Breaking the Code

Deciphering Climate Action Efforts in the Financial Sector

By James Mitchell, Lindsey Schafferer, Tyeler Matsuo, and Radhika Lalit

**“There is a tide in the affairs of men,
Which, taken at the flood, leads on to fortune;
Omitted, all the voyage of their life
Is bound in shallows and in miseries.
On such a full sea are we now afloat,
And we must take the current when it serves,
Or lose our ventures.”**

—*Julius Caesar* Act 4, Scene 3
Quoted by Michael Parker at the launch of the Poseidon Principles in June 2019. Parker is Chairman of Shipping, Logistics, and Offshore at Citigroup and Chair of the Poseidon Principles Association.

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ABOUT THE CENTER FOR CLIMATE-ALIGNED FINANCE

Rocky Mountain Institute's Center for Climate-Aligned Finance was established as an "engine room" to help financial institutions partner with their clients, industry leaders, and key buyers to develop practical and scalable solutions to the barriers to climate alignment. Climate alignment is a powerful theory that could provide a definitive approach for the financial sector to drive long-term, multi-sector decarbonization.

ABOUT ROCKY MOUNTAIN INSTITUTE

Rocky Mountain Institute (RMI)—an independent nonprofit founded in 1982—transforms global energy use to create a clean, prosperous, and secure low-carbon future. It engages businesses, communities, institutions, and entrepreneurs to accelerate the adoption of market-based solutions that cost-effectively shift from fossil fuels to efficiency and renewables. RMI has offices in Basalt and Boulder, Colorado; New York City; the San Francisco Bay Area; Washington, D.C.; and Beijing.

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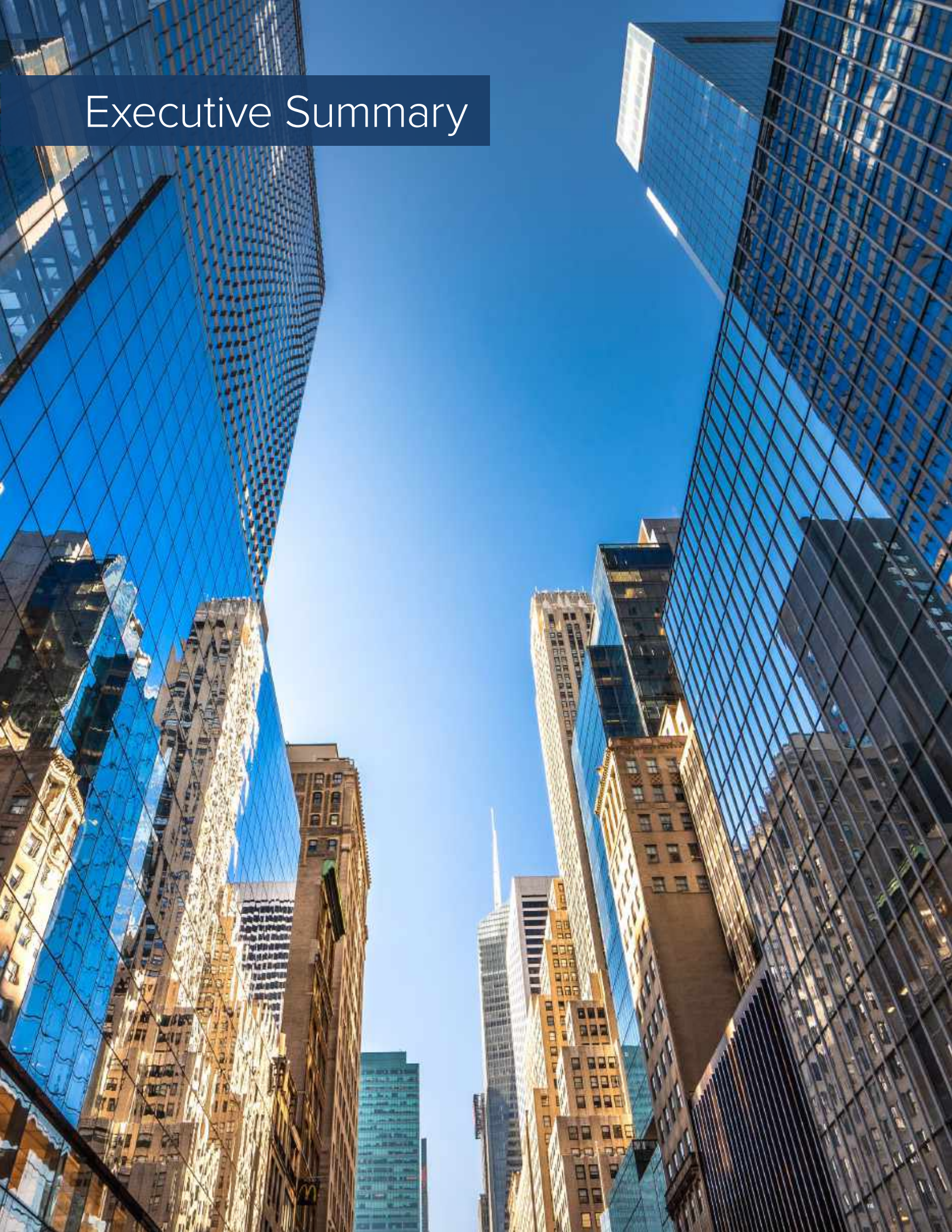

Executive Summary

The debate over *whether* private financial institutions should play a proactive role in the low-carbon transition is coming to a close, and a proliferation of efforts to define *what this role should be in practice* has begun.

While the financial sector has initiated broad efforts to consider climate risks, asset owners and lenders representing tens of trillions in assets have begun to move beyond such considerations to make good on their commitments to align their portfolios with the Paris Agreement. Policymakers across the globe are establishing taxonomies and strenuous climate benchmarks to better direct capital toward sustainable activities and investor expectations of "impact" are increasing. Nations such as the UK, France, and Denmark have set legally binding net-zero emissions targets, which has spurred financial regulators to ensure markets are pricing climate risks effectively and financial supervisors to increase scrutiny of banks and insurers.

This fast-shifting landscape is difficult to navigate for financial institutions and climate action initiatives alike. Doing so is crucial for understanding what is being asked of the financial sector, how structural barriers (and sometimes legal obligations) limit its ability to influence the real economy, and which initiatives are working to overcome these barriers to influence.

Charting the Course to Climate-Aligned Finance, published by the Center for Climate-Aligned Finance at Rocky Mountain Institute, identified the five major barriers that any financial institution must overcome when seeking to align their portfolios with the temperature goals of the Paris Agreement: working around the structural challenges to influence the real economy, overcoming competitive disadvantage, selecting methodologies to assess alignment, understanding decarbonization pathways, and sourcing adequate data. **This report takes stock of major trends and initiatives by identifying the efforts being made to overcome these barriers**.

Barrier: Moving Beyond Divestment to Actively Influencing the Real Economy

Because of an insufficient supply of investible assets that are aligned with climate targets, it is not possible to align major financial portfolios with climate targets today. While screening specific economic activities (e.g., oil sands-related energy production) out of portfolios is possible, it is not possible to fully align major financial portfolios with climate targets through divestment alone. Therefore, financial institutions must go beyond divestment alone to develop a more sophisticated approach to actively influencing the real economy that relies on all available levers of influence. In practice, this approach must be informed by both regulatory efforts around climate risks and efforts working to mobilize the financial sector as a driving force for the decarbonization of the global economy.

While the debate about *whether* private financial institutions should play a role in decarbonization is ending, efforts to define what that looks like in practice are still developing. Following commitments to align with climate targets by asset owners and lenders representing tens of trillions in assets over the past year, tremendous efforts have been initiated to ensure that stewardship is both ambitious and well-informed. In that same time frame, sustainability-linked finance has become one of the fastest-growing debt asset classes and interest in transition finance has piqued. Policymakers and regulators have been at work as well. The EU has made tremendous headway on its Action Plan on Sustainable Finance and at least ten other nations or regions have expressed interest in developing some form of sustainable finance taxonomy. The interests of clients are shifting too. Net inflows into open-end and exchange-traded

sustainable funds available to US investors alone totaled $20.6 billion in 2019, roughly four times the record set for net inflows in 2018. Similarly, net inflows into European sustainable funds amounted to €160 billion in 2019, a record level. More than 50 of the 360 European funds launched in 2019 had a climate-oriented mandate.

One key assumption underlies these efforts: that it is *within the capacity* of financial institutions to influence the real economy in a world often lacking policies to give clear direction on and incentives for industrial decarbonization.

As efforts to mobilize the financial sector accelerate, there is a need for clear-eyed realism about what private financial institutions can do voluntarily, how this is constrained by significant—often structural—barriers, and what efforts are being established to better enable climate-forward financial institutions to play a proactive role in decarbonization. **Simply put, actions taken by private financial institutions are not a wholesale replacement for policy, but they can be influential in reinforcing it, preparing for it, and collectively moving ahead of it. This reality should inform both the actions of financial institutions and the expectation that they develop ambitious, sophisticated, and transparent approaches to influence, which span all available levers of influence**. See Exhibit ES1 below for a description of actions, intended impacts, and limitations.

Tremendous efforts are being made by initiatives—many of which are led by financial institutions themselves—to overcome the most significant barriers to influence and better enable financial institutions to actively influence the real economy (see Exhibit ES2).

COLLECTIVE ACTION—A MATURING RESPONSE TO THE CHALLENGE OF INFLUENCE

Barrier: Competitive Disadvantage

In *Charting the Course to Climate-Aligned Finance*, we identified **competitive disadvantage** as a significant barrier to fully mobilizing the financial sector as a force for decarbonizing the real economy. Many financial institutions delay meaningful action on climate change to avoid losing clients and investment opportunities to competitors. The history of finance is the story of pioneers finding opportunity and profit where peers see only risk. Climate finance is no different; however, just as we celebrate those leaders who anticipated the 2008 mortgage crisis, we cannot rely on visionaries alone to enable systemic change. An investor may choose to sell the shares of a carbon-intensive utility. Yet, that investor's influence over the utility equates to zero if the shares are repurchased by other neutral investors and the ability to engage is lost. This "carbon leakage" must be mitigated to the degree possible through collective action.

The past three years have brought a considerable increase in the scale, ambition, and specificity of voluntary collective action initiatives in the financial sector.

EXHIBIT ES1

The Limits of Power—How Efforts to Mobilize the Financial Sector Stack Up Against the Limitations of Influence

	Action taken by financial institution	Examples	Intended impact	Limitations
Direct	Offer specific financial products to incentivize or enable sustainable or transition-related activities.	Lender provides **sustainability-linked loan** to shipowner that gives preferential cost of capital so long as operations remain aligned with climate-aligned trajectory established by **Poseidon Principles.** Corporate issues **transition bond** with sustainability-linked pricing mechanism. Bank underwrites ratepayer-backed bonds to accelerate retirement of coal-fired power stations in regulated utility markets in the United States.	Influence cost or availability of capital or financial services.	Requires knowledge of **decarbonization pathways** and/or **alignment assessment methods**. May require standards for one or both to create consensus on eligible activities and eliminate greenwashing. May require granular **data** sourced from detailed client disclosures.
	Integrate climate risk or alignment into financing and investment decisions.	Asset managers better integrate climate risk considerations into investment decisions, resulting in risk tilting within portfolios, due to broad **TCFD implementation.** Investor preferences are better directed toward sustainable activities by the **EU Sustainable Finance Taxonomy**. Climate-focused asset owner implements **Paris-Aligned Benchmark** for portfolio tracking. A group of institutional investors joins the Powering Past Coal Alliance **(PPCA) Finance Principles** and implements **values-based screens** on use of unabated coal-fired power generation.		Actions must be taken in concert and at great scale to influence due to the challenge of **competitive disadvantage:** "neutral investors" can buy up sold shares or finance excluded projects or companies. Tragedy of the horizon: differing perceptions of materiality and time frames of material exposures. Capacity to fully integrate climate risk into portfolio management may be constrained due to limitations in **data**.
	Active stewardship and engagement.	Shareholder resolution backed by **Climate Action 100+** (CA 100+) members requires corporate to set net-zero target and disclose how it intends to meet that target. Soft engagement by **Transition Pathway Initiative** (TPI) member encourages corporate to establish more robust climate targets and governance. Soft engagement by **Poseidon Principles** signatory encourages client to ensure that newbuild vessel can be flexibly converted to low-carbon fuels to reduce stranding risk.	Encourage companies across sectors to transition.	Often requires knowledge of **decarbonization pathways** and/or **alignment assessment methods.** Scale may be necessary for effectiveness and influence is difficult to measure. Regulations may disallow certain resolutions or limit degree to which majority-backed resolutions are binding.
Indirect	Advocacy.	**Investor Agenda** member sends letter to national government urging them to set emissions targets in line with the temperature goals of the Paris Agreement and establish policies to achieve that target.	Change policy environment to incentivize more sustainable activities.	Competing policy priorities.

