Will Oil and Gas Producers Lose Access to External Financing as Lenders Decarbonize?

November 2023

This article, by S&P Global Ratings and S&P Global Commodity Insights, is a thought leadership report that neither addresses views about individual ratings nor is a rating action. S&P Global Ratings and S&P Global Commodity Insights are separate and independent divisions of S&P Global.
Key Takeaways

- While many OECD governments have focused public policy on accelerating the energy transition and decarbonizing their economies, in general, we have not seen a material impact to the near-to-medium-term funding environment for IOCs and independents in terms of access to capital and cost of capital.

- Funding availability for independent oil producers in key OECD markets such as North America and Europe could face intensified pressures after 2030, with increasingly restrictive financed emission targets due to lender policies, regulatory policies and net-zero alliance memberships.

- S&P Global Ratings’ survey of banks that account for over 25% of bank lending to the oil and gas sector reveals that regional differences in regulation and investor sentiment are shaping access to capital; European banks and asset managers are generally setting stricter, yet still accommodating, financed emission targets and sector-exclusion policies compared to their North American counterparts.

- Despite longer-term pressures on funding sources, a focus on cash flow generation and debt repayment, along with higher oil prices and slower demand growth, has reduced external financing needs for the sector, a trend we expect to continue for the foreseeable future.
Introduction

Climate change has enormous global implications for industry, nations and individuals alike. Regarding the capital markets, a key question for high greenhouse gas (GHG) emitters, such as oil and gas producers, is how will financial institutions respond in the face of ever-changing regulations and policies on net-zero GHG commitments, stakeholder pressures and competing energy technologies? What will the financial landscape look like for oil and gas companies whose business models have been highly dependent on access to capital?

In this report, we examine the funding environment for international oil companies (IOCs) and independents, mainly in North America and Europe — which constitute much of the Organisation for Economic Co-operation and Development (OECD). In comparison to national oil companies (NOCs), we believe these companies and regions could face greater risk in terms of access to capital, as most governments and financial lenders/firms have pledged to gradually decarbonize their economies, a commitment that contemplates a major reduction in fossil fuels use. Our analysis below excludes NOCs, which are fully or partially owned by a national government.

Additionally, we evaluate the policy framework around financial institutions’ efforts to decarbonize, and how that might impact the various avenues to raise capital for oil and gas producers in North America and Europe — exploring where external financing pressures might manifest more quickly. As part of our analysis, we surveyed a sample of North American and European banks that historically have been among the largest lenders to the oil and gas sector to understand their current policies and how they might evolve over time. Finally, we examine the sector’s funding needs, now and in the future.
Role of oil and gas in the energy transition

Events over the last several years — starting with the energy price spikes in the second half of 2021, moving to the Russia-Ukraine war and most recently highlighted by the renewed conflict in the Middle East — have intensified the focus on energy security, access and affordability as top global priorities that must be balanced along with climate-related goals. For many nations, this means securing supply and use of fossil fuels through the medium term, particularly domestic resources, even if those resources are high-carbon-intensity fuels. The S&P Global Commodity Insights base-case view is that global oil demand does not peak until the early 2030s, when it plateaus and follows a gradual downward path through the latter half of the decade and through 2050. In OECD markets, oil demand peaks sooner in 2025, falls at an average rate of 0.6% through 2030 and continues to decline. Natural gas is a more complicated story, given its perception by some as a transition fuel. In OECD markets, S&P Global Commodity Insights projects flat average annual gas demand growth through 2030. From 2030 to 2050, natural gas demand grows in every region outside of North America, OECD Asia and the European Union. These demand expectations complicate the achievement of Paris agreement goals, creating a dilemma for governments, producers and financers given the sector’s contributions to total global emissions. According to S&P Global Commodity Insights, oil and gas accounted for roughly 55.4% of energy-related CO₂ emissions in 2022, up from 55.2% in 2020 and 6.6% higher on an absolute basis. So what does this mean for capital availability for oil and gas producers in OECD markets — particularly in North America and Europe? Will capital markets remain open to them, as long as government policy and investor sentiment remain supportive of a multidimensional energy transition (e.g., balancing decarbonization with energy security goals)? Or will pressures on funding availability accelerate at a faster pace than demand falls?

