Capital markets: The hidden pipeline for fossil fuel financing

How big US banks quietly raise billions of dollars for polluting companies

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Executive summary

- Banks play a vital role in capital markets. Acting as underwriters, they are the gatekeepers of fossil fuel companies: they advise companies issuing bonds and equities, hold the vital information on the issuer, and help market the instruments to investors disclosing only the necessary risk.

- Nearly two thirds (61%) of all US bank financing for fossil fuel expansion comes from underwriting bonds and equities. From 2016-2022, the six biggest US banks — JPMorgan Chase, Citi, Bank of America, Wells Fargo, Morgan Stanley, and Goldman Sachs — have underwritten $266 billion in new bond and equity issuances for 30 of the top fossil fuel expansion companies.

- Banks are performing sleight of hand, distracting investors and regulators with net-zero transition plans that are half-finished, while continuing to funnel money to fossil fuel companies via capital markets with limited scrutiny.

- Despite the importance of capital markets activities in helping fossil fuel companies secure new funding, banks focus primarily on lending, while downplaying the importance of underwriting, when setting their emissions reduction targets.

- Currently, only three of the six major Wall Street banks include bond and equity underwriting in their sectoral emissions reduction targets — JPMorgan Chase, Goldman Sachs, and Wells Fargo. The remaining three banks have so far chosen to only apply emissions reduction targets to lending activities.

- Even among those who have set emissions reduction targets that include underwriting, insufficient disclosures and lack of standardization make it difficult to understand how robust banks’ facilitated emissions accounting methodologies are, and what progress they are making toward achieving their emissions reduction targets.

- Banks should set targets for facilitated emissions reductions, and not limit emissions reduction efforts to credit exposure.

- Banks should take full responsibility for their role in helping fossil fuel companies raise money through capital markets, and not use accounting tricks to hide the full impacts of their underwriting decisions.
Introduction

The world’s preeminent climate experts have repeatedly affirmed that in order to meet our global goal of net-zero emissions by 2050, we must cut our emissions by 45% in this decade. In 2021, the International Energy Agency (IEA) published a landmark report concluding that in order to meet this goal, there should be no additional investment in new fossil fuel supply. Critically, this affirms that new fossil fuel development is fundamentally incompatible with our global climate goals.

As the urgency to act has grown, pressure has mounted on banks to take responsibility for their role in financing fossil fuel expansion and the industries driving the climate crisis. In response, banks have begun to make commitments to address their climate impacts, and align their financing with the goal of reaching net-zero emissions by 2050. Among those who have made this commitment are the six largest Wall Street banks: JPMorgan Chase, Citi, Wells Fargo, Bank of America, Morgan Stanley, and Goldman Sachs.

These major US banks are among the world’s largest financiers of fossil fuels. Since 2016, the year after the Paris Agreement was adopted, the big six Wall Street banks have provided $433.8 billion in lending and underwriting to 30 of the largest fossil fuel expanders in the world. Despite their recent climate commitments, the banks have shown little signs of slowing down their financing for planet-warming fossil fuels. In general, these big six banks lag far behind the best practices of their international peers when it comes to setting robust emissions reduction targets and adopting policies restricting fossil fuel financing.

Emissions from capital markets activities are often overlooked

Much attention has been given to the emissions resulting from banks’ credit exposure, also known as financed emissions. However, the emissions resulting from banks’ capital markets activities have relatively been overlooked. This is a serious oversight because banks play a major role in capital markets and helping companies access capital. Fossil fuel companies rely on banks to sell their newly issued bonds and shares to investors. In fact, a significant portion of banks’ fossil fuel financing over the last seven years came in the

1 https://www.ipcc.ch/2022/04/04/ipcc-ar6-wgiii-pressrelease/
2 https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroby2050ARoadmapfortheGlobalEnergySector_CORR.pdf
3 https://www.bankingonclimatechaos.org/
form of bond and equity underwriting. Many banks tend to downplay their role in capital markets, and do not include underwriting in their emissions reduction targets. Of the six major US banks, only three — JPMorgan Chase, Goldman Sachs, and Wells Fargo — include their facilitated emissions in the scope of their sectoral emissions reduction targets, though their methodologies are largely inconsistent and opaque.

