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hades of Green: Ethics in Net-Zero Financial Transition

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“...the economy itself cannot be limited to production and distribution. It must also consider its impacts on both the environment and on the dignity of people” – Pope Francis (Francis, 2020)

Introduction

As global emissions bounce back after a year of pandemic lockdowns (IEA, 2021a), the world must enact a tectonic shift in production and emissions patterns. Global finance is key to this transition: in many cases, banks and investors own or manage more assets than the gross domestic product (GDP) of an entire country. For example, a recent review of the world’s largest banks found that even the 100th largest bank, Qatar National Bank, holds more money in assets (\$281bn) than 150 countries in the world produce in annual GDP

(Feliba & Ahmad, 2021; *GDP by Country* 2017).

Financing solutions to climate change is thus a moral imperative, and one that Pope Francis highlighted in his encyclical letter ‘*Laudato Si*’, which emphasizes the need to invest in renewable energy and divest from fossil fuels (Francis, 2015). The financial sector is beginning to take note: since the Paris Agreement was signed in 2015, more than twenty coalitions and frameworks have been formed to address the role of financial institutions in combatting climate change; half of these initiatives started in the past two years alone (Tonkonogy & Choi, 2021). Three of the largest initiatives – the Task Force on Climate-related Financial Disclosures, Glasgow Financial Alliance for Net-Zero, and Climate Action 100+ – now collectively own

or manage \$272 trillion in assets (Task Force on Climate-related Financial Disclosures, 2017; United Nations Climate Change, 2021; Climate Action 100+, 2020).

However, there exists a gap between the goals of these groups and actual climate action, due in part to a lack of guidance around how to fund businesses with low emissions and/or credible decarbonization plans, and when to defund businesses with high emissions. This will require improved reporting of company emissions, clearer frameworks for setting and tracking climate finance goals, and better country policies to enable universal adoption of these approaches.

Financial institutions looking to invest in climate finance should thus: learn from country-led climate finance lessons regarding the importance of ethics in determining large-scale outcomes (section 1); set ambitious climate targets (section 2); leverage investments or lending practices to influence broader corporate change (section 3); and increase funding to organisations serious about transitioning to a low-carbon future (section 4).

Most importantly, financial institutions must incorporate ethics into each of these approaches in order to ensure that the climate transition is a *just transition* (section 5). There are no easy social metrics to use off-the-shelf here, which makes it imperative for qualitative assessments to be embedded across the sector's value chain. Ultimately,

financial institutions must re-align the sector to value environmental and social externalities that are critical to ensuring a net-zero world.

Two steps back without the inclusion of ethics in climate finance

“[President] Moreno is giving away our forests and territories to oil companies and taking away our ability to move around the country. The government needs to protect its people, which means guaranteeing our rights, ensuring basic means of transportation, and protecting the forest as well as our climate.” – Domingo Peas, an Achuar Indigenous leader (*Brutality, Violence, and Repression in Ecuador*, 2019)

The removal of fossil fuel subsidies is a critical step in addressing global emissions, and one that needs to happen as soon as possible, at the greatest scale possible. However, a 2020 study found that thirty-five of the world's biggest banks provided a record \$735.6 bn in lending and underwriting to the fossil fuel industry (BankTrack et al., 2020).

If these banks are to take serious action on climate change, there are lessons to be learned from political attempts to shift funding such as subsidies away from fossil fuels. In 2019, Ecuador's President Moreno announced the removal of fossil fuel subsidies within the country. This removal made both climate and economic sense: Ecuador spent an average of \$1.4 bn a year on subsidies and this removal was a condition for

accessing an International Monetary Fund (IMF) loan of \$4.2 bn (Arnold, 2019).

Yet less than one week after the government of Ecuador signed Decree 883 to eliminate these subsidies, Quito lay under a thick cloud of tear gas. Key members of the Moreno government, including President Moreno himself, fled to the coastal city of Guayaquil as indigenous peoples, students, and blue-collar workers from around the country converged on the capital in protest. As the protests intensified, President Moreno ultimately agreed to repeal Decree 883.