Despite many uncertainties, we believe it is more likely that any falloff in capital accessibility comes toward the back half of the decade and after 2030, when oil and gas demand begins to flatten and eventually starts to decline. After 2030, we would also expect renewable technologies to become increasingly more cost-effective and scalable, and new regulatory pressures to solidify. Additionally, financers will likely become increasingly concerned about the risk of “stranded assets” and continue to reduce their exposure to the sector in anticipation of steeper demand declines. During the back half of the 2030s in particular, there is a scenario in which capital market access could become increasingly difficult for some oil and gas companies — especially for smaller independents that have higher marginal production costs — and could manifest itself in the form of higher funding costs, tighter credit terms or some sources of capital becoming partially or totally inaccessible.
Financial institutions, like all entities, are coming under increasing pressure to disclose and lower their emissions. Data collected in the 2022 S&P Global Corporate Sustainability Assessment, or CSA, shows that 42% of banks, financial-services firms and insurers have publicly committed to reduce emissions or achieve net zero associated with Scope 1 emissions (e.g., direct operations) and Scope 2 emissions (e.g., indirect emissions primarily derived from a purchased entity). However, just over 20% had pledged intermediate emissions reduction or net-zero targets related to Scope 3 financed emissions, which are defined as GHG emissions linked to their investment and lending activities. For the oil and gas sector, it is banks’ Scope 3 targets that are most important in determining their ability to borrow from these financial institutions.

Addressing Scope 3 emissions is challenging for lenders, as it is based on their clients’ ability to accurately measure their own emissions, implement transition plans and coalesce around setting targets. There are several organizations that attempt to aid financial institutions in this process, including the Science-Based Targets initiative (SBTi), which defines and promotes best practices in science-based target setting, and the Glasgow Financial Alliance for Net Zero (GFANZ), which operates under the auspices of the United Nations. With over 650 members that manage or own more than $150 trillion in assets (see the table in the Appendix), the GFANZ alliances have made progress in getting members to set intermediate (e.g., 2030) targets, although such growth has not come without challenges. GFANZ does not require its members to establish sector-specific targets, such as for oil and gas, nor do they have enforcement capability. Recently, certain alliances have also faced some notable withdrawals by large financial institutions, both in the United States and Europe.

From a regulatory standpoint, the US Securities and Exchange Commission released a proposal in March 2022 (“Enhance and Standardize Climate-Related Disclosures for Investors”), which would require companies to disclose Scope 3 emissions based on financial materiality. States such as California have moved faster, recently passing a bill in October that will require Scope 3 disclosures beginning in 2027. In Europe, sustainability reporting standards require increased Scope 3 disclosures as early as 2024. As a result, while it is still early innings in terms of disclosure, target setting and enforcement, we believe this will likely continue to evolve over time. For the oil and gas sector, this could mean lenders beginning to drop ties with companies not making progress on their own Scope 1 and Scope 2 emissions reductions, especially as we move toward the back half of the decade and beyond.

1. S&P Global Inc. is a founding member of the Net-Zero Financial Services Provider Alliance (NZFSPA).
Will banks continue to lend to the oil and gas sector?

According to the 2023 Banking on Climate Chaos report, which is published by a group of nonprofits, funding provided by banks to companies involved in the extraction, transportation, transmission, distribution, combustion, trade or storage of fossil fuels decreased by roughly 9% between 2016 and 2022. When looking at funding provided exclusively for expansion projects, this decline is steeper, at 33%. As we discuss later in our report, we believe the key driver of this funding decline is likely due to lower overall funding needs in the sector as a result of more disciplined production plans, and a greater ability to self-fund due to reduced debt loads, as well as strong free cash flow generation following the COVID-19 pandemic. That said, there is also likely an element of certain banks reducing their exposure to the sector — especially toward smaller, private oil and gas companies that are increasingly seeking alternative sources of financing.