Industry-wide standards are essential

The lack of a standardized, industry-wide methodology for facilitated emissions accounting means that even for the banks who have set emissions reduction targets for underwriting, it remains difficult to understand how robust banks’ facilitated emissions accounting methodologies are, and what progress they are making toward achieving their emissions reduction targets. To address this problem, the Partnership for Carbon Accounting Financials (PCAF) is developing a methodology that would help standardize the practice and make it easier for banks to disclose (and set targets for reducing) their facilitated emissions.

Following publication of this forthcoming PCAF methodology, banks should act quickly to begin publishing robust, consistent, and accurate disclosures of their facilitated emissions, and adopt additional or updated emissions reduction targets for their underwriting activities. PCAF started the process of updating its Standard to include facilitated emissions at the beginning of 2022, and published a paper for stakeholder feedback in October 2022. To date, PCAF has not published a final Standard, without explanation for the delay. Throughout the development of this methodology, it has been reported that some banks have actively stalled the process because they do not want to take full accountability for the emissions that result from their capital markets activities.

The reality is, without bank underwriting of new bond and equity issuances, fossil fuel companies cannot raise money through capital markets. Banks who downplay the importance of capital markets in their climate strategies are intentionally sidestepping a major source of real-world emissions that they are enabling.

5 https://www.bankingonclimatechaos.org/
The path forward is clear: in order for banks to implement their climate commitments and help the world reach net zero by 2050, banks must change their practices to contribute to real-world emissions reductions. This means banks should reduce both lending and underwriting that contributes to fossil fuel production and other high-emitting sectors, and increase lending and underwriting for clean energy and decarbonization.

What’s next?

In this analysis, we provide an examination of the underwriting for fossil fuel companies by the six major US banks, which demonstrates the importance of banks’ capital markets activities to their climate commitments. We then provide a topline explanation of facilitated emissions and the recent debate over how to account for facilitated emissions in big banks’ disclosures, followed by conclusions and recommendations.

In short, banks should disclose the emissions from underwriting activities (in addition to lending) — based on transparent, robust, and comparable methods — that takes full account of their capital facilitation role, and they should set ambitious near-term targets for reducing their emissions from all financing activities.

What are facilitated emissions and why do they matter?

**Equity financing: Shares**

Fossil fuel companies have two main options for raising capital: **equity financing and debt financing**.

For **equity financing**, companies sell shares to investors. By purchasing equity, investors acquire a piece (or share) of the company, and therefore obtain some say in the management and direction of the company. By selling new shares, companies raise capital in order to maintain and expand their operations. In the case of fossil fuel companies, capital raised from
selling new shares allows them to build new coal mines, oil and gas fields, pipelines, and other infrastructure. Banks play a crucial intermediary role in the issuance and sale of new equities, and help price, underwrite, and sell the newly issued shares to investors.

**Debt financing: Loans and bonds**

The second main option available to companies is debt financing. There are two kinds of debt financing: (1) Loans, in which a company borrows money from a bank, and pays back the loan amount plus interest over a set period of time; and (2) Bonds, in which a company issues an instrument similar to a loan, which is underwritten by banks, sold to investors and repaid to the purchaser with fixed interest over a set period of time. Importantly, bonds make up the majority of bank underwriting for fossil fuel companies, relative to shares.  

**Financed versus facilitated emissions**

Financed emissions are emissions that occur as a result of the lending activities of a financial institution. When a bank provides a loan for an oil company to drill a new well, the resulting emissions can be attributed back to that bank. These are the types of emissions that banks most commonly disclose and set reduction targets for. However, these are only half of the picture.