As the case of Ecuador shows, these changes cannot occur without careful ethical considerations of the impacts of such policies on vulnerable and low-income communities. While the IMF concluded that reforming the fuel subsidies would “allow for an increase in social assistance spending” (International Monetary Fund, 2019), this was not communicated in a way that engendered trust from key constituencies.

Instead, President Moreno’s announcement immediately caused diesel prices to more than double and gasoline prices to rise by 25 per cent, thus disproportionately impacting rural communities, especially Indigenous Peoples, who had limited alternative transport choices (Monahan, 2020).

In Ecuador, as in many former colonies, Indigenous Peoples and

other historically marginalised groups lack trust in the government. Rising petrol prices simply added to a historical stack of oil-related grievances that started in the 1970s with the government’s exploitation of the Amazon for oil. While both the government and private companies profited from this extraction, the local communities did not receive much, if any, financial compensation and were saddled with higher mortality and other health risks (San Sebastián, M., & Hurtig, A-K., 2004; Kimerling, 2006). To add salt to the wound, the IMF itself had previously required Ecuador to expand oil production in order to manage the country’s spiraling debt, most of which originated from Ecuador tying increased public spending to high oil prices and then failing to diversify when those prices crashed (Cueva & Díaz, 2019).

Thus, the subsidy removal did little to address the root causes of Ecuador’s emissions and debt, while shifting the burden of payment onto the country’s most vulnerable populations.

In other countries that have successfully removed or limited fossil fuel subsidies, their success was reliant on improved stakeholder engagement with affected workers, targeted investments in social safety nets, increased job opportunities within renewable energy sectors, and clearer communication about the benefits of these reforms (Merrill & Quintas, 2019). A New Climate Economy report also

found that successful transitions required extensive dialogue with the affected stakeholders and designing more targeted benefits for these communities. For example, when China shuttered 151 coal plants, the government ensured that significant funding (\$15 bn) was invested in the retraining and early retirement of these workers (Global Commission on the Economy and Climate, 2018).

Addressing climate change inherently requires ethical considerations as many of the most vulnerable people are those facing the largest impacts from rising temperatures and sea levels – although these same people contribute the least to this global catastrophe (Abeygunawardena & Sperling, 2003). While governments have led the global response to climate change to date, it is arguably financial institutions that hold the most capital and can enact the most meaningful change. Ecuador’s GDP, for example, is only \$107.4 bn; meanwhile, a single bank, JPMorgan Chase & Co., provided \$64.9 bn to the fossil fuel industry in 2019 alone and holds an additional \$3.4 trillion in assets (BankTrack et al., 2020; Feliba & Ahmad, 2021).

Too big to ignore: the financial sector must set climate targets

“Climate change is the greatest market failure the world has ever seen.” – Sir Nicholas Stern (Stern, 2006)

Although each country has

established a climate target through the Paris Agreement, such targets, if achieved, will only limit global warming to 2.4° Celsius (C) (2100 *Warming Projections*, 2021). There is a clear and urgent need for the private sector, and in particular the financial sector, to help close this gap between existing targets and what we currently know is scientifically needed, which is well below 2°C, closer to 1.5°C (Paris Agreement, 2015).

To begin with, financial institutions must set a 2050 emissions reduction target in line with a well-below 2°C or 1.5°C trajectory. Yet setting such targets is fraught with uncertainties. Most financial institutions can easily calculate and set achievable targets for scope 1 (direct emissions) and scope 2 (emissions from electricity use). However, the overwhelming emissions come from scope 3 (all other indirect emissions): essentially, this includes emissions from any company that has received an investment or a loan, and most of these companies have not calculated their own emissions.

Historically, frameworks have not provided a scope 3 methodology, yet in this past year alone, both the Partnership for Carbon Accounting Financials (PCAF), led by a coalition of Dutch banks (PCAF, 2021), and the Science-based Targets Initiative have shared pilot approaches (Yan et al., 2021).