As signatories to the Net-Zero Banking Alliance (NZBA) or through independent corporate policies, many US and European banks have set interim science-based targets to reduce financed emissions in regard to their oil and gas lending portfolios. As highlighted in Table 1: Selected North American and European banking lenders' oil and gas financed emission targets, targets and units of measurement vary across banks, with most bank lenders targeting around a 25%-30% reduction in financed emissions by 2030. For those banks that are members of the NZBA, guidelines call for targets to be reviewed at a minimum of every five years and revised as needed, with the next round of interim targets slated for 2035. We believe targets will likely become more restrictive over time, initially impacting smaller private oil and gas companies' ability to borrow in the traditional bank loan or reserve-based lending (RBL) markets. However, over the intermediate term, most upstream borrowers should be able to navigate the banking sector’s 2030 net-zero commitments for the following reasons:

- Banks in North America and Europe, which historically have acted as the primary financers to the oil and gas sector, have set weighted-average financed emissions targets at the loan portfolio level. Accordingly, given this weighted-average approach, individual companies lagging on their emissions reduction efforts could still receive funding if overall portfolio targets are being met — and benefit from progress made by larger, integrated oil and gas companies that account for a larger portion of the bank’s overall lending portfolio.

- Many banks, especially in North America, have set targets based on emissions intensity (e.g., CO₂ emissions per unit of energy produced or revenue), which permits for growth in absolute emissions as long as companies are making efficiency gains. We believe this could lead to greater stability of funding from banks utilizing this measurement basis, although over time, more banks could feel pressured to base their targets on the more stringent absolute emissions measurement.

- Current NZBA guidelines require banks to set financed emissions targets on their lending and investment activities, but not facilitated emissions targets on their capital market activities, such as advisory and underwriting services. While some banks may choose to voluntarily set targets on capital market activities, they have flexibility to continue their role in facilitating debt and equity transactions for oil and gas companies. We believe NZBA guidelines could change over time to include capital market activities, assuming the banking industry could coalesce around carbon-accounting standards for facilitated emissions, which is currently being worked on by organizations such as the Partnership for Carbon Accounting Financials.