Source: RMI

EXHIBIT ES2

The Landscape of Initiatives

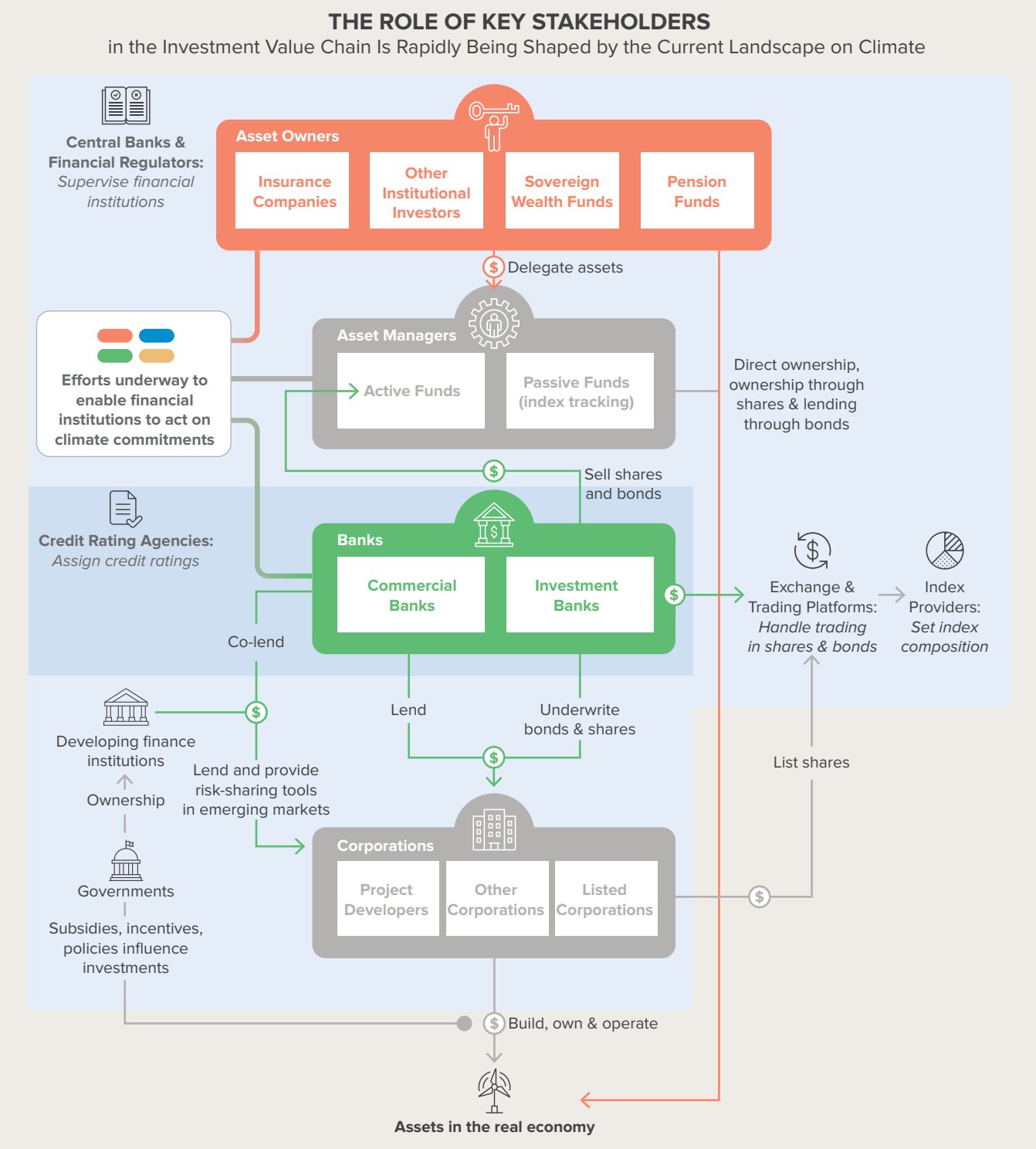

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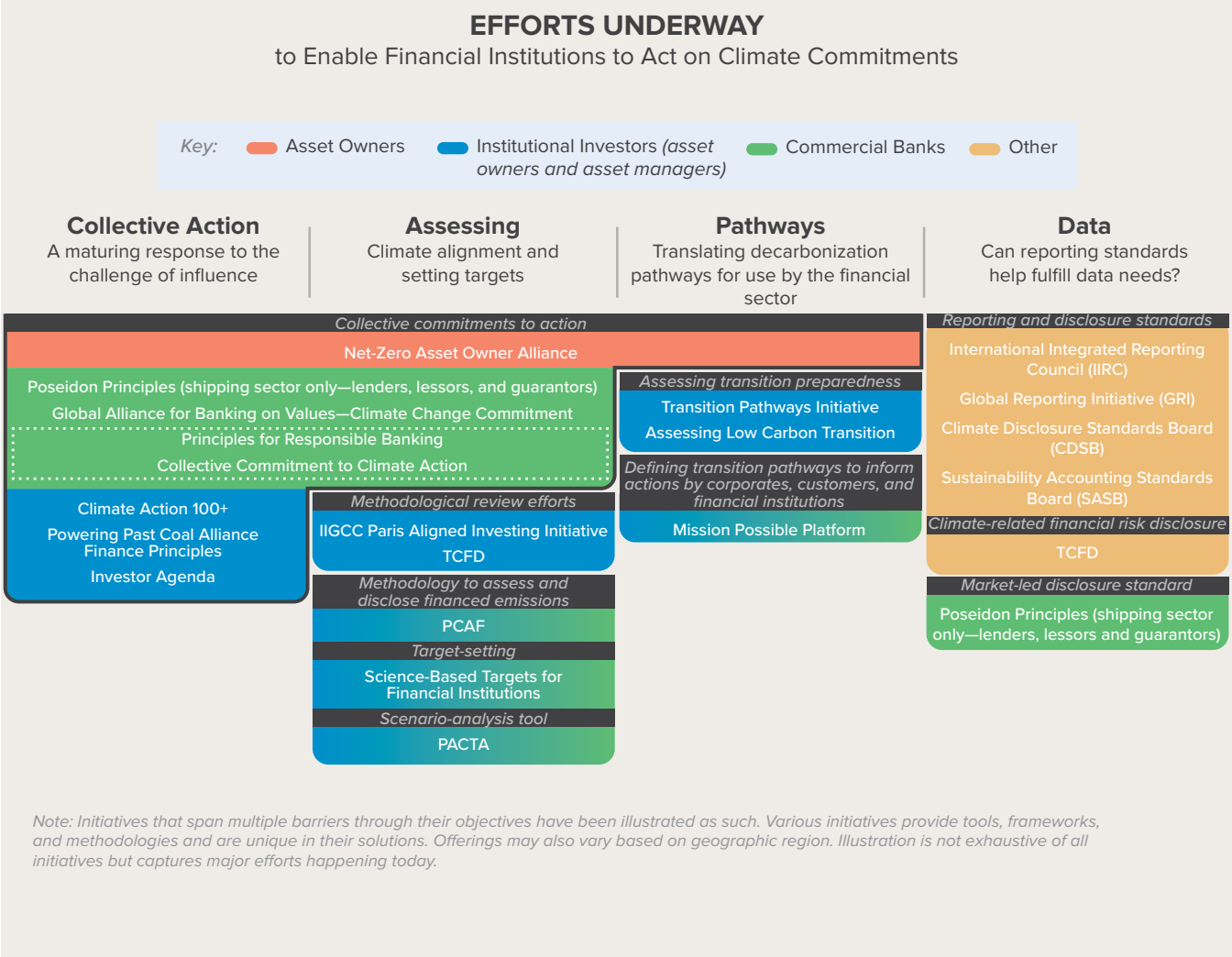
EXHIBIT ES2 (continued)

The Landscape of Initiatives



Note: Initiatives that span multiple barriers through their objectives have been illustrated as such. Various initiatives provide tools, frameworks, and methodologies and are unique in their solutions. Offerings may also vary based on geographic region. Illustration is not exhaustive of all initiatives but captures major efforts happening today.

Source: RMI (adapted from the Climate Finance Leadership Initiative).

Institutional investors are systematically engaging corporates at great scale globally via initiatives such as Climate Action 100+, known as CA 100+ (launched 2017, $40 trillion assets under management [AUM]), and Investor Agenda (launched 2018, $32 trillion AUM). Asset owners and commercial banks are making climate alignment commitments—commitments to align their portfolios and services with internationally agreed climate targets—through initiatives such as the Collective Commitment to Climate Action,[i] the Global Alliance for Banking on Values Climate Change Commitment, the Net-Zero Asset Owner Alliance, and the Poseidon Principles, which accounted collectively for $17 trillion in assets at the close of 2019.

As signatories to these ambitious commitments have begun to turn toward implementation, clarity has emerged on what such commitments mean in practice: **climate alignment commitments are commitments to assess alignment with climate targets and improve (or conform to) that alignment through product offerings, investment and financing decisions, and engagement**.

While collective action initiatives neither serve as a replacement for policy nor make the uncomfortable shift toward influencing the real economy easy, promising signs of their advantages are emerging: they de-risk the imposition of new requirements on clients, reduce the costs of understanding and supporting decarbonization, and seem to make engagement more effective.

ASSESSING CLIMATE ALIGNMENT AND SETTING TARGETS

Barrier: Navigating Varying Methodologies

As more financial institutions have made climate alignment commitments, an array of methodologies, platforms, and tools has emerged to allow them to assess and disclose their progress in achieving alignment with climate targets. While transparent methods and disclosure platforms are critical for ensuring accountability, the **availability of differing methodologies** adds some complexity that must be navigated by financial institutions. Varying methodologies may draw on different data sources, define alignment differently, rely on different metrics, and reference different climate scenarios.

The ability to transparently track and disclose progress is a cornerstone of any legitimate climate alignment commitment or target-setting process. As climate alignment commitments have grown in number and scale, so too have the number and fragmentation of initiatives for assessing the alignment of financial portfolios with climate targets. These include platforms for making and disclosing progress toward commitments, methodologies for measuring progress, and tools to help financial institutions apply these methodologies to their own portfolios.

[i] Signatories to the Collective Commitment to Climate Action represent a subset of Principles for Responsible Banking signatories, which represent $47 trillion in assets, or one-third of the global banking sector.

All methods today follow a similar logic: calculate the climate impact of different companies and investments, allocate these impacts to different financial securities, aggregate these impacts to the portfolio level, and assess whether the portfolio's climate impact is aligned with a climate-aligned pathway.[ii] Methods differ in their climate impact metric—focusing on financed emissions, low- versus high-carbon technologies, or "implied temperature rise"—and in the types of securities covered. Given this divergence, **there is a clear and widely acknowledged need for harmonized methodologies to assess climate alignment and to ensure that it can be done comparably**. In response, several private sector-led initiatives are seeking to harmonize approaches.

Two critical gaps remain. First, there is still no single framework for assessing alignment across the financial sector. This can make it especially difficult to navigate and compare financial institutions that may span several functions, such as a large financial institution with lending, underwriting, and investment management activities. Second, because alignment assessments are framed solely around the climate impact represented by a portfolio, there is little guidance on how climate alignment may translate to strategy, governance, risk management, or other institute-wide practices.

TRANSLATING DECARBONIZATION PATHWAYS FOR USE BY THE FINANCIAL SECTOR

Barrier: Multiple Decarbonization Pathways

In *Charting the Course to Climate-Aligned Finance*, we identified the **need to understand complex, often conflicting, sectoral decarbonization pathways and choose one to benchmark efforts against** as a barrier to financial institutions that seek to proactively support decarbonization. This barrier becomes far thornier if considered within the context of the multiple voluntary efforts and policy efforts working to define decarbonization pathways and rally the efforts of financial institutions behind them.

While a relatively technical subject, **understanding decarbonization pathways and using that understanding to inform product offerings, investment decisions, and engagement are crucial for financial institutions that wish to play a proactive role in decarbonization**. Several initiatives, such as the Transition Pathway Initiative (TPI) and the Assessing Low-Carbon Transition (ACT) initiative, are working to standardize how corporate climate alignment can be measured and integrated into stewardship and portfolio management.

Assessing alignment of financial portfolios with climate targets and disclosing progress is important for ensuring accountability, but such assessments are not necessarily the most effective means for informing financial decision-making to support decarbonization. **Financial institutions need**

[ii] Notably, all tend to define climate alignment in terms of the climate impact represented by a portfolio, rather than how strategies, practices, governance, or other factors are aligned with a low-carbon future.

forward-looking information on whether a corporate is decarbonizing in line with climate targets and sectoral decarbonization pathways. This includes understanding the emissions pathway for the sector of the economy in which that corporate operates (e.g., utilities sector) and the technology mix and business models that are capable of keeping emissions below that pathway while still delivering services (e.g., electricity generation) at reasonable cost to the consumer.

Establishing a shared vision of pathways is also crucial for influencing the real economy through collective financial sector action. Two approaches for establishing this shared vision have emerged: "top-down" modeling and "bottom-up" coalitions. Initiatives such as TPI and ACT have largely coalesced around International Energy Agency (IEA) modeled emissions scenarios. The IEA offers relatively apolitical scenarios that break down emissions pathways by sector, allowing them to be incorporated into tools or evaluations of corporates. However, the IEA has also been criticized for being unrealistic in their technology assumptions and for failing to provide a scenario that keeps temperature rise to 1.5 degrees Celsius. "Bottom-up" initiatives such as the Mission Possible Platforms have sought to develop their own decarbonization pathways, which seek to consider the unique technological, political economy, and financing challenges of decarbonizing real economy sectors and build "coalitions of the willing" around shared visions to overcome them.

DATA—CAN REPORTING STANDARDS HELP FULFILL DATA NEEDS?

Barrier: Sourcing Adequate Data

In *Charting the Course to Climate-Aligned Finance*, we identified **the ability to source adequate, decision-useful data** as a significant barrier to both assessing the alignment of financial portfolios with climate targets and understanding climate risk.

Data quality and availability are significant barriers to assessing climate risk, the climate alignment of financial portfolios today, and corporate decarbonization readiness. **The need for more and better-standardized disclosures is recognized by regulators and financial institutions alike. Regulators across major financial markets are moving swiftly to clarify or require climate-related financial disclosures in line with the Task Force on Climate-Related Financial Disclosure (TCFD). There is clear demand for and steps toward a market-led reporting standard to ensure that both the volume and comparability of corporate non-financial increases**. The disclosure frameworks are in place to support the development of this standard.