Recent analysis using the PCAF methodology found that banks

and asset managers in the United Kingdom (UK) alone finance more than 805 million tonnes of carbon dioxide or other greenhouse gases (MtCO₂e) a year: nearly double the UK's emissions and more emissions than all but nine of the world's largest emitting countries (WWF & Greenpeace, 2021).

As the bulk of emissions stem from scope 3, it is imperative that financial institutions begin to account for and target these emissions in climate goals, even given the uncertainty still associated with these approaches, as there is a clear scientific – and thus moral – basis for acting against climate change now as opposed to delaying interventions years later (i.e., the cumulative effect) (Rhys, 2011).

Such targets must approach the inherent uncertainty in setting a 2050-aligned goal in a value-driven way. At the moment, many countries, companies, and financial institutions have adopted *net-zero* targets, which gives them some flexibility regarding exactly how much emissions must be reduced (*reductions*) compared to how much emissions already in the atmosphere can be later removed (*removals*).

There are well-documented concerns with an over-reliance on removals. The primary worry is the uncertainty and the timescale: if carbon removal technologies do not materialise as expected by 2050 (or do not materialise at the expected price point), then companies and financial institutions will have already locked

the world into a high-temperature pathway with few alternatives planned (Anderson & Peters, 2016). Future faith in removals could therefore impede adequate priority being given to mitigating emissions now.

Additionally, most technological removals solutions do not address the social injustices caused by emitters today. For example, if a factory continues polluting because it plans on later removing carbon from the atmosphere through carbon capture and storage (CCS), the negative air quality and health impacts on local – often vulnerable or low-income – communities will still not be resolved. This highlights the need to consider climate commitments and action through a social equity lens in addition to a pure emissions view.

The financial sector is in a unique, and difficult, position when ascertaining how and when to lend or invest in various companies based on a well-below 2°C or 1.5°C pathway. That is because progress in one sector may not be feasible for another, especially in hard-to-abate sectors.

The aviation sector, for example, has potential decarbonisation pathways through the production of sustainable aviation fuels and/or the electrification of planes. However, neither of these solutions is currently commercially available at a scale needed to transform the industry (Sustainable Aviation Fuel: Review of Technical Pathways, 2020; Coren, 2020). As a result, the International Civil Aviation

Organization (ICAO), when setting an industry-wide climate target of carbon-neutral growth post-2020, decreed that airlines must purchase carbon credits in the meantime until such solutions are available (ICAO, 2019). However, there are similar ethical concerns around the long-term reliance on carbon credits to those around removals; ultimately, internal decarbonisation is needed by 2050.

While it is imperative that the financial sector sets climate targets inclusive of all emission scopes, there is still debate and experimentation around how best to implement these goals and the role of removals and carbon credits in helping address the uncertainty in meeting a target that is five, ten, or even twenty years in the future. What is certain is that these targets must be set, and lessons must be learned along the way – the time for waiting is over.

Moral imperative to change the fossil fuel status quo

“Investor engagement has been key to delivering the wave of net-zero commitments from companies during 2020. Firms yet to come forward with net-zero plans will come under growing pressure as investor willingness to escalate their engagement will be the new norm. Work will also continue to support those companies that substantiate net-zero goals with robust business strategies. Long-term ambition needs to be made real with clear short- and medium-term targets, and capex alignment to support delivery of those

goals.” – Stephanie Pfeifer, Chief Executive Officer of the Institutional Investors Group on Climate Change (Climate Action 100+, 2020)

In addition to setting their own targets, financial institutions hold a uniquely influential position with recipients of their financing: these relationships can be leveraged to push companies to adopt ambitious climate targets, disclose relevant climate and social data, and advocate for supportive policy by governments to enhance and require these approaches.