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9 [https://www.smithschool.ox.ac.uk/sites/default/files/2022-04/Breaking-the-Bond-Primary-Markets.pdf](https://www.smithschool.ox.ac.uk/sites/default/files/2022-04/Breaking-the-Bond-Primary-Markets.pdf)
Facilitated emissions, which occur as a result of the underwriting and advisory services provided by a financial institution, are also critically important. When a bank underwrites the sale of a new bond or equity issuance by an oil company to drill a new well, the resulting emissions can similarly be attributed back to that bank.

Banks play a vital role in capital markets. Acting as underwriters, they are the gatekeepers of fossil fuel companies: they advise companies issuing bonds and equities, hold the vital information on the issuer, and help market the instruments to investors disclosing only the necessary risk.

By failing to disclose or set targets for reducing facilitated emissions, banks are ignoring a massive part of their role in enabling and perpetuating climate change. Banks that facilitate fossil fuel bonds and shares are complicit in climate destruction on a global scale.

Underwriting is a major part of US banks’ financing of fossil fuel expansion

The data summarized below is sourced from the 2023 Banking on Climate Chaos report (BOCC), which provides a ranking of the fossil fuel financing (lending and underwriting) from the world’s top 60 banks, overall and by sub-sector, from 2016-2022. The scope of the findings below is limited to the BOCC data on the six largest US banks and their financing for 30 of the world’s top fossil fuel expansion companies included in the report.

The top six US banks are determined based on total assets. The list of 30 fossil fuel expanders is selected from the list of top fossil fuel companies with significant expansion plans highlighted in the sectoral and expansion league tables in BOCC. The companies are selected by filtering for the 30 fossil fuel expanders receiving the most financing from the big 6 US banks. The transactions are categorized between lending and underwriting of corporate bonds and equities. Data from BOCC is sourced primarily from Bloomberg Finance L.P.

US banks’ underwriting for top fossil fuel expansion companies

![Chart showing underwriting activities of major US banks for top fossil fuel expansion companies from 2016-2022.]

This chart shows the underwriting activities of the 6 major US banks for 30 of the top fossil fuel expansion companies from 2016-2022. Source: Banking on Climate Chaos report

The data show that:

- From 2016-2022, the six biggest US banks — JPMorgan Chase, Citi, Bank of America, Wells Fargo, Morgan Stanley, and Goldman Sachs — have underwritten $266 billion in new bond and equity issuances for 30 of the top fossil fuel expansion companies in the world.

- From 2016-2022, JPMorgan Chase was the largest underwriter of bond and equity issuances for these fossil fuel expansion companies among the six major Wall Street banks. In the last 7 years, Chase provided $69.9 billion in underwriting of bonds and equities ($61.1 billion in bonds; $8.83 billion in equities) for these top fossil fuel expansion companies.

- From 2016-2022, Citi was the second largest underwriter of bond and equity issuances for these fossil fuel expansion companies among the six major Wall Street banks. In 2021 and 2022, Citi was the top underwriter, while in 2016, 2017, and 2018, JPMorgan Chase was the top underwriter.
From 2016-2022, nearly two thirds (61%) of the big six US banks' financing for fossil fuel companies was in the form of bond and equity underwriting. In general, despite annual fluctuations as a result of changing interest rates and other market factors, nearly two thirds of fossil fuel financing in recent years has come from bond and equity underwriting, while the other third comes from lending.

The fluctuations in the last three years in aggregate fossil fuel financing (including lending and underwriting) are attributable to major swings in interest rates, economic productivity, fossil fuel sector profits, and other factors. The recent drop in banks' fossil fuel financing is more likely a result of energy companies not needing or wanting to raise as much new capital than it is about banks changing practices. This trend is unlikely to be sustained without action by banks to avoid new financing for dirty energy projects.

