Banking on Climate Chaos: Fossil Fuel Finance Report 2025

Research Methodology FAQ

The *Banking on Climate Chaos: Fossil Fuel Finance Report 2025* is based on comprehensive research of global banks' financial flows to the fossil fuel industry. The research is conducted by the Banking on Climate Chaos (BOCC) coalition which includes Rainforest Action Network, BankTrack, the Center for Energy, Ecology, and Development, Indigenous Environmental Network. This document provides supplementary detail on the methodology used in the research.

Fossil Fuel Financing Data

What kind of financial transactions are included?

The report covers finance data for both lending and underwriting. Banks are credited in BOCC with each new financing and refinancing commitment, similar to industry-standard league table approaches. This means that BOCC tracks the *flow* of bank financing. These league tables, therefore, reflect the volume of deals banks participate in, regardless of whether those deals are drawn, matured, or repaid. Finance flow data is not the same as investment data. (See Investing on Climate Chaos for further data on fossil fuel investments.)

The bank financing covered in this report includes:

- **Bond issuances**. Bonds are debt issued by corporations or governments to finance their activities, in which the issuer promises to pay back the debt at a specific date along with periodic interest payments. Bond issuances wouldn't be possible without banks facilitating them – they are critical intermediaries that advise, underwrite risk, and market the issuances and earn significant profits and fees from these transactions. Typically, bonds are sold to investors, who trade shares in them, though banks may also hold bonds. Bond underwriting services comprise approximately 38% of the BOCC dataset.
- **Lending**. Banks provide a set amount of money, or a loan, to be paid back by a specific date along with interest. These loans can be structured in multiple ways: Term loans are when the borrower gets a lump sum of money and agrees to pay back the loan by a certain date. Revolving credit facilities are financing instruments that allow companies to borrow money, repay it, and borrow again, repeatedly, up to a certain limit. Lending services comprise approximately 58% of the BOCC dataset.
- **Share issuances**. Shares allow companies to raise capital by selling equity i.e., an ownership stake in the company, to investors via the stock markets. Like with bond issuances, banks play key facilitation roles in this process. The report includes primary share issuances, which are when a company issues new shares, and large secondary share issuances, when existing shareholders sell their shares to new investors. Share issuances comprise approximately 3% of the BOCC dataset.

The above types of financing may be categorized in several ways, including:

- **Corporate financing**, which involves financing that can be used for a variety of purposes across a company.
- **Project financing,** which encompasses financing earmarked for use on a specific project.
- **Merger and acquisition financing,** which is used to fund a company merging with or acquiring another company. Because an acquisition usually requires equity or asset purchases, financing is often required for the acquiring company to have enough cash on hand for the purchase.

The research assesses each bank's financial involvement in corporate lending and underwriting transactions between January 1, 2021, and December 31, 2024 for companies that are involved in the extraction, transportation, transmission, distribution, combustion, trade, or storage of any fossil fuels or fossil-based electricity, globally. The research includes syndicated finance, e.g. finance that banks provide in groups, or syndicates.

Data for the BOCC research is collected, analysed and validated using multiple sources including Bloomberg Finance L.P, IJGlobal and publicly available information in company reports and media archives, as well as additional research provided by Profundo.

Note that the BOCC report only provides aggregate analysis that is derived from the BOCC research, and underlying transaction level data cannot be published or shared in order to maintain compliance with the licensing requirements of commercial data providers.

What is the scope of companies that are included this year?

The foundational methodology for this research is identical to last year's. , We do make adjustments from year to year to the company scope in an effort to effectively capture as full a scope as possible of the financing behind this global crisis. Additional research results in an expanded number of companies that met existing inclusion criteria. In some cases, diversified companies from previous years' research have been removed from this dataset if new information is revealed that indicates participation in the fossil fuel industry is minimal.

The research estimates the financing commitments from financial institutions to 2730 companies active across the fossil fuel industry. We build our company list based on Urgewald's Global Oil and Gas Exit List (GOGEL) and Global Coal Exit List (GCEL) and add additional companies identified using Bloomberg, the Global Energy Monitor, Enerdata, and our own research. This list is narrowed down to companies which have received corporate financing between 2021 and 2024. Details on companies included in the league tables can be found below.

Why do I see diversified companies on the list?

We include companies with a variety of industry classifications if we have evidence of exposure to fossil fuels. This means that we include not merely pure play oil, gas, and coal companies. Many fossil fuel companies have finance subsidiaries, which we also consider to be in scope since they tend to be the vehicles which enable financing for their parent or other related subsidiaries. This is important because all fossil fuels must be phased out and especially all fossil fuel expansion must stop, regardless of how the company is classified or how much exposure the company has. We invite banks to scrutinize their clients closely to understand what their diverse operations include.