## Selected North American and European banking lenders’ oil and gas financed emission targets

<table>
<thead>
<tr>
<th>Bank</th>
<th>Base year</th>
<th>2025 target</th>
<th>2030 target</th>
<th>Measurement</th>
<th>Sector/scope</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Headquarters region: North America</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank of America</td>
<td>2019</td>
<td>NA</td>
<td>42%</td>
<td>Emissions intensity</td>
<td>Upstream, refiners, integrated (Scopes 1 and 2)</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>NA</td>
<td>29%</td>
<td>Emissions intensity</td>
<td>Upstream, refiners, integrated (Scope 3)</td>
</tr>
<tr>
<td>Citi</td>
<td>2020</td>
<td>NA</td>
<td>29%</td>
<td>Absolute emissions</td>
<td>Energy sector (Scopes 1 and 3)</td>
</tr>
<tr>
<td>Goldman Sachs</td>
<td>2019</td>
<td>NA</td>
<td>17%-22%</td>
<td>Emissions intensity</td>
<td>Oil and gas sector excluding midstream (Scopes 1, 2 and 3)</td>
</tr>
<tr>
<td>JPMorgan Chase</td>
<td>2019</td>
<td>NA</td>
<td>35%</td>
<td>Emissions intensity</td>
<td>Oil and gas sector (Scopes 1 and 2)</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>NA</td>
<td>15%</td>
<td>Emissions intensity</td>
<td>Oil and gas sector (Scope 3)</td>
</tr>
<tr>
<td>Royal Bank of Canada</td>
<td>2019</td>
<td>NA</td>
<td>35%</td>
<td>Emissions intensity</td>
<td>Oil and gas sector excluding midstream (Scopes 1 and 2)</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>NA</td>
<td>11%-27%</td>
<td>Emissions intensity</td>
<td>Oil and gas sector excluding midstream (Scope 3)</td>
</tr>
<tr>
<td>Morgan Stanley</td>
<td>2019</td>
<td>NA</td>
<td>29%</td>
<td>Emissions Intensity</td>
<td>Oil and gas sector (Scopes 1, 2 and 3)</td>
</tr>
<tr>
<td>Toronto Dominion Bank</td>
<td>2019</td>
<td>NA</td>
<td>29%</td>
<td>Emissions intensity</td>
<td>Energy sector (Scopes 1, 2 and 3)</td>
</tr>
<tr>
<td>Wells Fargo</td>
<td>2019</td>
<td>NA</td>
<td>26%</td>
<td>Absolute emissions</td>
<td>Oil and gas sector (Scopes 1, 2 and 3)</td>
</tr>
<tr>
<td><strong>Headquarters region: Europe</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barclays</td>
<td>2020</td>
<td>15%</td>
<td>40%</td>
<td>Absolute emissions</td>
<td>Energy sector (Scopes 1, 2 and 3)</td>
</tr>
<tr>
<td>BNP Paribas*</td>
<td>2020</td>
<td>12%</td>
<td>30%</td>
<td>Emissions intensity</td>
<td>Upstream gas (Scopes 1, 2 and 3)</td>
</tr>
<tr>
<td></td>
<td>2020</td>
<td>25%</td>
<td>80%</td>
<td>Emissions intensity</td>
<td>Upstream oil (Scopes 1, 2 and 3)</td>
</tr>
<tr>
<td>Deutsche Bank</td>
<td>2021</td>
<td>NA</td>
<td>23%</td>
<td>Absolute emissions</td>
<td>Oil and gas upstream (Scope 3)</td>
</tr>
<tr>
<td>HSBC</td>
<td>2019</td>
<td>NA</td>
<td>34%</td>
<td>Absolute emissions</td>
<td>Oil and gas sector (Scopes 1, 2 and 3)</td>
</tr>
<tr>
<td>ING**</td>
<td>2019</td>
<td>12%</td>
<td>19%</td>
<td>Absolute emissions</td>
<td>Oil and gas sector (Scopes 1, 2 and 3)</td>
</tr>
<tr>
<td>Santander</td>
<td>2019</td>
<td>NA</td>
<td>29%</td>
<td>Absolute emissions</td>
<td>Oil and gas upstream (Scopes 1, 2 and 3)</td>
</tr>
<tr>
<td>Société Générale</td>
<td>2019</td>
<td>20%</td>
<td>30%***</td>
<td>Absolute emissions</td>
<td>Oil and gas upstream (Scope 3)</td>
</tr>
<tr>
<td>Unicredit</td>
<td>2021</td>
<td>NA</td>
<td>29%</td>
<td>Absolute emissions</td>
<td>Oil and gas sector (Scope 3)</td>
</tr>
</tbody>
</table>

Data compiled Aug. 18, 2023.

NA = not available.

*BNP Paribas’ 2025 interim target of 12% on oil and gas, with upstream oil alone set at a 25% reduction.

**ING has set a 69% reduction target by 2050.

***Société Générale has set an additional target to reduce Scope 3 absolute emissions linked to the end-use of oil and gas production by 30% by 2030 (versus 2019).

Sources: Public bank disclosures and sustainability reports.

© 2023 S&P Global
European banks have set more stringent targets and exclusion policies relative to North American banks

On average, European banks have set more stringent 2030 interim targets compared to North American banks, as outlined in Table 1. Besides setting higher financed emissions targets, nearly 90% of the selected European bank lenders to the oil and gas sector use the more stringent absolute emissions as their unit of measurement, compared to roughly 20% for their North American counterparts. We believe absolute emissions targets are more challenging to achieve, especially for operators looking to grow production and banks looking to grow their lending portfolios. Additionally, exclusion policies for top European bank lenders tend to be more stringent regarding new oil and gas exploration and development. In North America, bank policies primarily focus on excluding new financing to oil and gas exploration in the Arctic region. By contrast, in Europe, some bank lenders have set policies that preclude financing for certain new oil and gas developments and are focused on phasing out lending to the sector. Over time, such policies in our view could push more international-based oil companies to seek financing from banks in North America or Asia Pacific or look for alternative sources of funding in the debt capital markets.