As reporting standardization occurs, it is crucial that frameworks improve the understanding of climate risks, the alignment with climate targets, and corporate decarbonization readiness. While the momentum around reporting standardization is hugely promising, it will do more to improve institutional investors' understanding of climate factors. Lenders may continue to face data challenges, which may need to be addressed through targeted market or policy actions.

CONCLUSION

Efforts to understand climate-related risks proliferated in the years leading up to the establishment of the TCFD by the G20 Financial Stability Board in 2015. While TCFD implementation is far from full today, it has established crucially important "guide rails" for deliberations around climate-related risks that are often both technical and political.

Today, efforts to mobilize financial institutions as a "driving force" for decarbonization are proliferating. While the expectation that the financial sector *should* play a proactive role in supporting decarbonization is clear, navigating a shifting landscape of market trends, policy efforts, regulatory stipulations, and voluntary initiatives is challenging. Similar to the run-up to the creation of the TCFD, there is a need to ask which "guide rails" would be helpful to a financial sector stepping into a new, sometimes uncomfortable, role.

What is being asked of the financial sector today? Financial institutions across the investment chain are being asked to be *proactive* in support of decarbonization rather than *reactive* to policy. For asset owners and banks (particularly commercial banks), climate alignment commitments—commitments to align portfolios with the temperature goals of the Paris Agreement—may become a norm. As asset owners push the implementation of these commitments down the investment chain and investor interest continues to shift toward environmental, social, and governance (ESG) issues, this shift will have significant implications for asset managers as well.

What does it look like in practice? A climate alignment commitment is a commitment to assess alignment with climate targets and improve that alignment through product offerings, investment and financing decisions, and engagement. A meaningful climate alignment commitment is a commitment to influence the real economy. While not all financial institutions will make such commitments, the expectation that they should proactively support decarbonization will go beyond those who make them. Financial institutions' influence is limited, but they still have the responsibility to proactively support decarbonization. They should be expected to develop ambitious, sophisticated, and transparent approaches to influencing the real economy that span all levers of influence.

What may be needed to ensure that actions taken by the financial sector in support of decarbonization are effective and that expectations are realistic?

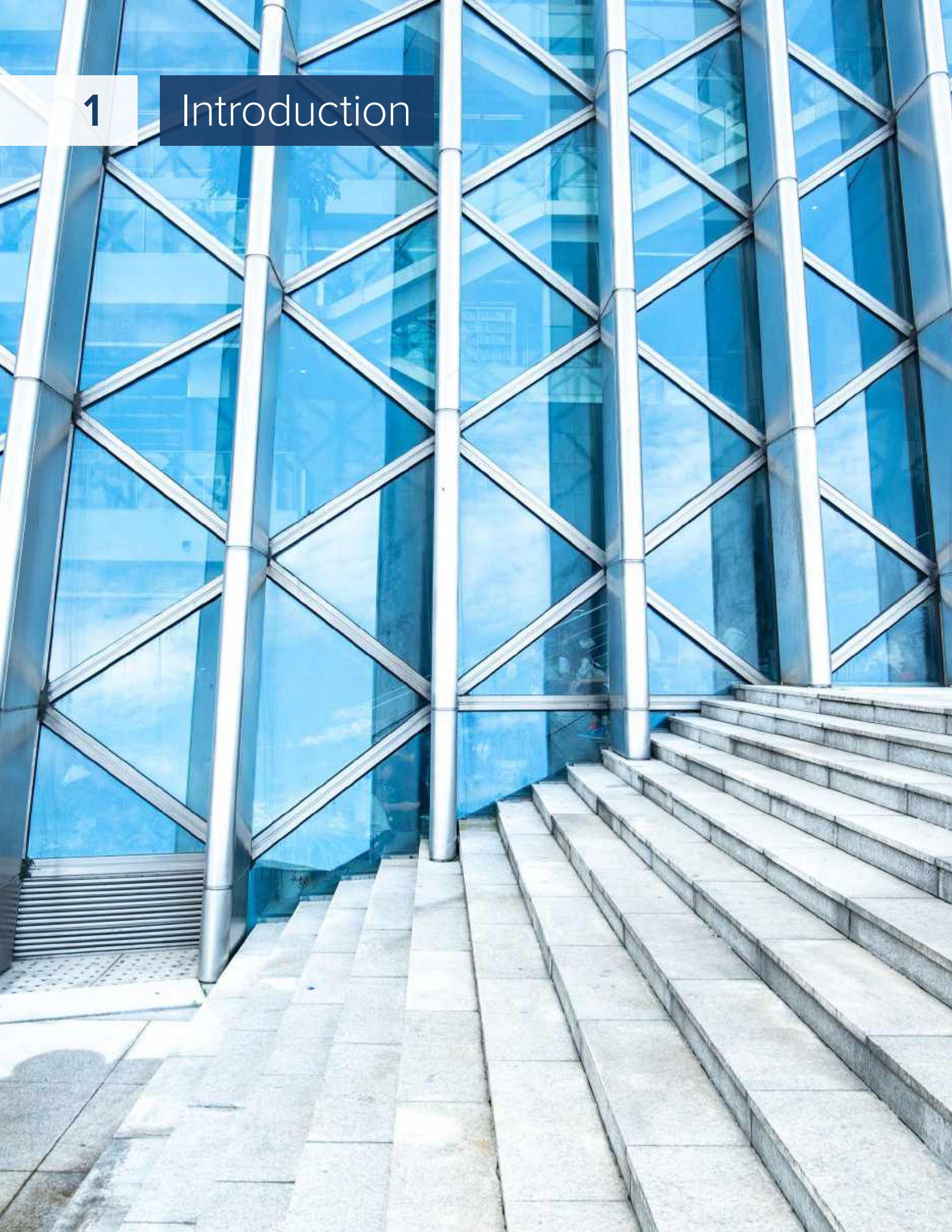
- **Harmonized alignment assessment methodologies**—Harmonized methodologies for assessing the climate alignment of financial institutions across the financial sector are needed to ensure that progress can be reported in a comparable fashion while also acknowledging that both policy and the real economy are not aligned with climate targets. Methodologies must be pragmatic.

- **Decarbonization pathways**—A shared vision and understanding of real economy sector-specific decarbonization pathways, including quantitative emission benchmarks and transition pathways, must inform the actions taken by financial institutions—regardless of type or whether they have a formal climate alignment commitment—in support of decarbonization. Pathways must be informed by industry.

- **Collective action with individual leadership and accountability**—Collective action initiatives can help establish assessment methodologies and decarbonization pathways more quickly and at lower cost. They reduce the risks to first movers and make actions more effective. However, leadership by and accountability of individual financial institutions are still important and necessary.

- **Data**—More and better-standardized data is needed to understand climate risk, the alignment of climate impacts with climate targets, and the decarbonization readiness of corporates, all of which are needed to fully mobilize the financial sector.

1 Introduction



Introduction

The role of the financial sector in supporting the low-carbon transition is rapidly being defined by two significant trends. This shift poses challenges to financial institutions—particularly those with an international footprint—that must navigate a flurry of new regulatory requirements, shifting customer expectations, and highly ambitious voluntary initiatives. It also holds tremendous opportunity for those who navigate new challenges adeptly.

The first of these trends is the global acceptance that climate risks are a threat to financial stability. A mere three years after the publication of the recommendations of the Task Force on Climate-Related Financial Disclosure (TCFD), regulators in most of the world's major financial markets are increasing or mandating climate-related disclosures from corporates, the largest asset managers are pushing for reporting standardization and threatening to use voting power against corporates who fail to comply, and financial supervisors are increasing scrutiny of banks and insurers.

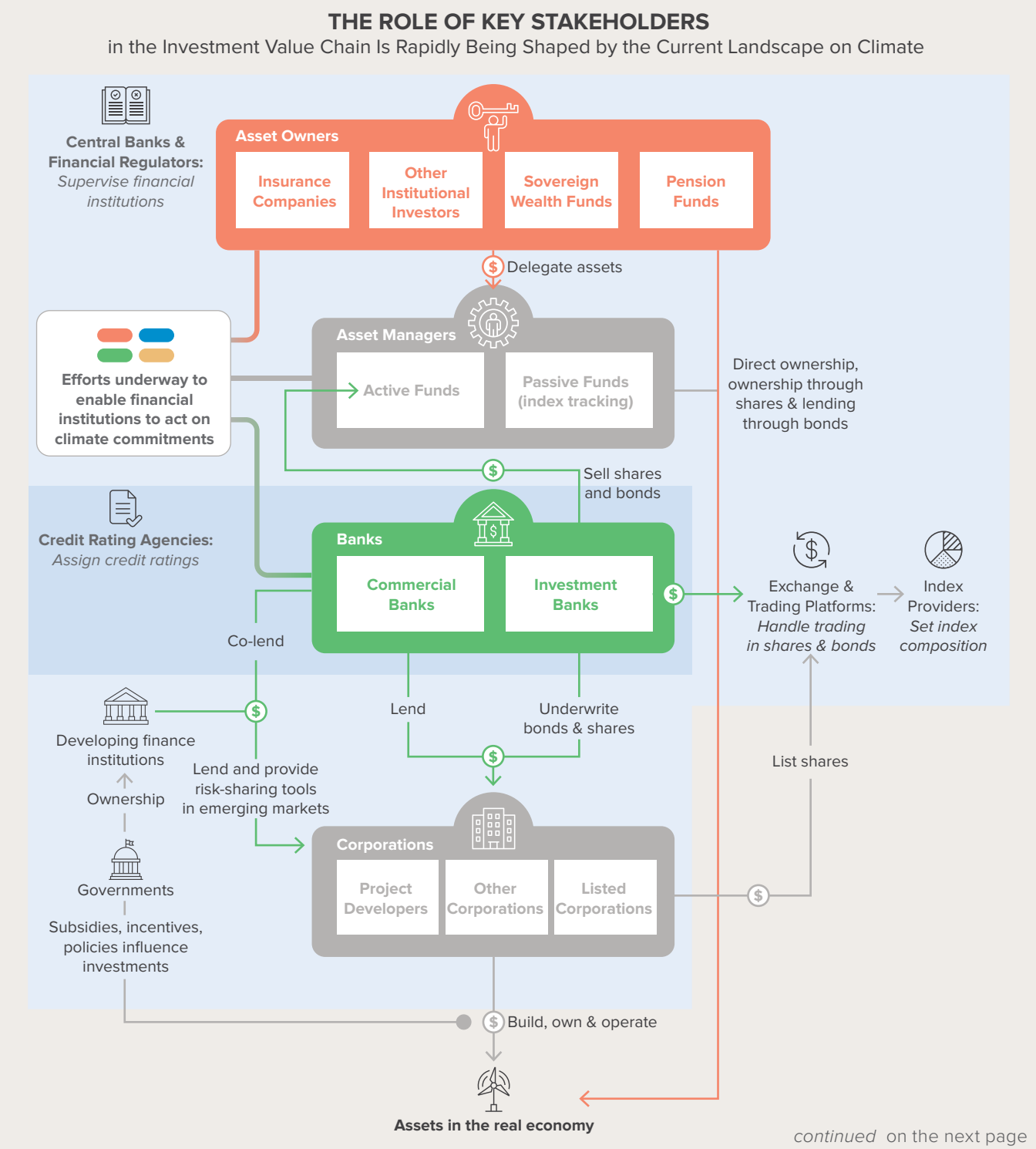
The second is the cementing expectation that the financial sector should be a driving force for decarbonizing the real economy and the proliferation of efforts to define what that means in practice. Asset owners and lenders representing tens of trillions in assets have begun to move beyond such considerations to make good on their commitments to align their portfolios with the Paris Agreement. Policymakers across the globe are establishing taxonomies and strenuous climate benchmarks to better direct capital toward sustainable activities and investor expectations of "impact" are increasing.

The intent of this report is to take stock of the regulatory and policy efforts, market trends, and voluntary initiatives actively shaping the role of private financial institutions in supporting decarbonization of the real economy; to clarify what these efforts are trying to achieve; and to identify key questions that will need to be addressed to move forward effectively.

Charting the Course to Climate-Aligned Finance, published by the Center for Climate-Aligned Finance at Rocky Mountain Institute, identified the five major barriers that any financial institution must overcome when seeking to align their portfolios with the temperature goals of the Paris Agreement: working around the structural challenges to influence the real economy, overcoming competitive disadvantage, selecting methodologies to assess alignment, understanding decarbonization pathways, and sourcing adequate data. **This report takes stock of major trends and initiatives by identifying the efforts being made to overcome these barriers**. See Exhibit 1 for a picture of the current landscape of efforts.