This can be accomplished through shareholder engagements and resolutions. For example, Ceres, a network of financial institutions and companies committed to building a sustainable future, encourages its Investment Network members to file shareholder resolutions regarding climate, energy, water, and sustainability (*Engagement Tracker*, 2021). In 2020, the non-profit recorded 131 climate-related shareholder proposals; 70 will be voted on, while 42 were withdrawn in exchange for climate commitments by the company in question (Berridge, 2020).

Most recently, activist shareholders won two victories with ExxonMobil and Chevron. In May 2021, Chevron investors voted for a proposal to increase the company’s emission reduction targets, while on the same day, two climate activists were elected to ExxonMobil’s board via a proxy campaign (Mufson, 2021).

Financial institutions can also take a more direct, targeted approach. The Climate Action 100+ encourages financial institutions to engage with 167 of the world's top greenhouse gas emitters and companies that are critical to a low-carbon transition through collaborative, targeted engagement with company executives and board members. In its 2020 progress report, as these companies also grappled with the unanticipated impacts of COVID-19, Climate Action 100+ found that almost half (43 per cent) of the companies had net zero commitments; however, only 10 per cent of companies included scope 3 emissions in their targets. The progress report concluded that there is a need for additional guidance around the benchmarking and scoring of company climate plans, sector-specific decarbonisation pathways, and more specific approaches to lobbying and a just transition (Climate Action 100+, 2020).

Both Ceres and Climate Action 100+ approaches focus on large, global companies, many of which include the world's top polluters. From an ethical standpoint, it is necessary to either divest completely from top polluters or to actively engage to enact change in such corporations and communicate this to the public.

These two paths can be seen in Norway's Council of Ethics for its Government Pension Fund Global, managed by Norges Bank.

The guidelines allow for both positive screening (investing in best-in-class companies with strong climate targets, even if existing emissions are high) and negative screening (refusing to invest in high-emitting companies at all) (Norges Bank Investment Management, 2016). A positive screening approach should be continually reassessed; the ethics guidance specifically states that "companies may be excluded or placed under observation if there is an unacceptable risk that they contribute to or are themselves responsible for... acts or omissions that on an aggregate company level lead to unacceptable greenhouse gas emissions".

In the Council's annual 2020 report, it reported excluding four companies that extracted oil from oil sands on these grounds. Additionally, of the 314 companies the fund divested shares from due to risk, 170 were divested based on climate risk (Council on Ethics for the Norwegian Government Pension Fund Global, 2020).

There may also be an ethical dilemma closer to home in the making. Norway's wealth stems primarily from oil production and export; the pension fund's purpose is to invest wealth from Norway's petroleum sector. While Norway's state-owned company Equinor – which changed its name from Statoil in 2017 to emphasize its broader focus as an energy company and not just an oil

company (Sætre, 2021) – does not explore heavy oil or oil sands, the company continues to explore for new oil and gas fields (Equinor).

The International Energy Agency recently made international headlines by concluding that there is no room for investment in new fossil fuel supply to meet net-zero by 2050 (IEA, 2021b). It remains to be seen whether Norway’s Council of Ethics will opine on Equinor’s future expansion plans, or whether the company will align itself with the latest science on the transition needed by the oil and gas industry.

Trust, but verify

“...developed countries [must] commit to a goal of mobilizing jointly USD 100 billion dollars a year by 2020 to address the needs of developing countries. This funding will come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources of finance.” – The Copenhagen Accord (Copenhagen Accord, 2009)

The Intergovernmental Panel on Climate Change estimates that \$3.8 trillion in investments is needed annually to transition the world to a 1.5°C trajectory; however, the Climate Policy Initiative only tracked an estimated \$608-622 bn in investments in 2019, of which a little more than half was from private funding (Macquarie et al., 2020). In addition to this finance being grossly inadequate to address the growing scale of the climate crisis, there is another problem: how to tell

whether these “green” investments are actually making a difference to the atmosphere, and not causing additional harm to ecosystems or society.