Capital markets remain open for oil and gas issuers, while funding needs have declined

Growing membership in GFANZ alliances and other climate-related initiatives has yet to impact capital market access for oil and gas issuers. Indeed, a recent report from Finance Map reviewed $16.4 trillion of equity managed by 45 of the world’s largest asset managers and found that 95% of portfolios are misaligned with the goals of the Paris Agreement. The study also highlighted that asset managers had equity investments of $880 billion in companies that are tied to fossil fuel production versus green investments of $309 billion. We would expect fixed income portfolios to have similar metrics, especially as the report found that average asset manager support for climate-ambitious resolutions dropped to 50% in 2022 from 61% in 2021.

These statistics are evident in the sector’s bond issuance trends over the last decade. Between 2010 and the first half of 2023, North American investment-grade and speculative-grade rated oil and gas companies raised a total of $476.7 billion and $377.8 billion, respectively, through public bond issuance, signaling often-receptive fixed income investor appetite for debt issuance across the rating spectrum. In Europe, fixed income investors participated mostly in investment-grade debt issuance, with investment-grade and speculative-grade bond issuance totaling $446.5 billion and $82.3 billion, respectively, during the same period. In the few instances where raising public capital has been difficult, in our view, it seems this had more to do with asset quality than climate or environmental concerns.
Chart 2a
North America oil and gas sector: Investment-grade and speculative-grade debt issuance
(2010–2023 YTD)

Chart shows primary market bond issuance volumes and yields from the North American oil and gas sector.
YTD = year to date; YTM = yield to maturity.
Sources: Refinitiv; S&P Global Ratings Credit Research & Insights.
© 2023 S&P Global.

Chart 2b
EMEA oil and gas sector: Investment-grade and speculative-grade debt issuance
(2010–2023 YTD)

Chart shows primary market bond issuance volumes and yields from the EMEA oil and gas sector.
EMEA: Europe, Middle East and Africa; YTD = year to date; YTM = yield to maturity.
Sources: Refinitiv; S&P Global Ratings Credit Research & Insights.
© 2023 S&P Global.
In addition to capital access, despite the industry’s inherent volatility, as far as we can tell there have been little discernable risk premiums attributed to oil and gas bond pricing (outside of commodity cycle troughs) compared with those of the broad corporate industrial universe. As shown in Charts 3a and 3b, environmental concerns seem to be far from the most important factor for funding of oil and gas companies. Industry cycles and other economic and technical considerations have been much more relevant for pricing, as highlighted by the spikes in 2016 and 2020, when the industry faced a collapse in commodity prices. Additionally, spread premiums have been near zero since 2021, the same time period that GFANZ alliances have been gaining traction.

**Chart 3a**

**Investment-grade oil and gas spreads versus nonfinancial sector**
(basis points)

- Investment grade, nonfinancial, 10 year
- Investment grade, oil and gas, 10 year

Chart shows the option-adjusted spread for US corporate bonds with a 10-year maturity.
Source: S&P Global Ratings Credit Research & Insights.
© 2023 S&P Global.

**Chart 3b**

**Speculative-grade oil and gas spreads versus nonfinancial sector**
(basis points)

- Speculative grade, nonfinancial, five year
- B- and below, nonfinancial, five year
- Speculative grade, oil and gas, five year

Chart shows the option-adjusted spread for US corporate bonds with a five-year maturity.
Source: S&P Global Ratings Credit Research & Insights.
© 2023 S&P Global.
Oil and gas producers are self-funding, for now

While market access has remained favorable, the falloff in debt issuance since 2021 has been notable (see Charts 2a and 2b). However, this is the result of lower funding needs, as opposed to market access challenges. After navigating the dual challenges of the COVID-19 pandemic and the commodity downcycle, many operators have emerged stronger than ever with healthy balance sheets and cash flow surpluses. The hydrocarbon price run-up caused by the Russia-Ukraine war resulted in strong free cash flow generation, and oil and gas producers pivoted to paying down material amounts of debt. In 2021, for large US oil-focused exploration and production (E&P) operators, 70% of free cash flow was used to pay down debt, with the vast majority of cash flow shifting toward shareholder returns in 2022. Capital expenditures have also been lower than the historical norm (Chart 5b) over the last three years, especially as spending has still mainly been directed at oil and gas investments as opposed to decarbonization efforts due to a lack of shareholder pressure to spend on the latter.