EXHIBIT 1

The Landscape of Initiatives



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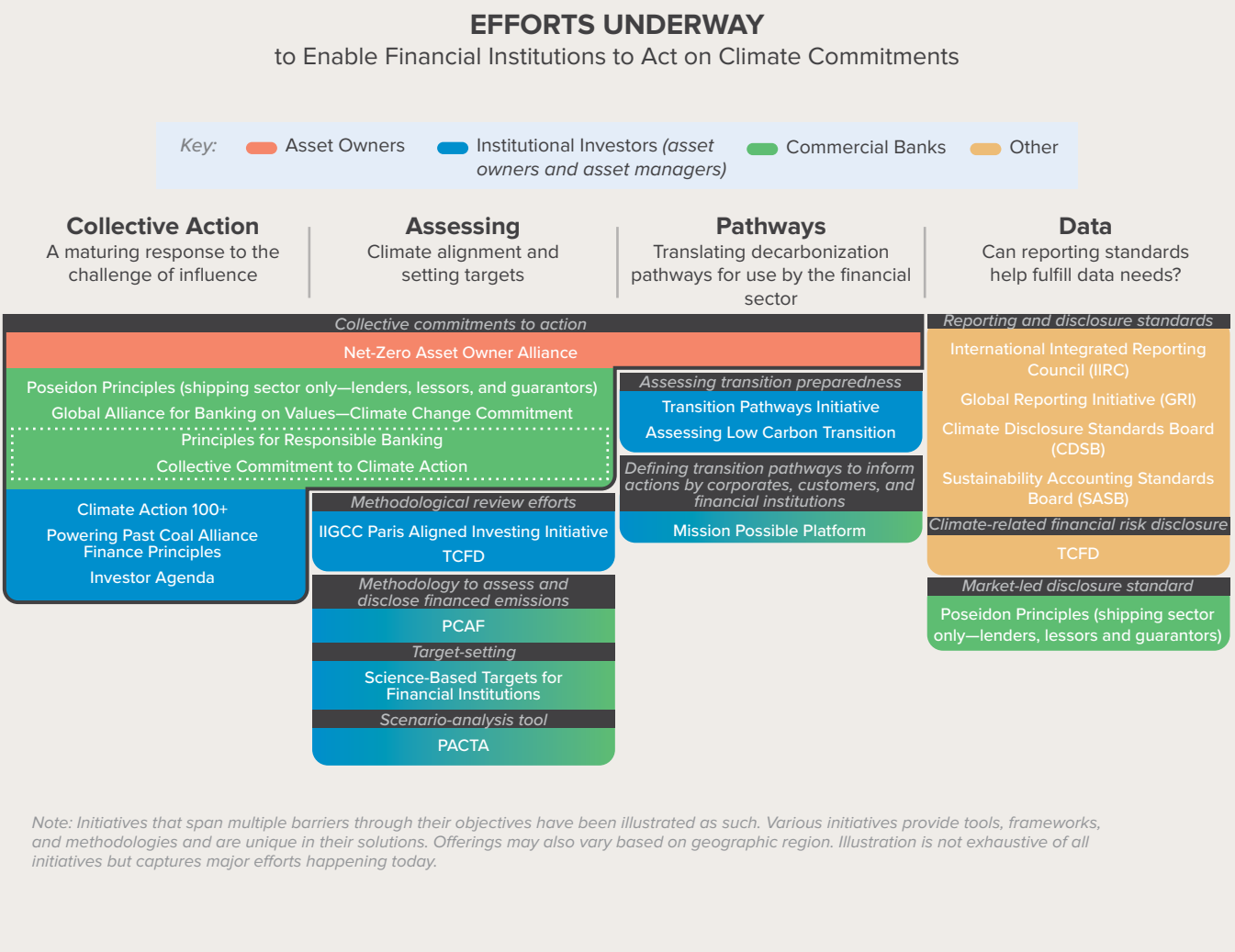


Note: Initiatives that span multiple barriers through their objectives have been illustrated as such. Various initiatives provide tools, frameworks, and methodologies and are unique in their solutions. Offerings may also vary based on geographic region. Illustration is not exhaustive of all initiatives but captures major efforts happening today.

Source: RMI (adapted from the Climate Finance Leadership Initiative).

2 Decarbonizing the Real Economy—The New Role of Finance

Decarbonizing the Real Economy—The New Role of Finance

Barrier: Moving Beyond Divestment to Actively Influencing the Real Economy

Because of an insufficient supply of investible assets that are aligned with climate targets, it is not possible to align major financial portfolios with climate targets today. While screening specific economic activities (e.g., oil sands-related energy production) out of portfolios is possible, it is not possible to fully align major financial portfolios with climate targets through divestment alone. Therefore, financial institutions must go beyond divestment alone to develop a more sophisticated approach to actively influencing the real economy that relies on all available levers of influence. In practice, this approach must be informed by both regulatory efforts around climate risks and efforts working to mobilize the financial sector as a driving force for the decarbonization of the global economy.

This section provides an overview of major trends shaping how the financial sector responds to climate risks and how it supports the low-carbon transition of the real economy. It is not intended to be exhaustive. Instead, it is intended to provide an indication of the undeniable direction of travel, to provide a simple framework for thinking about how the financial sector can influence the real economy, and to clearly identify the structural limitations of such actions.

KEY INSIGHTS

Climate Risk

The impacts of climate change, or a societal response to those impacts, are widely understood to have substantial financial ramifications. While the path to embedding climate risk considerations into financial decisions ubiquitously remains relatively long, both financial regulators and leading financial institutions are moving to ensure that climate-related risks are incorporated appropriately into financial decision-making and supervision. Regulatory actions globally are quickly increasing climate-related disclosure requirements for corporates, and actions taken in 2020 by the world's largest asset managers will likely accelerate the development of a reporting standard. This will have significant implications for corporates, asset managers, asset owners, and service providers, as it will quickly improve the understanding of climate risks and presumably lower the costs of doing so. Furthermore, scrutiny of banks and insurers—particularly those considered systemically important—looks likely to increase as groups such as the Network for Greening the Financial System rapidly increase the sophistication of their knowledge exchanges around climate stress testing and as institutions such as the Federal Reserve Bank of the United States actively consider joining.

Mobilizing the Financial Sector as a Driving Force for Real Economy Transition

The debate over whether private financial institutions should play a role in the low-carbon transition beyond integrating climate-related risks into financing and investment decisions has ended. A combination of efforts by financial institutions to make good on climate alignment commitments, policy efforts to establish mechanisms such as green taxonomies and climate benchmarks, and investor expectations of "impact" are beginning to shape what this may look like in practice.

One key assumption underlies these efforts: that it is *within the capacity* of financial institutions to influence the real economy in a world often lacking policies to give clear direction on and incentives for industrial decarbonization.

As efforts to mobilize the financial sector accelerate, there is a need for clear-eyed realism about what private financial institutions can do voluntarily, how this is constrained by significant—often structural—

barriers, and what efforts are being established to better enable climate-forward financial institutions to play a proactive role in decarbonization. **Simply put, actions taken by private financial institutions are not a wholesale replacement for policy, but they can be influential in reinforcing it, preparing for it, and collectively moving ahead of it. This reality should inform both the actions of financial institutions and the expectation that they develop ambitious, sophisticated, and transparent approaches to influence, which span all available levers of influence**. See Exhibit 2 below for a description of actions, intended impacts, and limitations.

CLIMATE RISK—PREPARING FINANCIAL INSTITUTIONS FOR THE IMPACTS OF CLIMATE CHANGE

Implementing the Recommendations of TCFD

TCFD was established by the G20 Financial Stability Board (FSB) in December 2015. The TCFD was established on the basis that climate change is one of the most significant and misunderstood risks that organizations face today. Because climate change is large-scale and long-term in nature, it is particularly challenging to address in economic decision-making. In June 2017, TCFD released its final recommendations. Those recommendations provide a voluntary framework for companies and other organizations to provide consistent climate-related financial risk disclosures for use by investors, lenders, insurers, and other stakeholders.[1]

Three years after their publication, the TCFD recommendations are supported by a significant list of companies, investors, financial regulators, and governments. However, the 2019 TCFD Status Report came to the high-level conclusion that "The disclosure of climate-related information is growing, but not fast enough."[2] While the TCFD recommendations now enjoy broad and high-level endorsements, the recommendations were designed from the outset to support, not replace, country-level reporting guidance on material financial issues. Thus, it is broadly recognized that there are two principal challenges that must now be overcome: increasing the scale of reporting under the TCFD recommendations and standardizing reporting in a manner that is relevant and decision useful.

These challenges are recognized and are likely to be overcome, though this process will take some time and may not advance evenly across all geographies. The first challenge—the scale of reporting—looks likely to be overcome through regulatory actions clarifying, and sometimes requiring, climate-related financial disclosures. However, mandatory reporting does not resolve the issue of ensuring that what is reported is useful to financial markets. Current trends suggest that a reporting standard may emerge soon.

Major Regulatory Moves Require and Clarify Climate-Related Financial Disclosures

The need for increasing the scale of climate-related disclosures is well established. Financial regulators across most major financial markets are moving to either require or further clarify climate-related disclosures in line with the TCFD recommendations. This will have significant and imminent implications for corporates, asset managers, asset owners, and service providers. Exhibit 3 below provides a non-exhaustive list of major financial markets with likely or imminent regulatory action on non-financial disclosure.

EXHIBIT 2

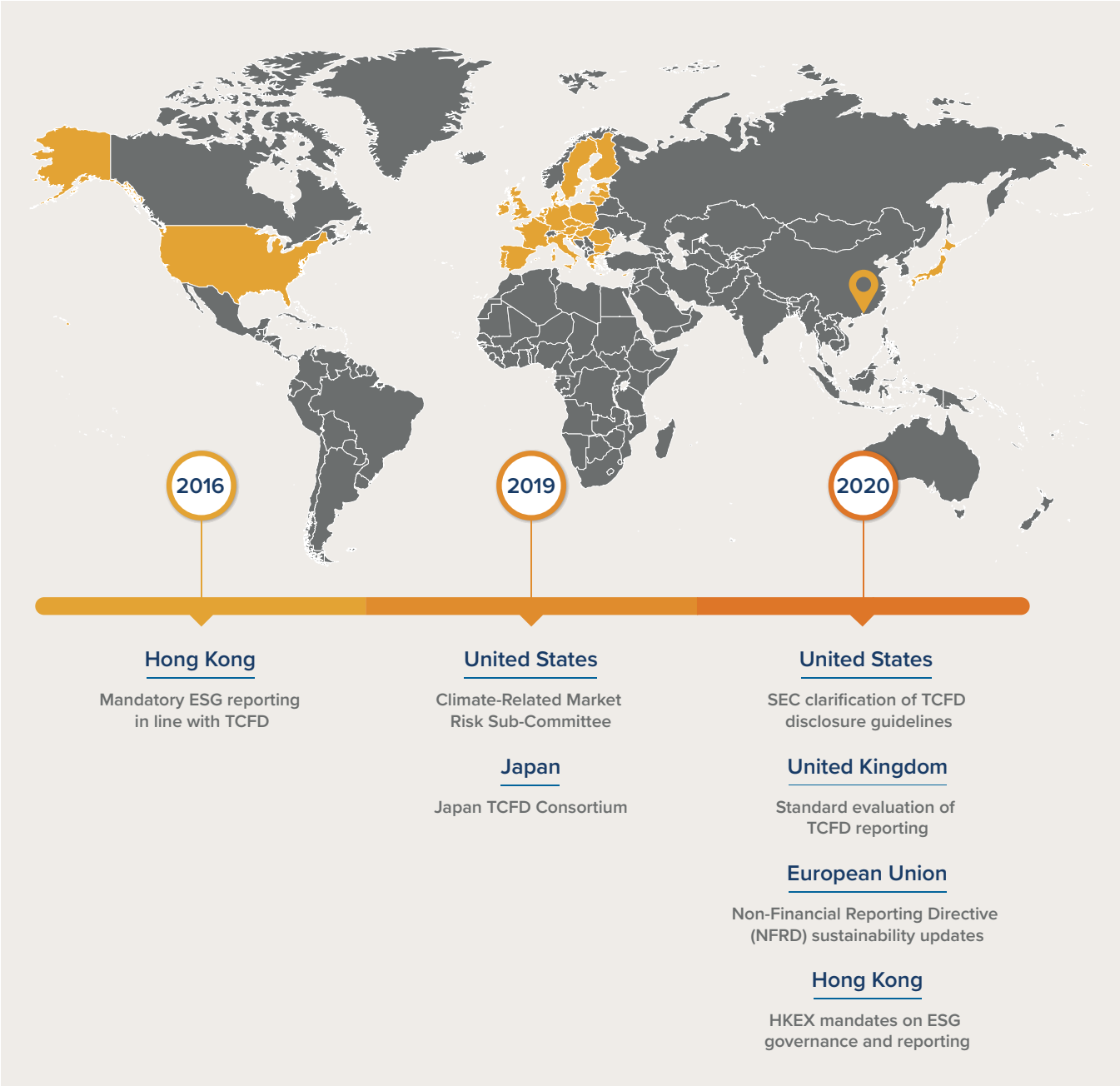
The Limits of Power—How Efforts to Mobilize the Financial Sector Stack Up Against the Limitations of Influence

	Action taken by financial institution	Examples	Intended impact	Limitations
Direct	Offer specific financial products to incentivize or enable sustainable or transition-related activities.	Lender provides **sustainability-linked loan** to shipowner that gives preferential cost of capital so long as operations remain aligned with climate-aligned trajectory established by **Poseidon Principles.** Corporate issues **transition bond** with sustainability-linked pricing mechanism. Bank underwrites ratepayer-backed bonds to accelerate retirement of coal-fired power stations in regulated utility markets in the United States.	Influence cost or availability of capital or financial services.	Requires knowledge of **decarbonization pathways** and/or **alignment assessment methods**. May require standards for one or both to create consensus on eligible activities and eliminate greenwashing. May require granular **data** sourced from detailed client disclosures.
	Integrate climate risk or alignment into financing and investment decisions.	Asset managers better integrate climate risk considerations into investment decisions, resulting in risk tilting within portfolios, due to broad **TCFD implementation.** Investor preferences are better directed toward sustainable activities by the **EU Sustainable Finance Taxonomy**. Climate-focused asset owner implements **Paris-Aligned Benchmark** for portfolio tracking. A group of institutional investors joins the Powering Past Coal Alliance **(PPCA) Finance Principles** and implements **values-based screens** on use of unabated coal-fired power generation.		Actions must be taken in concert and at great scale to influence due to the challenge of **competitive disadvantage:** "neutral investors" can buy up sold shares or finance excluded projects or companies. Tragedy of the horizon: differing perceptions of materiality and time frames of material exposures. Capacity to fully integrate climate risk into portfolio management may be constrained due to limitations in **data**.
	Active stewardship and engagement.	Shareholder resolution backed by **Climate Action 100+** (CA 100+) members requires corporate to set net-zero target and disclose how it intends to meet that target. Soft engagement by **Transition Pathway Initiative** (TPI) member encourages corporate to establish more robust climate targets and governance. Soft engagement by **Poseidon Principles** signatory encourages client to ensure that newbuild vessel can be flexibly converted to low-carbon fuels to reduce stranding risk.	Encourage companies across sectors to transition.	Often requires knowledge of **decarbonization pathways** and/or **alignment assessment methods.** Scale may be necessary for effectiveness and influence is difficult to measure. Regulations may disallow certain resolutions or limit degree to which majority-backed resolutions are binding.
Indirect	Advocacy.	**Investor Agenda** member sends letter to national government urging them to set emissions targets in line with the temperature goals of the Paris Agreement and establish policies to achieve that target.	Change policy environment to incentivize more sustainable activities.	Competing policy priorities.