Climate finance typically measures success purely in terms of emissions reduced. However, this has led to ethical issues where coal plants, crude oil combustion, thermal power plants, and other heavy emitting industries can receive recognition for and access climate finance by switching to more efficient processes or other fossil fuel sources with slightly less environmental impact. As a result, initiatives like the Clean Development Mechanism (CDM), a United Nations carbon credit programme, approved methodologies such as ACM0013, which allowed coal plants using a less-intensive technology to earn carbon credits. Unfortunately, many of these plants will operate for at least 30 years, meaning that this mechanism encouraged and locked in emissions rates for decades after the initial sale of carbon credits (Lazarus & Chandler, 2011).

This trend continued in 2015 when multilateral development banks such as the World Bank, Asian Development Bank, and the European Investment Bank produced a joint document on “Common Principles for Climate Mitigation Finance Tracking” (2015), that lists projects like “thermal power plant retrofit to fuel switch from a more greenhouse gas (GHG) intensive fuel to a different, less GHG-

intensive fuel type” (p. 3) as an appropriate activity to access climate mitigation finance. The document provides some slight nuance that the CDM lacked, noting that in fossil fuel sectors, it is important for the banks to consider the structural impacts of these investments and seek to prevent long-term lock-in of high carbon infrastructure (Common Principles for Climate Mitigation Finance Tracking, 2015). However, specific details were not provided about how to determine the credibility of these approaches.

In many cases, a proposed approach can be nuanced and require an ethical framework. In 2017, for example, the oil and gas company Repsol announced a green bond that would finance energy efficiency investments in many of the company’s chemical and refinery facilities that would avoid an estimated 1.2 million tonnes of CO₂ (MtCO₂e) annually by 2020. Fewer emissions overall are, objectively, a good thing for the atmosphere. However, Repsol produced 19.7MtCO₂e of direct scope 1 emissions in 2016; its indirect scope 3 emissions would be at least an order of magnitude higher. In this context, the proposal is wholly inadequate to seriously address the company’s emissions. The Climate Bonds Initiative, which considered listing the bond, concluded that “we do not regard this bond as ‘greenwashing’... but this highlights the challenge in dealing with complicated emissions questions; exactly the area where

clear science-based criteria would make life easier for both issuers and investors” (Whiley, 2017).

In an attempt to provide transparent guidance on whether a company is making a good-faith attempt to address its climate impact, the Climate Bonds Initiative and Credit Suisse recently issued a joint paper proposing a *transition* framework. This guidance helps to determine whether companies in hard-to-abate sectors are eligible for a transition label, which recognises investments that are not green, but which do “have a short-term role to play in decarbonizing an activity or supporting an issuer in its transition to Paris Agreement alignment” (Almeida et al., 2020). The framework aims to provide key criteria to ensure that these labels are not effectively greenwashing a company’s high emissions and propose clear roles for what constitutes a green label compared to a transition label (Climate Bonds Initiative, 2020).

As the financial sector becomes more mature in its understanding of climate risk, there could foreseeably be mixed loan or investment funds that seek to maximize financial and climate returns while weighing the risk of failure and/or greenwashing. Such a portfolio might include several guaranteed climate outcomes, such as investments in renewable energy companies, while also making calculated investments in transition companies that could pay off with both financial

and climate dividends on a much larger scale. This approach will be instrumental in moving the needle towards making climate finance mainstream.

Addressing the tragedy of the commons

If someone hit someone else, it was clear who had done what and why it was wrong. [...] Today, by driving your car you could be releasing carbon dioxide that is part of a causal chain leading to lethal floods in Bangladesh” – Peter Singer, Philosopher (Singer, 2016)

Climate change has a uniquely decoupled spatial relationship from cause to effect: one tonne of carbon dioxide or equivalent gas can be emitted anywhere in the world and have the same effect on the climate. Likewise, a changing climate can, in turn, cause natural disasters in areas with historically low emissions. This is at the heart of climate change ethics, and in the United Nations Framework Convention on Climate Change negotiations: developing countries, which historically had low emissions and many of which continue to have low emissions today, are often predicted to be disproportionately impacted by climate change (and to have the fewest resources to adapt to these impacts).