Among the major Wall Street banks, there is some variation in the breakdown of lending compared to underwriting for these fossil fuel expansion companies in the last seven years. For Morgan Stanley and Goldman Sachs, underwriting far outpaced lending. For Bank of America, Citi, and JPMorgan Chase, lending and underwriting were closer to equal, with underwriting topping lending by Bank of America. For Wells Fargo, lending far outpaced underwriting.
US banks’ annual lending vs underwriting for top fossil fuel expansion companies

This chart shows the aggregate financing for 30 of the world’s top fossil fuel expansion companies by the 6 major US banks from 2016-2022. Source: Banking on Climate Chaos report

US banks’ lending vs underwriting for top fossil fuel expansion companies

This chart shows the breakdown of loans versus underwriting for 30 of the world’s top fossil fuel expansion companies by the 6 major US banks from 2016-2022. Source: Banking on Climate Chaos report
Understanding the debate over facilitated emissions

Following their commitments to reach net zero by 2050, all six major Wall Street banks set interim targets for reducing their emissions in key sectors by 2030. However, only three of the six — JPMorgan Chase\(^\text{11}\), Goldman Sachs\(^\text{12}\), and Wells Fargo\(^\text{13}\) — include both lending and capital markets facilitation in their targets. The other three — Citi\(^\text{14}\), Morgan Stanley\(^\text{15}\), and Bank of America\(^\text{16}\) — currently limit the scope of their emissions reduction targets to their lending portfolio. This is a significant gap, as roughly half of banks’ financing for fossil fuels in recent years has typically been in the form of bond and equity underwriting, as opposed to lending.

For the big US banks, bond and equity underwriting follows a similar pattern. From 2016 to 2022, the six major Wall Street banks underwrote $266 billion in new bond and equity issuances for 30 of the top oil and gas expansion companies.

Developing an industry-wide standard

Banks often point to a lack of industry standards on accounting for and reporting on underwriting to justify why they do not disclose or set targets for facilitated emissions. The Partnership for Carbon Accounting Financials (PCAF) is an industry-led initiative that aims to address these sorts of challenges by setting standards for greenhouse gas accounting for the financial sector. Now, PCAF is working to address the need for a consistent industry-wide standard for accounting and reporting facilitated emissions.

Originally expected to be released at the end of 2022, the new standards have faced significant delays, reportedly due to member banks’ diverging opinions on the best approach to accounting and reporting facilitated emissions.\(^\text{17}\) The main area of contention in the methodology appears to be over how to weigh the banks’ facilitation activity — essentially, how responsible the banks are for the emissions that result from their

\(^{11}\) https://www.jpmorgan.com/solutions/cib/investment-banking/center-for-carbon-transition/carbon-compass
\(^{13}\) https://sites.wf.com/co2emission/CO2eMission_Methodology.pdf
underwriting. Some banks have expressed concerns about over-emphasizing their role in capital markets, including challenges with double counting emissions and the inherent volatility of capital markets over time.

**Standardization and consistency is key**

The most essential piece of the facilitated emissions issue, as is the case for all carbon accounting, is standardization and consistency. In order for clients, regulators, and investors to understand a bank’s climate plan, they must have access to robust disclosures, and be able to compare those disclosures with peer institutions across the sector. Currently, the lack of an industry-wide standard makes it impossible to know which bank has made the most progress on setting (and achieving) emissions reduction targets and publishing robust disclosures.

In addition, there is a troubling lack of consistency in the way that banks choose to include underwriting activities in their emissions targets and disclosures. For example, three Wall Street banks — Citi, Bank of America, and Morgan Stanley — indicate that they count all of their underwriting activities for clean energy and other green technologies toward their “sustainable finance” pledges, but these banks have avoided accounting for the same level of impact for their high-carbon financing and emissions reduction targets for the most polluting sectors. This raises major concerns, as it suggests that banks are attempting to take all of the credit for financing clean energy and other climate solutions, and less of the blame for financing fossil fuels and other climate-wrecking industries. **At minimum, banks should use consistent methodologies for all of their targets to avoid mischaracterizing their financing activities and their climate impacts — both good and bad.**