Source: RMI

EXHIBIT 3

Regulatory Movements to Increase Climate-Related Disclosure



Source: RMI

Market Players Push for Standardization of Climate-Related Disclosures

It is well established that there is a need for better-standardized reporting to ensure that climate-related financial disclosures are comparable and decision useful. To date, regulators have stopped short of stipulating detailed reporting standards, generally seeing it as the domain of the private sector.

A market-led reporting standard may be emerging. In his January 2020 announcement, Larry Fink, CEO of BlackRock, stated clearly that BlackRock expects industry-specific Sustainability Accounting Standards Board (SASB)-aligned reporting of climate-related risks in line with TCFD recommendations.[iii] The announcement also threatened to use voting powers against directors who fail to comply. Similarly, in its January 2020 CEO letter on its proxy voting agenda, State Street Global Advisors committed to take voting action against board members who fall short of expectations on environmental, social, and governance (ESG) scores, which State Street calculates using SASB's metrics and materiality map.[3]

While it should be noted that there is some skepticism around whether major asset managers will use voting powers to the degree that they have pledged, the momentum behind standardization is significant and its potential benefits clear. Finally, it should be noted that it remains to be seen whether the updated EU Non-Financial Reporting Directive (NFRD) will be prescriptive or rely on a market-driven standardization process building on the huge efforts of SASB, Climate Disclosure Standards Board (CDSB), Global Reporting Initiative (GRI), and International Integrated Reporting Council (IIRC).

In addition to the need to increase the scale and standardization of reporting, there is a need to ensure that such a bounty of new information is integrated into streamlined and cost-effective platforms from service providers. There are signs that this is beginning to happen. Examples include the 2019 Morgan Stanley Capital International (MSCI) acquisition of Carbon Delta and Moody's Analytics majority-stake in climate risk start-up Four Twenty Seven, Inc., a leading provider of intelligence on physical climate risks.[4] The trending consolidation of private providers yields opportunity for scalable climate solutions that can be efficiently integrated into existing infrastructure.

Financial Supervisors Shift Focus to Financial Stability

Supervisory scrutiny of banks and insurers, particularly those considered systemically important, is increasing in scope and sophistication.

In December 2019, the Bank of England announced its intent to test lenders and insurers on three different climate scenarios. The central banks of Australia, France, the Netherlands, and Singapore are also performing similar climate-related stress tests, with the intent of testing the resilience of the largest banks and insurers under different scenarios to physical risk, the risk associated with climate events due to global warming, and transition risk, the risks presented by policy changes, technological evolution, and material shifts in asset valuation (among others) as the economy transitions. The tests also aim to measure aggregated climate risk exposure on the financial system by examining asset prices and business models.[5]

The Network for Greening the Financial System (NGFS) was established in 2017 to provide a platform for central banks and supervisors to standardize frameworks for environment and climate risk management in the financial sector.[6] At present, NGFS members supervise two-thirds of systemically important banks and insurers, and their jurisdictions represent 44 percent of global

[iii] See BlackRock's SASB and TCFD Stewardship Guidelines: **https://www.blackrock.com/corporate/literature/publication/blk-commentary-tcfd-sasb-aligned-reporting.pdf**.

gross domestic product (GDP).[7] It is noteworthy that going forward, NGFS membership will likely only increase. In January 2020, Jerome Powell, chair, announced the Federal Reserve Bank of the United States is actively considering joining NGFS.[8]

In 2018, NGFS members unanimously found that "climate-related risks are a source of financial risk."[9] This serves as the basis of their work today, which includes developing robust, shared supervisory best practices on climate risk, climate stress testing, and scenario analysis; increasing climate-related disclosure practices; assessing systemic climate risk impacts on the economy and financial system; and organizing around global frameworks, like taxonomies, to scale up green finance.[10]

Climate stress tests yield the prospect of highlighting major warning signs on the balance sheets of banks and insurers. This reality was illustrated by a 2019 preliminary study conducted by De Nederlandsche Bank (DNB) of 80 Dutch financial institutions representing EUR 2.3 trillion in assets across corporate loan, bond, and equity portfolios. DNB, a recognized leader in progressing climate stress tests, found that asset losses for the aggregate Dutch financial system under disruptive energy transition scenarios fell between EUR 48 billion and EUR 159 billion, representing asset losses upwards of 11 percent.[11]

In light of this looming reality, a 2020 study conducted by Moody's on 28 of the 100 largest banks globally (by assets) found that only 20 percent had established dedicated climate-risk committees, 29 percent were implementing climate-risk considerations at every step of the credit risk management process, and only 10 percent were adopting climate stress-testing methodologies.[12]

MOBILIZING THE PRIVATE FINANCIAL SECTOR AS A "DRIVING FORCE" IN TRANSITIONING THE REAL ECONOMY

Taxonomy Proliferation?

A taxonomy is a classification system that systematically defines which assets or economic activities are considered sustainable. The primary arguments being advanced in support of taxonomies today are that they reduce complexity and costs for financial institutions by clearly defining "green," can be used as an engagement tool, reduce greenwashing, and have the potential to mobilize private capital for sustainable companies or economic activities.[iv] In addition, groups such as NGFS see taxonomies as a tool for understanding potential climate risks and opportunities.[v]

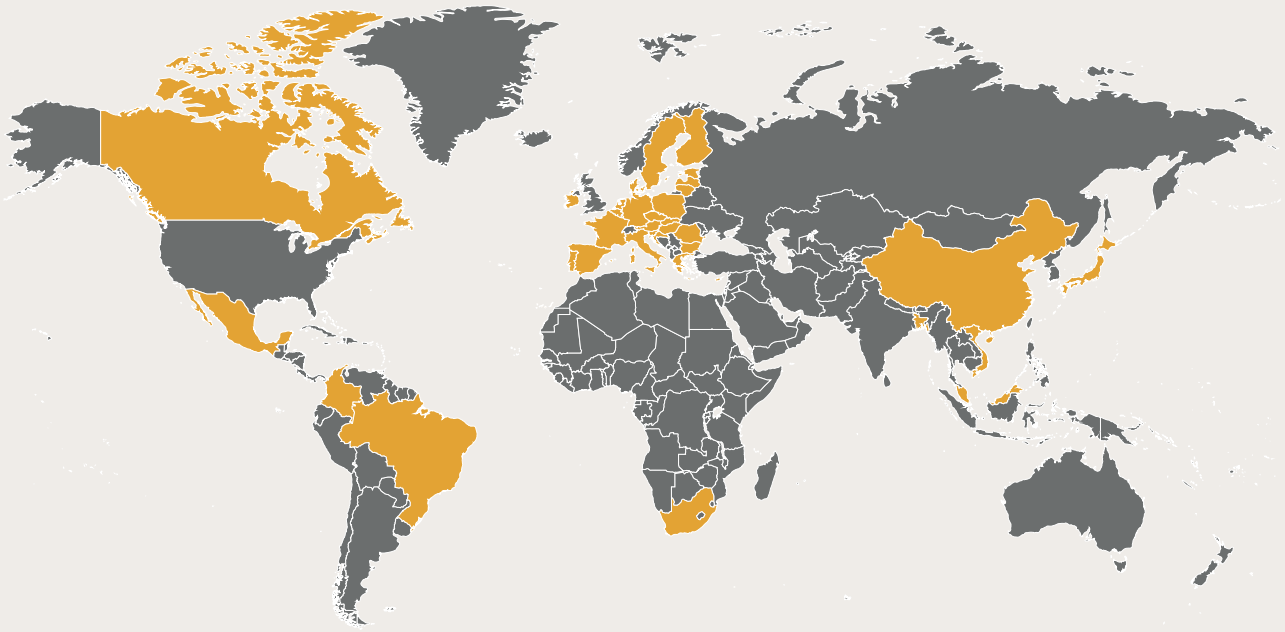
Given the potential advantages of taxonomies, tremendous efforts are underway today to establish taxonomies of various forms. Relying only on publicly available information, at least 11 countries and regions either have or are considering the establishment of some form of taxonomy (see Exhibit 4). It should also be noted that market-driven taxonomies such as the Climate Bonds Taxonomy are being used at significant scale globally.[13] The 2020 green bonds market currently stands at $179.9 billion in total issuances, with $80.7 billion either certified as Climate Bonds or aligned with the Climate Bonds Taxonomy.[14]

[iv] While there is not yet evidence of a price differential in the green bonds market, more effectively mobilizing private capital is a key component of the EU Sustainable Finance plan. See the EU taxonomy overview.

[v] It should be noted that NGFS was recently unable to conclude whether there is a risk differential between green and non-green assets. See **https://www.ngfs.net/sites/default/files/medias/documents/ngfs_status_report.pdf**.

EXHIBIT 4

A Snapshot of Sustainable Taxonomy Proliferation around the World



Bangladesh
- Green Bank Reporting Standards
- Policy Guidelines for Green Banking
- 5% minimum direct green finance targets

Brazil
- Mandatory environmental and social strategy and governance framework
- Guidelines for issuing green bonds in Brazil

Canada
- Convening of task group to explore development of Canadian Green Taxonomy

China
- Green Bond Endorsed Project Catalogue

Colombia
- Voluntary Green Protocol

European Union
- EU Sustainable Finance Taxonomy

Japan
- Announced intent to establish national transition taxonomy

Malaysia
- Principles-Based Green Taxonomy

Mexico
- Green Taxonomy under review

South Africa
- Sustainable finance framework under development

Vietnam
- Directive on Promoting Green Credit Growth and Environmental and Social Risks Management in Credit Granting Activities ("The Directive")

Source: RMI

While there were some expectations that the EU Sustainable Finance Taxonomy would become the *de facto* global taxonomy, it seems unlikely that such a future will materialize (see Box 1). September 2019 comments by Peter Johnson, chair of the Canadian task group and director of Social and Environmental Risk and Opportunity at Scotiabank, illustrate why in his remarks on the development of a unique Canadian taxonomy, he cited fundamental differences in the construction of the Canadian economy and noted that the transition to a low-carbon economy will be different among regions and will occur at varying speeds.[15]

The need for harmonization of taxonomies to the degree possible is recognized.[vi] Harmonization will reduce complexity and cost of compliance for financial institutions and will better enable international financial flows—particularly flows from geographies such as Europe, where investors are hungry for ESG products but where consumer protection efforts are increasingly placing strict disclosure requirements on asset managers.

Regardless of how such efforts progress, the development and maturation of taxonomies globally will have significant implications for financial institutions across the investment chain. Because of the normative nature of taxonomies (in the sense that the direct capital flows toward specific economic activities), taxonomies will be especially important to the financial institutions that have made climate-related commitments and those that they task with implementing them through investment strategies (e.g., asset managers). Given that climate is the most common mandate of ESG funds, it is crucial that as harmonization occurs, alignment with temperature goals remains at the heart of their intention.

[vi] For example, in June 2020, China and the EU announced the intended launch of a taskforce to harmonize their sustainable finance taxonomies. See **https://www.responsible-investor.com/articles/china-and-eu-to-form-taskforce-on-green-taxonomies**.

Box 1. The EU Sustainable Finance Taxonomy

The stated aim of the EU's Action Plan on Financing Sustainable Economic Growth is to redirect large volumes of private finance toward sustainable investments. The EU sustainable finance taxonomy forms the foundation of this action plan, as it is by far the most well-developed policy-driven taxonomy.

Published in June 2019, the taxonomy itself establishes industry-specific criteria for sustainability. The taxonomy provides a list of economic activities (e.g., power generation) and environmental performance thresholds. To meet the criteria, an economic activity must contribute substantially to at least one environmental objective and do no significant harm to the other five. The six environmental objectives are climate mitigation, adaptation, water, pollution control, circular economy, and ecosystem health.

The taxonomy was supplemented by the EU's November 2019 Regulation on Disclosures Relating to Sustainability Risk and Sustainable Investments, which updated the non-financial reporting directive (NFRD) to encourage companies with over 500 employees to disclose taxonomy-relevant data and required that, starting in March 2021, asset managers must disclose their sustainability objectives, methodologies, and sustainability impact. While not yet a hard requirement, asset managers are encouraged to use the taxonomy to do this, for example, by disclosing the proportion funding taxonomy-eligible activities. It is broadly assumed that the EU will move toward further clarifying and mandating disclosures by companies and asset managers.