Chart 4a

Large US oil-focused E&P uses of free cash flow in the first nine months of 2021 (%)

Data compiled November 30, 2021.
E&P = exploration and production.
Source: S&P Global Commodity Insights.
© 2023 S&P Global.
In the current commodity price environment, from our perspective, North American and European operators are not only self-funding, but are generating ample free cash flow, limiting their need for external funding sources. Financial and capital discipline, mandated by investors, has replaced years of cash flow deficits that have weighed on the industry during upcycles. Operators now appear to us to be more focused on establishing a track record of financial discipline, and have adopted more conservative financial policies around production growth and acquisition funding compared to strategies of the past.
However, over the longer term, it remains to be seen whether producers will be able to continue to cover capital expenditure (capex) through cash flow as they drill into lower-quality reserves, face changing supply/demand dynamics and contend with potential inflationary pressures. According to S&P Global Commodity Insights, global E&P capital spending from 2022 to 2027 will increase at a 5.2% compound annual growth rate. This growth rate is even higher in North America and Europe, at 8.6% and 6.5%, respectively. The projected growth in capex reflects the need to stem production declines, replace aging infrastructure, address cost inflation, invest in new technologies and spend to meet the growing demand for energy.
Alternative sources of funding

While we have not seen funding pressures materialize for mid-to-larger oil and gas producers, some companies have sought alternative sources of funding outside of the traditional bank loan and RBL markets. One avenue has been through the nontraditional asset-backed securitization market in the form of proved developed producing (PDP) reserves securitizations. These products securitize the cash flow generated by a company’s producing reserves as collateral for bond investors. We estimate that nearly $6 billion in proceeds has been raised since 2021 by private oil and gas companies in this market.

Another source of funding that has seen rapid growth and increasing investor depth is the private credit market. However, while this market has extended funding across a broad mix of sectors, it does not appear that a significant amount has been flowing into the conventional oil and gas sector. Looking across the asset holdings of middle-market collateralized loan obligations and business development companies, each of which provide a source of funding for private credit, we see relative concentrations of holdings of loans from the technology and healthcare sectors, where capital has helped fund growth in innovative business models that might require longer-term investment horizons. Within the energy sector, private capital has skewed toward cleantech and renewable assets that can be funded at a competitive cost, are smaller in nature, and could provide future tax credits or more certain exit strategies for asset managers. By contrast, private capital directed toward conventional oil and gas has been less prevalent, and when executed, tends to be associated with projects that are viewed as supportive of the energy transition (e.g., funding natural gas as a transition fuel, spending on low-carbon initiatives, etc.).

Conclusion

While some smaller private oil and gas companies are already seeing traditional financing sources dry up or become too expensive, we believe most mid- to larger-sized independents and integrated companies in OECD nations still have a relatively long runway in terms of capital access. Post 2030, pressures could intensify due to a confluence of factors, including continued declines in hydrocarbon demand, potentially increasingly restrictive decarbonization commitments, evolving regulation around emissions disclosure, advancements in renewables after a decade of post-Inflation Reduction Act spending on low-carbon and green technology, and growing concern among financers regarding the risks of “stranded” oil and gas assets. Capital access pressures will also likely accelerate faster in Europe relative to North America.