We notice that the industry classifications in the finance databases are not always an accurate reflection of the company's operations. We increasingly see companies with names that include the words "renewable," "clean," or "green" but that are exposed to fossil fuels, sometimes significantly or totally. We also see companies that have significantly changed the amount of business they are conducting in fossil fuels. In these cases, we apply year-specific adjusters if possible to account for changes in operation.

How do you assess financing for diversified companies?

As in previous years, to address the fact that some companies have comparatively small fossil exposure, we apply adjusters to the deal value. Each transaction is adjusted based on the particular company's involvement in the fossil fuel sector. For each company in the dataset, a segment adjuster was calculated or estimated. Adjusters were calculated using the following sources: Urgewald's [Global Oil & Gas Exit List], [Global Coal Exit List], data on revenue, assets, and income data, as well as company annual reports, company sustainability reports, and other publications as available. When data on a company is not readily available, we adjust using data on the parent company, if appropriate. Annual, or year-specific, adjusters are used whenever possible. If year-specific information is unavailable for a given year, the company is adjusted to the nearest year of available information. When information is too limited to assign an exact adjuster, we generally calculate a conservative lower bound adjuster, adjust down to a smaller known segment, or exclude the company altogether, depending on information availability.

See the later sections for specifics on how adjusters were calculated.

What about green financing and sustainable financing?

This report does not calculate financing for new energy, renewables, or other developments necessary for the energy transition. Many companies in the scope of this report are beginning to transition away from fossil fuels. In some cases these companies already show revenue, assets, or capital expenditures on non-fossil fuel activities. In those cases of diversified energy companies with activities in those areas, the non-fossil fuel business was excluded from our calculations. This is especially true for many power generation and utility companies.

All deals marked as "Green Instruments" were removed from the dataset. Deals designated as "Sustainability Linked" or "Sustainability Bond/Loan" are included by default, but researchers may remove deals on an ad hoc basis if sufficient documentation can be found that proves proceeds cannot be used for fossil fuels. This is a conservative choice since the precise definitions and requirements for these designations have not been standardized.

We rely on the green instrument flag provided by our data providers. If any data provider flagged a deal as green we accept that flag. We also review the notes in the "Use of Proceeds" field. Please note that we do not as a rule exclude sustainability-linked instruments or social bonds, which often fall short of prohibiting the expansion of fossil fuels.

Do you include deals that have matured or revolvers that have not been drawn?

Financing is included if it was issued between January 1, 2021, and December 31, 2024, inclusive, regardless of when it matures. Banks are assigned league credit when financing is initially issued and again if it is renewed. We report cumulative financing totals rather than financing that is active at any single point in time. Likewise, we report the amount that a bank has *committed* to a deal, not the amount that the borrower has drawn down or has outstanding. This is a key difference between this report and how banks report their corporate finance on their own balance sheets.

A revolving credit facility is a loan that can be borrowed and repaid repeatedly during the loan period, and the industry standard approach for allocating league credit is to credit the banks regardless of whether the issuer actually drew money from it. We include all transactions, even those that have matured, that are recorded between 2021 and 2024. We report the commitment rather than the disbursement. We report on banks' decisions to finance fossil fuel issuers, not on how much those issuers draw from their issuances.

Does the research cover fossil fuel investment?

No. Big banks are also significant supporters of the fossil fuel sector through investments made by their asset management arms (ownership of bonds and shares). In contrast, this report focuses on the corporate finance part of a bank's business, in which it lends to and provides underwriting services for fossil fuel companies. Urgewald, one of the authoring organizations of this report, conducts research on fossil fuel investments.

Which banks are covered?

The analysis presented in the 2025 report covers the world's 65 biggest relevant banks by assets, according to the S&P Global Market Intelligence ranking from April 2024.[1] Banks with less than $150 million league credit reported in Bloomberg LP for economy-wide financing were deemed irrelevant to this analysis. Due to year-on-year changes in bank sizes as well as the expansion of the scope to the 65 largest banks, five new banks have been included in this list – **Capital On**e, **Sberbank**, **Commerzbank**, **Huaxia Bank**, and **Itaú Unibanco**. Banks with less than $150 million league credit reported in Bloomberg LP for economy-wide financing were deemed irrelevant to this analysis. This excludes **Japan Post Bank** (S&P assets rank 23) and **Norinchukin Bank** (S&P assets rank 51), which were replaced by the next two banks on the S&P Global's list to bring the total to 65 banks.