The EU's action plan also includes a proposed EU Green Bond Standard and EU Climate Benchmarks regulation. The Green Bond Standard will be linked to the taxonomy but, at least initially, the Climate Benchmarks regulation will not be.

Climate Benchmarks

A less discussed, but equally foundational, component of the EU's Action Plan on Financing Sustainable Economic Growth is the EU Climate Benchmarks regulation. Climate benchmarks, identified as both Paris-aligned benchmarks and climate transition benchmarks, differ from low-carbon or ESG benchmarks in that they include specific objectives related to greenhouse gas (GHG) emissions reductions and the transition to a low-carbon economy through the selection and weighting of underlying benchmark constituents.[16] **They are intended to hedge against climate transition risks, directly contribute to the low-carbon transition, align portfolio targets with the Paris Climate Agreement, and capture the benefits of doing so through performance potential**.[17]

The EU Climate Benchmarks represent a significant innovation that places influencing the real economy at the heart of capital markets.[18] By explicitly aligning with the goals of the Paris Agreement in their construction, climate benchmarks are more ambitious than existing low-carbon or climate indices due to their composition.

Climate benchmarks are designed to incorporate 7 percent year-on-year decarbonization trajectories (consistent with a 1.5°C cap in global temperature rise) and are guided by the core principle that in order to facilitate the low-carbon transition at the rate required, companies and industries that are carbon-intensive today cannot, and must not, be excluded.[19] Climate benchmarks, by construction, solve for this by smoothing out carbon reduction targets over time and allowing for the possible weighting of even high-

emitting sectors in index composition to ensure capital remains allocated today to high-emitting companies and sectors that require time and capacity to enable their low-carbon transition. Box 2 highlights an example of the implementation of low-carbon benchmarks.

Index providers such as MSCI and S&P Dow Jones Indices have shown strong interest in the development of both Paris-Aligned and Climate Transition Benchmarks beginning with the European market. There is optimism that climate benchmarks will help reduce greenwashing through the shift in awareness toward climate alignment and the heightened transparency around benchmark composition even though their uptake will likely be driven by investor demand and their ability to achieve performance objectives.

While the success of the EU's Climate Benchmarks regulation remains uncertain, they will likely act as another mechanism for forward-leaning asset owners and asset managers committed to aligning portfolios and influencing the real economy through investment activity.

Transition Finance

Transition finance is an emerging, but potentially useful, concept for financial institutions that wish to play an active role in decarbonization, but who find that securities deemed "green" by existing taxonomies are not available in great enough quantities to satisfy their climate-related commitments. According to the Climate Bonds Initiative, transition finance is "financing *the transition* to the realization of Paris Agreement goals, which encompasses investments in entities, economic activities, and specific assets and projects."

There are two key distinctions between green finance and transition finance. The first is that transition finance can be made available to carbon-intensive companies in order to facilitate a transition to *more* sustainable activities, which may not resolutely qualify as "green" by existing taxonomies. The second is that transition finance focuses on both the use of proceeds (e.g., in the case of a transition bond) and issuer behavior, that is, whether the issuer is actually becoming more sustainable. Thus, the thinking behind transition finance is that if well implemented, it can help companies and sectors progress in their low-carbon transitions at a faster pace.[20]

While still an emerging concept, market participants including BNP Paribas and AXA Investment Managers have vocally supported the new instrument and the creation of a market for transition bonds because they view the instruments as a necessary mechanism to accelerate progress on climate goals. Similarly, Credit Suisse and the Climate Bonds Initiative launched a partnership to unlock the potential of the transition bonds market.[21]

Box 2. A Noteworthy Implementation of Low-Carbon Benchmarks by the World's Largest Pension Fund

As asset owners and asset managers begin to bolster ESG strategies, low-carbon benchmarks are being leveraged more frequently. A market-moving illustration of this was the 2018 selection of two new low-carbon indices by the world's largest pension fund, the Government of Japan Pension Investment Fund (GPIF), and the subsequent allocation of 1.2 trillion yen (approximately $10 billion) to tracking the two indices. By construction, climate benchmarks represent a much more ambitious strategy than low-carbon benchmarks. The EU's Paris Aligned Benchmark regulation prohibits the labeling of benchmarks that do not meet strict alignment goals with the Paris Agreement in index composition (measured by an annual decarbonization trajectory).

Given the transition finance market is in its infancy, there are clearly challenges with the lack of market standards on the issuing, structuring, and assessment of instruments.[22] Some question the added value of transition finance unless these standards are put in place to guide the market, like the existing standards for green bonds from the Climate Bonds Initiative, or the Green Bond Principles, Green Loan Principles, and Sustainability Linked Loan Principles, formalized by the International Capital Markets Association and the Loan Markets Association.[23]

Sustainability-Linked Loans

Sustainability-linked loans tie interest rates to sustainability objectives such as carbon emissions reductions. According to available data, the sustainability-linked loan market grew from $5 billion to $40 billion between 2017 and 2018 and is one of the fastest-growing debt asset classes in 2020.[24]

There is significant optimism that sustainability-linked financing can enable lenders to influence the real economy and meet their own climate objectives. By linking the interest rate with sustainability performance targets, sustainability-linked loans provide borrowers an incentive to move the needle on climate to obtain lower costs of capital.[25] By design, sustainability-linked loans allow for flexibility in the ESG metric chosen to benchmark the interest rate, which means potentially greater access to capital for a larger number of firms or industries. However, concerns have been raised around the need for a standardized way to measure and track progress on sustainability performance targets. The Sustainability Linked Loan Principles do serve as a framework for preserving the integrity of sustainability-linked loans by providing guidelines on construction and fundamental characteristics of the product.[26] Box 3 highlights a recent sustainability-linked loan transaction, the first of its kind for an NYSE-listed shipowner.

Box 3. The First of Its Kind in the Shipping Sector—A Sustainability-Linked Loan Transaction Ties Loan Pricing to Carbon Emissions Reductions

In March 2020, a $390 million senior secured credit facility was closed by NYSE-listed shipowner International Seaways, which included a sustainability-linked pricing mechanism tying adjustments in loan pricing to carbon emissions reductions using the decarbonization trajectories defined by the Poseidon Principles climate alignment assessment methodology. This transaction represents the first of its kind for a publicly listed shipowner.

The Good, the Bad, and the Ugly: Trends Reshaping Asset Management

Asset managers across the United States and Europe are facing an expanding war on fees driven by the shift toward passive funds and rapidly increasing demands for, and expectations of, ESG funds and ESG investment strategies. In 2019, passively managed funds surpassed actively managed funds in assets under management (AUM) for the first time. Europe lags far behind, but BlackRock's iShares Exchange Traded Funds (ETF) division in Europe attracted $60 billion in cash in 2019 alone.[27]

This has driven a proliferation of ESG products to extract higher fees. In 2019 alone, investors poured €120 billion into European sustainable funds in which climate change was the most common mandate.[28] In the United States, investors placed $20 billion in sustainable funds, a fourfold increase over any previous year.[29]

However, these trends have also ignited regulatory scrutiny. One of the main rationales for the EU's sustainable finance taxonomy and its accompanying disclosure requirements for asset managers is to eliminate greenwashing. In the United States, there is growing momentum from the Securities and Exchange Commission on setting standards for ESG funds to eliminate greenwashing and push asset managers toward an industry standard on what it takes to label a fund or product "green."[30]

As the price war deepens and as appetite for ESG investment solutions further expands, asset managers are likely to find that ESG offerings, and specifically those that are climate-focused, will become a significant factor in value differentiation. Asset owners representing trillions in AUM are making commitments to align with the temperature goals of the Paris Agreement and are quickly increasing their own sophistication for direct holdings and their expectations of asset managers hired for outsourced investment management services.

This will further increase the complexity of the request for proposal process and the need to demonstrate clear and effective approaches to stewardship and portfolio management with climate at the heart of both.

3 Collective Action—A Maturing Response to the Challenge of Influence

Collective Action—A Maturing Response to the Challenge of Influence

Barrier: Competitive Disadvantage

In *Charting the Course to Climate-Aligned Finance*, we identified **competitive disadvantage** as a significant barrier to fully mobilizing the financial sector as a force for decarbonizing the real economy. Many financial institutions delay meaningful action on climate change to avoid losing clients and investment opportunities to competitors. The history of finance is the story of pioneers finding opportunity and profit where peers see only risk. Climate finance is no different; however, just as we celebrate those leaders who anticipated the 2008 mortgage crisis, we cannot rely on visionaries alone to enable systemic change. An investor may choose to sell the shares of a carbon-intensive utility. Yet, that investor's influence over the utility equates to zero if the shares are repurchased by other neutral investors and the ability to engage is lost. This "carbon leakage" must be mitigated to the degree possible through collective action.

This section overviews voluntary financial sector initiatives that are actively seeking to influence the real economy through collective action, that is, specific actions taken by a group of financial institutions in support of decarbonization. In selecting initiatives for inclusion, four criteria were used: an initiative must focus on private financial institutions, be oriented toward climate action, have some collective element, and remain publicly active today.[vii]

KEY INSIGHTS

The past three years have brought a considerable increase in the scale, ambition, and specificity of voluntary initiatives. The year 2017 saw the launch of the Climate Action 100+ (CA 100+), which is now composed of institutional investors representing $40 trillion in AUM and works to ensure that the largest corporate GHG emitters "take action on climate change." The following year, 2018, saw the launch of the Investor Agenda, an initiative to "accelerate and scale up the investor actions that are critical to tackling climate change."

By the close of 2019, financial institutions with over $17 trillion in assets had committed to aligning their portfolios and services with internationally agreed-to climate targets through the Collective Commitment to Climate Action, the Global Alliance for Banking on Values Climate Change Commitment, the Net-Zero Asset Owner Alliance, and the Poseidon Principles.

The year 2020 has begun to bring clarity to what these climate alignment commitments mean in practice. There is increasing recognition that because neither the real economy nor policy is aligned with the ambition of the Paris Agreement, it is not possible to fully align large financial portfolios with climate targets today. **Thus, climate alignment commitments should be interpreted as commitments by financial institutions to assess their alignment with climate targets and improve that alignment through product offerings, investment and financing decisions, and engagement.**

[vii] Initiatives are described as accurately as possible using publicly available information, although some editorial choices have been made for the purposes of brevity.

The year 2020 has also revealed the complexity and challenge of influence. However, initiatives spanning asset owners, asset managers, and commercial banks are showing noteworthy advantages:

- Initiatives such as the Poseidon Principles continue to grow in scale. At present, signatories of the Poseidon Principles represent one-third of senior shipping debt globally. This scale is enabling ambition by de-risking the imposition of new requirements—such as annual reporting of emissions—on clients.

- Initiatives such as the Net-Zero Asset Owner Alliance have brought significant groups of financial institutions together. While by no means an easy task, the scale is reducing the costs of navigating the complexities of assessing alignment and understanding what steps can be taken to support decarbonization.

- Initiatives such as CA 100+ are taking highly uniform and systematic approaches to engaging the largest GHG emitters. This well-informed stewardship is delivering results.

While not a replacement for policy, the progress of collective influence initiatives to date reveals the complexity of supporting decarbonization and that such initiatives are a legitimate and maturing solution to the challenge of competitive disadvantage.

OVERVIEW OF INITIATIVES

Principles for Responsible Banking (Launched September 2019)

The Principles for Responsible Banking provides a common framework for a sustainable global banking system through six overarching principles for aligning business activities with the United Nations (U.N.) Sustainable Development Goals and the Paris Climate Agreement. These six principles are:

- **Alignment**—Align business strategy with society's goals, specifically the U.N. Sustainable Development Goals and the Paris Climate Agreement.

- **Impact and target setting**—Increase positive impacts and reduce negative impacts through setting and publishing targets.

- **Clients and customers**—Work with customers and clients to encourage sustainable practices.

- **Stakeholders**—Consult, engage, and partner with other stakeholders to achieve society's goals.

- **Governance and culture**—Implement commitments through effective governance and culture.

- **Transparency and accountability**—Conduct periodic review of our collective and individual implementation.

Today, 170 banks representing $47 trillion in assets—approximately one-third of the global banking system—have joined the Principles for Responsible Banking.[31]

Collective Commitment to Climate Action, Superseding the Katowice Commitment (Launched in September 2019)

The Collective Commitment to Climate Action is a commitment made by 37 Principles for Responsible Banking signatories representing over $14 trillion in assets to take tangible steps toward aligning lending and financial services with the objectives of the Paris Agreement.[32] The commitment requires that banks work to:

- Align their portfolios to reflect and finance the low-carbon, climate-resilient economy required to limit global warming to well-below 2°C, striving for 1.5°C.
- Take concrete action, within a year of joining, and use their products, services, and client relationships to facilitate the economic transition required to achieve climate neutrality.
- Be publicly accountable for their impact and progress on these commitments.

The Collective Commitment supersedes the Katowice Commitment. The Katowice Commitment was a commitment made by five banks to measure the climate alignment of lending portfolios and to explore ways to progressively steer financial flows toward the goals of the Paris Agreement.[viii] The Katowice Commitment was launched in 2018 at the 24th Conference of the Parties to the United Nations Framework Convention on Climate Change (informally known as COP24).