**Methodological challenges**

The reality is, methodological challenges exist across all areas of carbon accounting for financial institutions, and these should not be used as an excuse to delay essential actions to reduce emissions in the real economy. Important analysis has been done by the UK-based NGO ShareAction to examine the strengths and weaknesses of different proposed methodologies for calculating banks’ facilitated emissions, including considerations around the time period of facilitation activity, and the weighting applied to the calculations. Following the publication of final guidance from PCAF, banks will need to quickly integrate the guidance, but this is only a first step. Banks serious about addressing their climate impacts will need to continuously work to improve the quality of

18 [https://shareaction.org/reports/banks-facilitated-emissions](https://shareaction.org/reports/banks-facilitated-emissions)
their emissions disclosures across all asset classes. Most importantly, banks need to set ambitious emissions reduction targets and work to meet those targets. **In order to provide investors with necessary insight into financial exposures and capital market business lines, banks should set targets for both facilitated and financed emissions.**

Ultimately, it is essential for banks to take full responsibility for their role in helping fossil fuel companies raise money through capital markets. Capital markets provide a key source of funding for fossil fuel companies, and banks have significant influence over companies wanting to access this market. **Further, it is important to not miss the forest for the trees. Disagreements over the best methodological approach for accounting facilitated emissions are not the most important concern for mitigating climate change. That is the starting line for banks to begin running the race to reach their emissions reduction targets.** The key is for banks to set ambitious targets for reducing their facilitated (and financed) emissions, and execute on strategies that will lead to actual emissions reductions in the real economy.

## Conclusion & recommendations

Currently, only three major Wall Street banks — JPMorgan Chase, Wells Fargo, and Goldman Sachs — include underwriting of bonds and equities (facilitation) in their sectoral emissions reduction targets. These banks diverge slightly in their approach to accounting facilitated emissions, and none of them share detailed methodology that would ensure accurate and consistent disclosures, both internally and across the sector.

**Banks must take responsibility for facilitated emissions**

Meanwhile, the remaining three major Wall Street banks — Morgan Stanley, Citi, and Bank of America — do not yet include facilitation in their targets at all. All three banks currently serve on the PCAF working group developing the forthcoming methodology, and have indicated they will work toward including facilitation in their targets once this work is complete. However, these banks are reportedly among those that have lobbied internally to weaken PCAF’s final guidance.19 **It is essential that all six Wall Street majors quickly adopt a robust and consistent methodology for accounting facilitated emissions, and take full responsibility for the climate impacts of their underwriting decisions.**

Government oversight must follow voluntary guidance

The heterogeneity of methodologies and disclosure quality makes it all the more urgent for PCAF to finalize and publish guidance for ambitious and robust facilitated emissions accounting practices. But the reality is that voluntary, industry-led guidance and standards will not be enough to ensure banks are being transparent and credible in their emissions disclosures and net-zero transition plans.

Oversight and accountability must ultimately fall to governments, whose job it is to protect the financial system and the economy from the risks posed by climate change. It is incumbent upon financial regulators to also issue guidance and require banks to transparently disclose the full emissions impacts of all of their activities in a consistent and comparable manner, and to adopt science-based emissions reduction plans.

Ensuring net-zero transition plans contribute to emissions reductions

In order to ensure their net-zero transition plans contribute to real-world emissions reductions, banks must:

- Set ambitious, science-based targets for reducing facilitated and financed emissions in key high-emitting sectors, and report on progress annually.
- Adopt a robust, ambitious methodology for accounting facilitated emissions, which takes full account (100% weighting20) of their role in capital markets facilitation.
- Transparently disclose their methodology for facilitated and financed emissions accounting, and describe any shortfalls or limitations that could skew the data.
- Continuously review and improve data quality and methodologies, and actively work to address any challenges.
- Stop lending and underwriting for companies expanding fossil fuel production, and phase out financing for fossil fuel companies and other high emitters that fail to adopt decarbonization plans aligned with science-based targets.

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20 https://shareaction.org/reports/banks-facilitated-emissions