How do you handle currencies and inflation?

Deals are reported in nominal terms, i.e. not adjusted for inflation, so that users of the report can understand the banks' contribution amounts at different points in time. Deals in non-USD currencies are converted to USD based on exchange rates at the time of the deal.

Allocating League Credit

The amount of credit that each bank is allocated for each deal is determined in three possible ways. In cases where the actual bank contribution is known, that value is used. If the percentage of fees earned by each bank is reported, that percentage is imputed to represent the percentage of their participation. Otherwise, the value of the deal is divided among all known participants, with a greater total share allocated to the banks in leading roles (bookrunners), using the book ratio methodology, an approach developed by the research consultancy Profundo.

This approach credits banks for their participation in corporate finance deals, including bonds, loans, and share issuances, and credits all banks making financial contributions to a deal

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[1] "The World's 100 Largest Banks, 2023," *S&P Global Market Intelligence*, April 26, 2023, https://www.spglobal.com/marketintelligence/en/news-insights/research/the-world-s-100-largest-banks-2023.

instead of only crediting banks in leading roles. Roles that do not involve financial contributions are excluded.

The algorithm used for determining the book ratio is as follows:

1) The bookratio, or the ratio of non-leading to leading participants on the deal is calculated: (total participants - total bookrunners) / total bookrunners

$$\frac{\textit{total number of participants} - \textit{number of bookrunners}}{\textit{number of bookrunners}} = \textit{bookratio}$$

2) Taking the bookratio and the type of financing, a percentage is chosen from the table below.

Bookratio	Lending	Underwriting
<1/3	No differentiation*	No differentiation*
> 1/3	75%	75%
> 2/3	60%	75%
> 1.5	40%	75%
> 3.0	< 40%**	< 75%**

** In cases where the book ratio is over 3.0, a formula is used which gradually lowers the commitment assigned to the bookrunners. For loans, this formula is (0.69282032301) /√(bookratio). For share issuances this formula is (1.29903810723) /√(bookratio)

3) The percentage from step 2 is split among the bookrunners to find the value for each bookrunning bank in the deal. This percentage is multiplied by the tranche value of the deal to arrive at the per bank value.

$$\frac{\textit{credit percentage from step 2}}{\textit{number of bookrunners}} \times \textit{tranche value (mln USD)} = \textit{per bank value (mln USD)}$$

The same is done for the non-bookrunning banks, using the percentage out of 100% remaining from step 2. The result is the per-bank value for non-bookrunners.

$$\frac{\textit{1 - credit percentage from step 2}}{\textit{number of non- bookrunners}} \times \textit{tranche value (mln USD)} = \textit{per bank value (mln USD)}$$

Banking on Fossil Fuels League Table

Which fossil fuel companies are included?

The primary fossil fuels league table is based on analysis of bank financing for approximately 2,730 subsidiary-level companies that are either independent or a parent company active across the fossil fuel life cycle. This includes companies that are involved in the extraction, transportation, distribution, combustion, trade, or storage of any fossil fuels as a business segment or in the generation of fossil-based electricity, globally, according to the Bloomberg Industry Classification Standard; or are on the Global Coal Exit List; *or* are on the Global Oil and Gas Exit List; *or* are listed on Global Energy Monitor or Enerdata as significant fossil fuel companies; *or* are in the scope of any of the other tables in the report, as described below. Only companies that received financing by one of the 65 banks in scope are analyzed, which means that some fossil fuel companies are not included. Both syndicated and bilateral financing are included, however, our underlying datasets give less visibility into bilateral lending, so it comprises a much smaller percentage of the report. Also, only companies for which sufficient information was available to create an adjuster were included (details in later sections).

How were these transactions adjusted?

Financing in the report is adjusted by the percentage of business each given company does in fossil fuels in order to account for diversified companies. “Adjusters” are applied on a year-specific basis for each step below when data is available. In other words, the adjuster for Company X in 2024 may be different from the same company’s adjuster in 2021 in order to reflect changing business models. Adjusters are calculated to be the best possible approximation of a given company’s business in fossil fuels.

Adjusters are typically selected using, in order of availability:

- If the company is listed on the Global Oil and Gas Exit List 2024 (GOGEL) or the Global Coal Exit List 2024 (GCEL):
    - The fossil fuel share of revenue from the GOGEL or the coal share of revenue reported on the GCEL.
    - The fossil fuel share of power production from GOGEL or the coal share of power production from GCEL.
    - In a small number cases where GOGEL or GCEL does not list a revenue or power production number, we apply a conservative lower-bound estimate based on company research done for the Exit Lists.
- If the company is not listed on an Exit List, we use:
    - The most recent year’s data from aggregated financial reporting data in the preferential order of assets, revenue, or operating income.
    - The adjuster for the issuer’s parent company, unless the subsidiary is identified to have a significantly different purpose than its parent company.
- In some instances we may determine that a company should receive a hand-researched adjuster. For companies with high levels of financing or which fall outside of typical fossil fuel sector classifications, we consult the company’s annual reports and determine an

appropriate adjuster based on revenue, assets, income, capital expenditures, and/or operating expenditures.