With regard to climate finance, then, ethical considerations must not only focus on the duty of a financial institution to reduce its own emissions or the emissions of

those it has loaned or invested in but also the duty to address the impacts of a changing climate on the world’s most vulnerable populations.

Yet how can financial institutions measure this impact? Often, the question of which metrics to use to ensure an equitable climate transition is left absent or undefined in climate finance working groups and guides. One group, the Climate Action 100+, has plans to build out its “Just Transition” requirement for companies. At the moment, however, this section has only one sub-bullet, which states: “The company considers the impacts from transitioning to a lower-carbon business model on its workers and communities.” Further requirements are still in development (Climate Action 100+, 2020).

There have been many studies estimating the cost-benefit of social outcomes; however, these are often not incorporated into real-world financial investment decisions. A recent IMF study examining the role of post-COVID recovery investments found that clean energy investments produce more jobs and other economic benefits, while similar investments in fossil fuel technologies underperform in both additional economic and social benefits. The study also found that investing in conservation produced multiple social and ecological returns compared to investments in industrial agricultural processes (Batini et al., 2021). Investing in nature also has another crucial benefit

in fighting the spread of zoonotic diseases, such as COVID-19, as these diseases usually occur in areas where deforestation occurs (OECD, 2020).

One simple proposal is to quantify these social and environmental externalities. However, quantifying biodiversity or improved health is less straightforward than measuring greenhouse gas emissions. An analysis of conservation investments found that financial institutions most commonly used third-party standards to verify the emissions reductions from these investments but relied on internal criteria to measure social and other ecological impacts (if measured at all). In some cases, investors cited a lack of standardised metrics as a reason for using internal criteria; in other cases, investors preferred internal criteria because these criteria were custom-made and were more nuanced than third-party certifications (Hamrick, 2016).

This illustrates the tradeoffs in trying to define, quantify, and track climate finance under a just transition framework: such metrics might oversimplify an inherently complex topic, resulting in added cost without added value.

Already, participation in climate finance remains low by private financial institutions. Since 2015, some of the world's largest public development banks have tried to leverage private sector finance: the idea was that billions in public sector dollars could unlock trillions

in private sector finance. However, only the Africa Development Bank managed to incentivize matching private investment during this time (Thwaites, 2020). Thus, while adding metrics around a just transition could result in more durable, long-lasting results, it also could add another finance barrier to engagement by the financial sector.

Even if simplified metrics were designed, this simplicity might not adequately address the risks in ensuring these decisions have legitimacy within a community or political setting. This argues for a holistic approach towards climate justice, which an approach such as divesting from fossil fuels might overlook. Thus, while financial institutions should encourage working groups and guidelines to explore criteria around a just and sustainable transition, these decisions must ultimately occur at the organizational level. At the end of the day, financial institutions must seek twin goals of ensuring that a low-carbon transition is a just transition.

Conclusion

Each year of climate inaction risks locking in higher temperatures by 2050. Transforming sectors to low-carbon or zero-carbon cannot happen without serious engagement by the financial sector. Climate finance is not currently competitive with traditional finance, since greenhouse gas pollution remains an environmental externality.

To even the playing field, financial institutions must adopt science-aligned climate targets, use their platforms to ensure borrowers and investees make similar goals, and, most crucially, begin implementation to realise these outcomes as soon as possible, all while using climate justice as a guide in all financial and operational decisions.

Momentum is growing for the financial sector to address climate change more seriously. In the

upcoming climate negotiations later this year, climate finance will be in the spotlight as negotiators discuss whether to extend or raise a 2009 pledge to mobilize \$100 bn annually to help developing countries transition to a low-carbon economy (Copenhagen Accord, 2009). The financial industry must be ready to step up and take responsibility for its role in perpetuating the high emitting status quo of the global economy and be willing to lead in the transition to a low-carbon future. •

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