels of heavy oil; unconventional oil and gas, including shale oil and gas or oil sands; or oil and gas through drilling in deep waters or in the Arctic;
- plan new oil or gas pipelines linked to the opening of new fossil fuel reserves, or new terminals for the export of liquefied natural gas.

60. For examples of companies on a 1.5°C trajectory, see https://sciencebasedtargets.org/companies-taking-action

Quantitative easing and climate:
The ECB's dirty secret

May 18, 2020

Reclaim Finance is an NGO affiliated with Friends of the Earth France. It was founded in 2020 and is 100% dedicated to issues linking finance with social and climate justice. In the context of the climate emergency and biodiversity losses, one of Reclaim Finance's priorities is to accelerate the decarbonization of financial flows. Reclaim Finance exposes the climate impacts of some financial actors, denounces the most harmful practices and puts its expertise at the service of public authorities and financial stakeholders who desire to to bend existing practices to ecological imperatives.

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