We believe this may be a key driver for consolidation in the oil and gas space, and particularly in the United States, where production is highly fragmented. Indeed, recent acquisitions by ExxonMobil and Chevron highlight the companies’ desire to strengthen their long-term positions against these headwinds. We expect that independent oil and gas companies that lack deep pockets or quality reserves will be particularly vulnerable and will either look to merge or be acquired in order to mitigate increasingly tighter capital market access.
## Appendix:

### Overview of Alliances under Glasgow Financial Alliance for Net Zero (GFANZ)

<table>
<thead>
<tr>
<th>Alliance/goal</th>
<th>Membership</th>
<th>Assets under management</th>
<th>Geographic breakout</th>
<th>Total members</th>
<th>Target setting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net-Zero Asset Managers Initiative (NZAM)</strong></td>
<td>Portfolio or asset managers (AMs)</td>
<td>$64 trillion</td>
<td>North America: 86; Latin America: 7; Europe: 184; Middle East and Africa: 1; Asia Pacific: 38</td>
<td>315</td>
<td>Review targets every five years from 2030 to 2050 with the view of increasing AUM until 100% of assets are included.</td>
</tr>
<tr>
<td><strong>Net-Zero Asset Owner Alliance (NZAO)</strong></td>
<td>All asset classes (equity, fixed income, private equity, real estate, mortgages and infrastructure)</td>
<td>$11 trillion</td>
<td>North America: 10; Europe: 63; Middle East and Africa: 4; Asia Pacific: 6</td>
<td>86</td>
<td>Intermediate targets every five years in line with Paris Agreement Article 4.9.</td>
</tr>
<tr>
<td><strong>Net-Zero Banking Alliance (NZBA)</strong></td>
<td>Banks</td>
<td>NA</td>
<td>North America: 12; Latin America: 15; Europe: 70; Asia Pacific: 27; Middle East: 4</td>
<td>133</td>
<td>Set 2030 targets (or sooner) and a 2050 target, with intermediary targets to be set every five years from 2030 onward.</td>
</tr>
<tr>
<td><strong>Net-Zero Financial Service Providers Alliance (NZFSPA)</strong>*</td>
<td>Financial services</td>
<td>NA</td>
<td>NA</td>
<td>26</td>
<td>Review and update such targets at least every five years with a view to increasing the proportion of services and products to achieve full alignment.</td>
</tr>
<tr>
<td><strong>Net-Zero Insurance Alliance (NZIA)</strong></td>
<td>Insurers and reinsurers</td>
<td>NA</td>
<td>North America: 1; Europe: 8; Africa: 1; Asia: 1</td>
<td>11</td>
<td>Every five years from 2030 to 2050.</td>
</tr>
<tr>
<td><strong>Net-Zero Investment Consultants Initiative (NZICI)</strong></td>
<td>Investment consultants to pension funds, insurers, endowments, foundations, sovereign wealth funds, etc.</td>
<td>Signatories advise on assets of up to $10 trillion</td>
<td>NA</td>
<td>12</td>
<td>NA</td>
</tr>
<tr>
<td>Alliance/goal</td>
<td>Membership</td>
<td>Assets under management</td>
<td>Geographic breakout</td>
<td>Total members</td>
<td>Target setting</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>---------------------</td>
<td>--------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Paris-Aligned Asset Owners (PAAO) — Committed to</td>
<td>All asset classes</td>
<td>Signatories represent over $3.3 trillion in assets</td>
<td>NR</td>
<td>59</td>
<td>Every five years.</td>
</tr>
<tr>
<td>transitioning their investments to achieve net-zero portfolio GHG emissions by 2050 and aligning with global efforts to limit warming to 1.5°C.</td>
<td>(equity, fixed income, private equity, real estate, mortgages and infrastructure)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venture Climate Alliance (VCA) — Committed to achieving a</td>
<td>Venture capital</td>
<td></td>
<td>NR</td>
<td>76</td>
<td>Individual firms set interim targets.</td>
</tr>
<tr>
<td>rapid, global transition to net zero or negative GHG emissions by 2050 or earlier.</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data compiled August 18, 2023.

AUM = assets under management; GHG = greenhouse gas; NA = not available; NR = not rated.

*S&P Global Inc. is a founding member of the Net-Zero Financial Services Provider Alliance (NZFSPA).


© 2023 S&P Global