Banking on Fossil Fuel Expansion League Table

Which fossil fuel companies are included?

We compiled a list from the GOGEL and GCEL of 706 companies that have expansion plans. The Fossil Fuel Expansion League Table reports on financing committed to those companies between 2021 and 2024. The companies include:

- **Upstream oil and gas companies with expansion plans as listed on the GOGEL**: Urgewald reports upstream oil and gas expansion in the columns entitled "Short-Term Expansion - Resources under Development and Field Evaluation as of September 2024 in mmboe" and "Exploration CAPEX 3-year average (2022-2024) in MUSD." All companies with nonzero figures in these columns which received financing are included in the expansion league table.
- **Midstream pipeline and liquefied methane gas (LNG) listed on the GOGEL**: Urgewald tracks midstream oil and gas expansion in the columns entitled "Length of Pipelines under Development in km," and "Expansion - LNG terminals Total Capacity under Development in Mtpa." This includes both import and export LNG terminals. All companies with nonzero figures in these columns which received financing are included in the expansion league table.
- **Downstream gas-fired power expansion companies listed on the GOGEL:** In the 2024 edition of GOGEL, Urgewald includes a table that tracks Gas-Fired Power Capacity Expansion and Oil-Fired Power Capacity Expansion, which tabulates companies with proposed and under construction gas-fired power and oil-fired power infrastructure. All companies on this list which received financing are included in the expansion league table.
- **Coal expansion companies listed on the GCEL and Metallurgical Coal Exit List (MCEL):** Urgewald tracks companies expanding in mining, power, and infrastructure. All companies on the GCEL and MCEL which are indicated as expansion companies and received financing are included in the expansion league table.

The full list of companies included is published as an online appendix to the report, titled "Fossil Fuel Company Lists," and is available for download at https://bankingonclimatechaos.org/

In some cases, parent companies appeared on the Exit Lists but their subsidiaries did not, or vice versa. For the expansion and sector lists, we only include companies which directly appear on GOGEL, GCEL, or MCEL not their related subsidiaries *unless* that subsidiary is determined to be a finance subsidiary of a company listed on an Exit List.

Please note that while the BOCC report text refers to the International Energy Agency's (IEA) Net Zero by 2050 1.5˚ C emissions scenario as a reference, the ways that these two reports define expansion are unique. The IEA scenario suggests that there is no need for investment in new oil and gas fields, coal mines, and unabated coal power plants beyond 2021. BOCC takes a broader view of expansion to include all companies from the above Exit Lists which are developing or exploring new fossil supply, pipelines, LNG export and import capacity, and new fossil-fired power plants.

How were these transactions adjusted?

The transactions in the expansion league table are adjusted using the same adjusters in the "Banking on Fossil Fuels League Table." Note that even though this list focuses on top fossil fuel expanders, the adjuster takes into account current operations only.

Opportunity for Comment

Are banks consulted during the research process?

All banks are given two weeks to review and provide feedback on the data that is attributed to them as part of the Opportunity to Comment (OTC) period. Information on the methodology was also shared with all banks in a webinar organized prior to the OTC period.

The report authors take all bank feedback into consideration when refining the dataset and prior to the publication of the report. Ultimately, however, it is the final decision of the authors whether or not to make changes in response to bank requests. All changes are consistent with the established methodology, and all updates are applied to all deals and banks. The research team maintains high standards of data integrity and quality.

It is our practice not to share with banks any comparative data which might give information about another bank. For that reason, we do not share the banks' rankings or the embargoed report in advance of publication.

What should I do if I have found a possible error?

We are committed to rigorous standards of data integrity and strive to publish information free from errors. If you believe you have identified an error, you may contact the report authors using the contact information in the "Get in Touch" section of https://www.bankingonclimatechaos.org.

The authors may issue occasional corrections, which are intended to correct errors of fact consistent with information that could have been known at the time of publication. Except under extraordinary circumstances, our published report does not reflect updates in the underlying data that occur after publication. While we are committed to robust research and analysis, ultimately we can not guarantee the accuracy, completeness, or correctness of the information or analysis.