Net-Zero Asset Owner Alliance (Launched in September 2019)

The Net-Zero Asset Owner Alliance is an international group of 25 institutional investors representing over $4.6 trillion in AUM and is convened by the United Nations Environment Programme Finance Initiative (UNEP FI) and Principles for Responsible Investment. The Alliance members have committed to transitioning their portfolios to net-zero GHG emissions by 2050. To achieve their aims, the Alliance seeks to emphasize actions such as:[33]

- Investor target-setting with reporting at real economy sector level
- Impact on the real economy
- Implementation via a wholistic ESG approach
- Joint engagement, which will build on best practices already under development at CA 100+, for example

PPCA Finance Principles (Launched July 2019)

The Powering Past Coal Alliance (PPCA) Finance Principles provide a power sector-specific commitment for financial institutions. This commitment includes phasing out the provision of financial services to or investment in unabated coal-fired power generation, reporting in line with TCFD, and encouraging others to do the same via the PPCA. The PPCA Finance Principles target adoption by banks, investors, and insurers.[34] At present, 16 asset owners and managers endorse the Finance Principles.

[viii] The five banks are BBVA, BNP Paribas, Societe Generale, Standard Chartered, and ING.

Poseidon Principles (Launched June 2019)

The Poseidon Principles are a climate alignment agreement for lenders, lessors, and guarantors active in the provision of financial services to the maritime shipping industry. They are the first sectoral climate alignment agreement for financial institutions. At present, the Poseidon Principles have 18 signatory banks and export credit agencies, which represent $150 billion, or one-third, of senior shipping debt globally. Signatories are required to measure and disclose the alignment of their ship finance portfolios annually while also committing to work with clients and partners to better align their portfolios. Signatories to the Poseidon Principles will begin reporting climate alignment scores in late 2020.

Global Alliance for Banking on Values Climate Change Commitment (Launched March 2019)

Global Alliance for Banking on Values Climate Change Commitment (GABV C3) was founded in March 2019 by 32 banks and credit unions representing $153 billion in assets. Participants commit to assessing and disclosing the climate impacts of their portfolio within three years with the ultimate aim of ensuring that impacts are in line with the Paris Agreement. The GABV C3 intends to use the financed emissions measurement methodology developed by the Partnership for Carbon Accounting Financials (PCAF).[35]

Investor Agenda (Launched September 2018)

The Investor Agenda is described as a collaborative initiative to accelerate and scale up the investor actions that are critical to tackling climate change and achieving the goals of the Paris Agreement with the aim of keeping average global temperature rise to no more than 1.5°C. The Investor Agenda was launched in September 2018 with 392 investors representing $32 trillion in AUM. Its founding partners include the Asia Investor Group on Climate Change, CDP, Ceres, Investor Group on Climate Change, Institutional Investors Group on Climate Change, PRI, and UNEP FI.

The Investor Agenda provides investors with a set of actions they can take in four key focus areas:

- **Investment**—Encourages investors to make low-carbon investments and commitments including phasing out investments in thermal coal.
- **Corporate engagement**—Encourages investors to engage companies to take action to limit the risks and maximize the opportunities of climate change by aligning their business strategies and capital allocations with the goal of keeping the increase in global average temperature to well below 2°C above pre-industrial levels, through becoming a signatory to the CA 100+ or the CDP's disclosure request.
- **Investor disclosure**—Encourages investors to improve disclosures and to do so in line with the TCFD recommendations for asset owners and managers.
- **Policy advocacy**—Recognizing the crucial role that policy plays in directing capital flow across the economy, investors are supported by the Agenda to Global Investor Statement to Governments on Climate Change when engaging governments and media.[36]

Climate Action 100+ (CA 100+) (Launched in 2017)

CA 100+ is an investor initiative launched in 2017 to ensure the world's largest corporate GHG emitters take necessary action on climate change. The initiative is led by a coalition of over 450 investors with over $40 trillion in AUM.

The aim of CA 100+ is to engage systemically important emitters to curb emissions, improve governance, and strengthen climate-related financial disclosures in line with TCFD recommendations and, where applicable, Global Investor Coalition on Climate Change expectations.[ix] CA 100+ operates in partnership with the Asia Investor Group on Climate, Ceres, the Investor Group on Climate Change, the Institutional Investors Group on Climate Change, and the PRI.[37]

In its 2019 Progress Report, CA 100+ lays out future engagement priorities on lobbying reform, target setting, and furthering TCFD implementation; supporting the growth of investor signatories; and working with key stakeholders to develop impact measurement frameworks.[38]

[ix] The Global Investor Coalition on Climate Change is a collaboration among four regional partner organizations: Asia Investor Group on Climate Change, Investor Group on Climate Change (Australia and New Zealand), Institutional Investors Group on Climate Change (Europe), and Ceres (North America). The partners work together to produce research reports and public policy statements and support global investor-led climate initiatives and investor-focused climate events. See **https://globalinvestorcoalition.org/**.

4 Assessing Climate Alignment and Setting Targets

Assessing Climate Alignment and Setting Targets

Barrier: Navigating Varying Methodologies

As more financial institutions have made climate alignment commitments, an array of methodologies, platforms, and tools has emerged to allow them to assess and disclose their progress in achieving alignment with climate targets. While transparent methods and disclosure platforms are critical for ensuring accountability, the **availability of differing methodologies** adds some complexity that must be navigated by financial institutions. Varying methodologies may draw on different data sources, define alignment differently, rely on different metrics, and reference different climate scenarios.

This section provides a brief overview of existing methodological review efforts as well as existing and forthcoming tools, methodologies, and platforms intended to measure alignment or enable target setting and validation. This section is not intended to provide a full review of methodologies or endorse one over another, as several efforts are already underway to do this.

KEY INSIGHTS

The ability to transparently track and disclose progress is the cornerstone of any legitimate climate alignment commitment or target-setting process. Consequently, as climate alignment commitments have grown in number and scale over the past year, so too have the volume and fragmentation of initiatives for assessing the alignment of financial portfolios with climate targets. These include platforms for making and disclosing progress toward commitments, methodologies for measuring progress, and tools to help financial institutions apply these methodologies to their own portfolios.

Many initiatives—such as the Poseidon Principles or the Science-Based Targets for Financial Institutions (SBT FI)—span across multiple functions, offering a one-stop-shop for making, assessing, and disclosing progress on commitments. This "vertical" integration within major climate alignment initiatives has helped to both streamline the target-setting process for financial institutions and create centralized hubs for making commitments. Both will be critical to scaling alignment efforts.

However, there has also been considerable fragmentation *across* different types of target-setting methods and platforms. All methods existing today follow a similar logic: (1) calculate the climate impact of different companies and investments, (2) allocate these impacts to different financial securities (e.g., equities, fixed income, loans), (3) aggregate these impacts to the portfolio level, and (4) assess whether the portfolio's climate impact is aligned with a climate-aligned pathway.[x] Yet methods may differ in their fundamental climate impact metric—focusing on financed emissions, low- versus high-carbon technologies, or the "implied temperature rise" or warming potential—and in the types of securities

[x] Notably, all tend to define climate alignment in terms of the climate impact represented by a portfolio, rather than how strategies, practices, governance, or other factors are aligned with a low-carbon future.

covered. Given this divergence, **there is a clear and widely acknowledged need for harmonized methodologies to assess climate alignment and to ensure that it can be done comparably**.

In response, several private sector-led initiatives are seeking to harmonize approaches. Many of these initiatives are differentiated by type of financial institution, such as the banking-specific Collective Commitment to Climate Action Target Setting Working Group or the asset owner-led Net-Zero Asset Owner Alliance and Paris Aligned Investing Initiative. Harmonizing methods for each type of financial institution allows for comparability among peers while providing the flexibility to tailor approaches to the specific needs and challenges of banks versus asset owners or asset managers.

While these efforts are promising signs that alignment efforts are maturing, there are still two critical gaps to applying approaches both at an institution- and financial sector-wide level. First, there is still no single framework for assessing alignment across the financial sector. This can make it difficult to navigate and compare financial institutions that may span several functions, such as a large bank with lending, underwriting, and investment management activities. Second, because alignment assessments are framed solely around the climate impact represented by a portfolio, there is little guidance on how climate alignment may translate to strategy, governance, risk management, or other institute-wide practices.

OVERVIEW OF EFFORTS Methodological Review and Harmonization Efforts

Collective Commitment to Climate Action Impact and Target Setting Working Group

Principle 2 of the Principles for Responsible Banking is Impact and Target Setting. The Target Setting Working Group was established for members of the Collective Commitment to Climate Action. There are two key climate-related objectives of the working groups at present:[39]

- **Learning and applying existing climate alignment methodologies**—The objective of this working group is to enable banks to understand and apply existing approaches to measuring climate alignment and learn from the experiences of the pioneer banks in this field.

- **Harmonization, comparability, and monitoring of climate targets**—The objective of this working group is to develop a common framework on suitable and comparable indicators, metrics, and consistent methodological approach(es) for measuring alignment and setting and monitoring progress on targets.

Institutional Investors Group on Climate Change Paris Aligned Investing Initiative

Launched in September 2019, the Paris Aligned Investing Initiative was created by 70 members of the Institutional Investors Group on Climate Change. The purpose of the initiative is to help investors understand the concepts and issues related to aligning portfolios to the Paris Agreement goals, assess methodologies and approaches that might be used to enable investors to do so, and analyze the implications of alignment on the characteristics of portfolios. Expected outputs from the initiative are:[40]

- A framework for Paris Alignment, including definitions relating to Paris Alignment; describing pathways for Paris Alignment based on emissions, technology, and economic scenarios; and outlining the range of potential methodologies and approaches that could be used.

- An assessment of relevant methodologies and approaches for four asset classes: sovereign bonds, listed equity, corporate debt, and real estate. The initiative will also assess the potential for increasing alignment through strategic asset allocation approaches and may include further asset classes over time.

- Testing of the most relevant methods and approaches for aligning portfolios using up to five real-world portfolios, forecasting implications of aligning to Paris against key financial metrics relevant to investors. A draft framework is expected to be ready for consultation in June 2020.

TCFD—Implied Temperature Rise Associated with Investments Working Group

TCFD has formed a working group to assess the benefits and challenges of implied temperature rise and other forward-looking metrics that financial institutions could disclose to support financial decision-making by their customers, clients, and beneficiaries.

Net-Zero Asset Owner Alliance Call for Methodological Convergence

As is described in Section 3 of this report, the Net-Zero Asset Owner Alliance is an international group of institutional investors with a commitment to transitioning investment portfolios to net-zero emissions by 2050. The Alliance has identified that to monitor progress and report against this 1.5°C target, there is a need for more robust measurement methodologies as well as an urgent need for methodological convergence of existing methodologies. While the Alliance is not designed to develop such solutions themselves, they have outlined their expectations for expert comment and have stated that they will coordinate closely with the TCFD Implied Temperature Working Group and COP 26 Private Finance Agenda.[41] It is highly notable that the Alliance has expressed a preference for a consistent methodology that leverages GHG footprinting as its foundation, normalized based on enterprise value, so that there is some comparability with the EU sustainable finance taxonomy.[42]

Commitment Platforms, Methods, and Tools

Science-Based Targets for Financial Institutions (SBT FI)

A partnership between CDP, U.N. Global Compact, World Resources Institute, and World Wide Fund for Nature, SBT FI aims to mobilize financial institutions to set science-based targets across investment and lending portfolios. SBT FI leverages three methodological approaches for different asset classes: sector decarbonization approach (SDA) based on a declining sector-specific emissions-intensity, capacity-based method (Paris Agreement Capital Transition Assessment [PACTA]) based on a shifting technology mix in line with a climate-aligned pathway, and SBT portfolio coverage method based on the share of corporates in a portfolio that have set and validated targets through the Science-Based Targets Initiative.[43]

SBT FI plans to release a tool to support investors in setting science-based targets in September. The first iteration of this tool will include support for investors seeking science-based targets for all portfolio companies by 2050, based on their current baseline. The tool will also assess the long-term emissions goals of the firms, as well as portfolio-level emissions, against a wide range of temperature pathways. Over 50 financial institutions have committed to set targets to SBT FI.

Paris Agreement Capital Transition Assessment (PACTA) (Launched September 2018)

PACTA is a scenario-based portfolio analysis tool to analyze alignment of equity, fixed income, and lending portfolios with various climate scenarios. In contrast to emissions-focused carbon footprinting approaches, PACTA looks at the technology shifts (e.g., from fossil fuel power plants to renewables) required to merge onto climate-aligned pathways. It also provides a more forward-looking measurement of climate alignment by assessing companies' future capital expenditure plans against these technology shifts. PACTA is currently used by over 1,200 financial institutions in developed and developing markets, which represent over $61 trillion assets under management.[44] PACTA also performs climate stress testing and can be used by regulators and bank supervisors. The tool was developed by 2 Degrees Investing Initiative, a global think tank that aims to align global financial markets with the goals of the Paris Agreement.

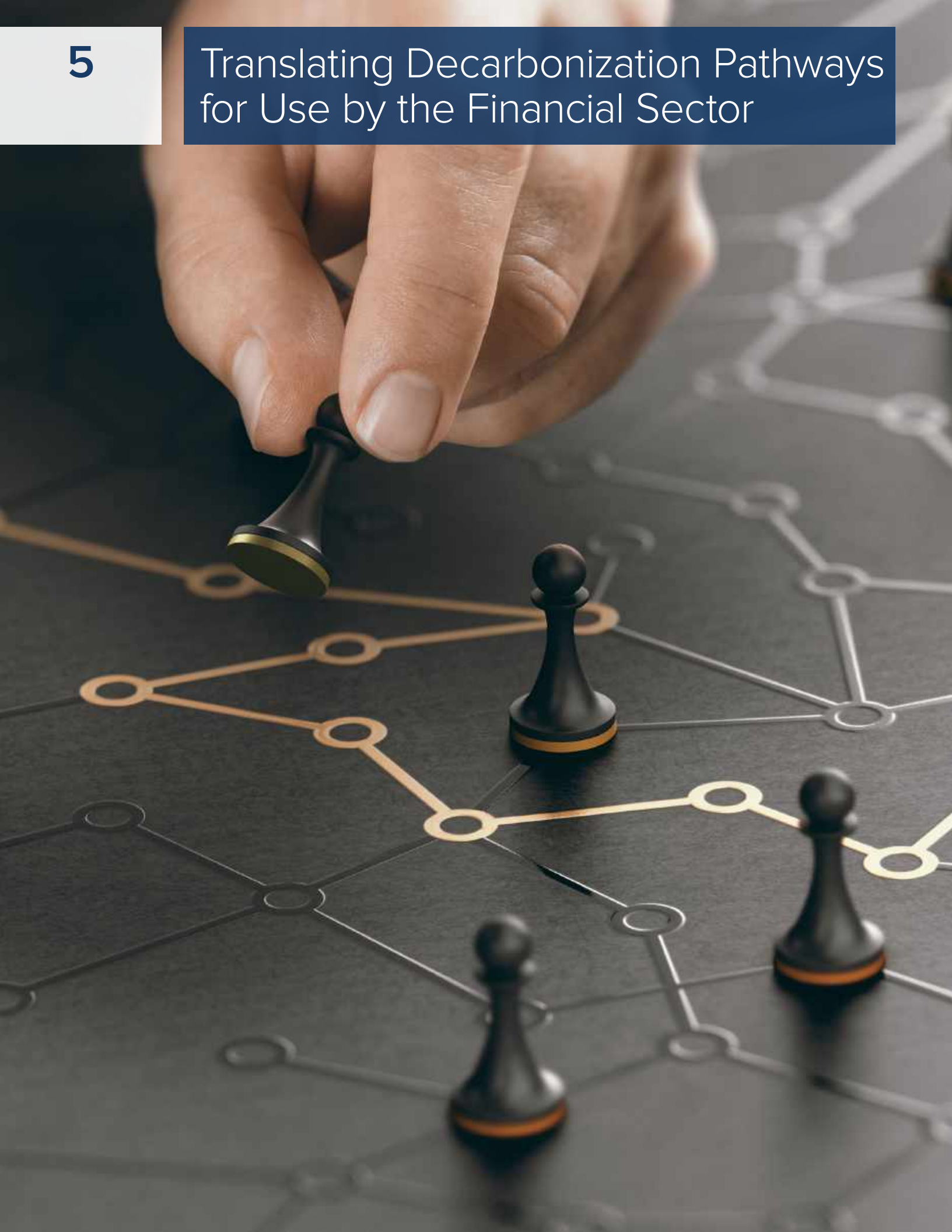
Poseidon Principles Climate Alignment Assessment Methodology

The Poseidon Principles established an industry-specific framework for assessing and disclosing the climate alignment of ship finance portfolios. The methodology measures the degree to which a vessel, financial product, or portfolio's carbon intensity is in line with a decarbonization trajectory that meets the International Maritime Organization's ambition of reducing total annual GHG emissions by at least 50 percent by 2050, based on 2008 levels. Poseidon Principles signatories are currently collecting data for the first publication of climate alignment scores in late 2020.

Partnership for Carbon Accounting Financials (PCAF) (Launched in 2015)

Partnership for Carbon Accounting Financials (PCAF) is an open and industry-led collaboration to establish a harmonized standard for measuring and disclosing the "financed greenhouse gas emissions" of loans and investments in line with GHG Protocol. Financial institutions can use this financed emissions standard to provide transparency about the emissions associated with their portfolios, identify potential emissions hotspots and risk within their portfolios, and track progress on their alignment with the Paris Agreement. Since its inception in 2015, PCAF has gained support from over 65 financial institutions spanning five continents.

5 Translating Decarbonization Pathways for Use by the Financial Sector



Translating Decarbonization Pathways for Use by the Financial Sector

Barrier: Multiple Decarbonization Pathways

In *Charting the Course to Climate-Aligned Finance*, we identified the **need to understand complex, often conflicting, sectoral decarbonization pathways and choose one to benchmark efforts against** as a barrier to financial institutions that seek to proactively support decarbonization. This barrier becomes far thornier if considered within the context of the multiple voluntary efforts and policy efforts working to define decarbonization pathways and rally the efforts of financial institutions behind them.

This section offers a survey of current efforts to either define sectoral decarbonization pathways and assess the alignment of corporates with those pathways or translate decarbonization pathways into specific sector-based actions for financial institutions. It is recognized that there are a considerable number of modeling efforts underway to define pathways (see Box 4); however, the main selection criterion used for selecting initiatives was that efforts should have direct involvement from financial stakeholders.

KEY INSIGHTS

While climate alignment methods are critical for demonstrating progress externally, they are not always the most effective means for informing decision-making. Beyond just understanding climate impact today, financial institutions pursuing climate alignment need forward-looking information on whether a corporate in its portfolio is decarbonizing in line with climate targets. This includes understanding the emissions pathway for the sector of the economy in which that corporate operates (e.g., utilities sector), and the technology mix and business models that are capable of keeping emissions below that pathway while still delivering services (e.g., electricity) at a reasonable cost to the consumer.

While a relatively technical subject, **understanding decarbonization pathways and using that understanding to inform investment decisions, stewardship and engagement, and product offerings are crucial for financial institutions that wish to play a proactive role in decarbonization**. Several initiatives, such as the Transition Pathway Initiative (TPI) and Assessing Low-Carbon Transition (ACT), are working to standardize how corporate climate alignment can be measured and integrated into financial decision-making.

In addition to assessing a corporate's emissions performance compared to sectoral emissions pathways, these initiatives look at its oversight and strategic approach to managing climate risk and opportunities. In the case of ACT, factors such as investments in low-carbon technologies, policy engagement, and technology mix also weigh into determining alignment, recognizing the importance of aligning on the fundamental drivers of emissions. Hitting these fundamentals, rather than just near-term emissions, can help minimize carbon lock-in and risk going forward while providing financial institutions with concrete outcomes on which to engage corporates.

Establishing a shared vision of pathways is also crucial for influencing the real economy through collective financial sector action. While two approaches for achieving this shared vision have emerged, "top-down" modeling and "bottom-up" coalitions, many initiatives central to shaping efforts by financial institutions such as TPI and ACT have coalesced around International Energy Agency (IEA) modeled emissions scenarios. However, the IEA scenarios have been criticized for being unrealistic in their technology assumptions and for failing to provide a scenario that keeps temperature rise to 1.5°C.

Box 4. Pathways, Roadmaps, and Scenarios: Demystifying the Jargon

Climate models, such as those profiled by the International Panel on Climate Change (IPCC), provide different *scenarios* for keeping the world within a carbon budget that would keep global temperature rise well-below 2°C. Based on these scenarios, we can derive *emissions pathways*, which allocate the remaining carbon budget to specific sectors—such as energy, transport, or industry—and stipulate how annual sectoral emissions need to evolve over time. These emissions pathways then can serve as the benchmarks for assessing the climate alignment of financial portfolios.

While emissions pathways are often the key benchmark used by alignment methodologies, there are a range of other factors underlying these pathways. Some of the most critical include socioeconomic factors (e.g., how populations or human behavior evolves), technological change (e.g., which low-carbon technologies become viable), and policy (e.g., the stringency of climate policies that are enacted). These underlying factors, which provide more tangible milestones such as *technology or policy roadmaps*, can often be better indicators for driving decision-making than emissions alone. For example, advocates of PACTA's methodology, which is based on the required high- to low-carbon technology shifts to achieve certain emissions pathways, can arm banks and shareholders with concrete expectations as they engage with their clients and investees. Increasingly, shareholders are also engaging with major emitters to report capital expenditure plans to understand whether planned investments are in line with climate-aligned technology roadmaps.

In response, several more bottom-up sectoral initiatives have sought to develop their own climate-aligned pathways, considering the unique technological, political economy, and financing challenges of decarbonizing different sectors. In particular, the Mission Possible Platforms have begun developing technology and finance roadmaps for hard-to-abate sectors, while PPCA provides guidance on the provision of financial services to unabated coal-fired power. With sufficient support from market actors, these bottom-up approaches could begin to replace top-down scenarios, such as the IEA, as the market standard.

Emerging climate-related financial regulation could also accelerate the convergence around shared pathways. The EU taxonomy for sustainable activities provides granular, sector-specific guidance on which activities are considered "green" and could be a building block for standardizing technology and business model roadmaps.

OVERVIEW OF EFFORTS

Assessing the Low-Carbon Transition (ACT) Initiative

Launched in 2015 by CDP and ADEME, ACT defines sector-specific pathways for decarbonization and assesses how prepared companies are to make the low-carbon transition. Assessments are made using three scoring categories: performance, narrative, and trends. Taken together, these scores rate a company's current performance, how prepared it is to implement a low-carbon compatible business model, and whether a company is likely to become more or less aligned with a low-carbon trajectory in the foreseeable future.

ACT methodologies recognize the technological and business model changes necessary to achieve decarbonization targets as well as the role of target setting, investments, management uptake, and policy engagement in achieving them.

ACT typically relies on the Sectoral Decarbonization Approach (SDA) to allocate the remaining carbon budget and create industry-specific emissions benchmarks.[45] The SDA relies on the IEA's 2-degree scenario for certain sectors. This scenario models global least-cost mitigation in line with a specific climate outcome (in this case, 2 degrees of warming by 2100) while still meeting projected demands for industry, transport, and building services.

At present, ACT is conducting outreach, developing and road-testing further methodologies, and conducting assessments.[46] ACT has developed methodologies for the automotive, electric utilities, and retail sectors. Draft methodologies for construction and real estate have undergone public consultation and are available. Methodologies for cement, oil and gas, and transport are entering a road-testing phase, and ACT has announced its intention to develop methodologies for iron and steel, agriculture, and agro-food, as well as a generic methodology for multisector assessments or sectors not covered.

Finally, ACT offers an engagement charter for financial institutions, which requests that investors engage portfolio companies to provide ACT assessments.

Transition Pathway Initiative (TPI)

Launched in 2017, TPI assesses companies' preparedness to transition to a low-carbon economy through the calculation of company-level management quality and carbon performance scores. The management quality score assesses companies' management of GHG emissions as well as the risks and opportunities of the low-carbon transition using a rating from zero to four. The carbon performance score measures companies' current and future performance relative to sectoral benchmarks. Sectoral benchmarks are based on the IEA's beyond 2 degrees, 2 degrees, and Paris pledge scenarios.[47] TPI provides the results of its analysis through a simple online tool, which is intended to support investment decisions as well as engagement.

TPI has been adopted by over 75 investors with AUM of over $20 trillion. At present, TPI provides assessments for the following sectors: airlines, aluminum, autos, cement, chemicals, coal mining, consumer goods, electricity utilities, oil and gas, oil and gas distribution, other basic materials, other industrials, paper, services, shipping, and steel.

The TPI was established as a joint initiative between the Church of England National Investing Bodies (Church of England Pensions Board, the Church Commisioners, and CBF Funds) and the Environment Agency Pension Fund.

Mission Possible Platform

The Mission Possible Platform was created by the World Economic Forum in partnership with the Energy Transitions Commission in September 2019. The Platform was created off the back of the Energy Transition Commission's 2018 Mission Possible report. This report identified that it is technically and economically possible for hard-to-abate industrial sectors to reach net-zero emissions by 2050 at a cost to the economy of less than 0.5 percent of global GDP and with minor impact on consumer living standards.[48]

The Mission Possible Platform seeks to establish coalitions of businesses, financial institutions, expert organizations, and governments to commit to reducing heavy industry (GHG) emissions by creating and delivering technology, policy, and financing solutions around feasible decarbonization pathways. The Mission Possible Platform has launched several sector-specific initiatives targeting these hard-to-abate sectors: Clean Skies for Tomorrow (aviation), Clean Road Freight Coalition (heavy transport), Getting to Zero Coalition (shipping), Aluminum for Climate (aluminum), Collaborative Innovation for Low-Carbon Emitting Technologies (chemicals), Net-Zero Steel Initiative (steel), and Circular Cars Initiative (automotive).

PPCA Finance Principles

As is discussed more fully in Section 3, the PPCA Finance Principles are a power sector-specific commitment to end the provision of financial services to or investment in unabated coal-fired power generation. The PPCA Finance Principles represent another approach to pathways. The Finance Principles are based on modeled future energy needs and the technological pathways capable of servicing those needs, and an understanding of the international political needs based on the concept of common but differentiated responsibility. The Finance Principles distill this information into a simple action that can be taken by any type of financial stakeholder that wishes to start aligning their financial decision-making in the utility sector.

6 Data—Can Reporting Standards Help Fulfill Data Needs?

Data—Can Reporting Standards Help Fulfill Data Needs?

Barrier: Sourcing Adequate Data

In *Charting the Course to Climate-Aligned Finance*, we identified **the ability to source adequate, decision-useful data** as a significant barrier to both assessing the alignment of financial portfolios with climate targets and understanding climate risk.

This section provides an overview of major initiatives working to drive the standardization of non-financial reporting. It is recognized that there are many initiatives contributing to this effort, but for the purposes of this report, major initiatives providing climate-related reporting frameworks of standards were included.

KEY INSIGHTS

Data quality and availability are a significant barrier to assessing climate risk and climate alignment. Today, under half of companies in the MSCI World Index, which represent about 60 percent of global market capitalization, report GHG emissions. Only 2 percent provide a full accounting of all direct emissions. In their most recent 2019 Status Report, TCFD reported that out of the 1,126 companies reporting, only 25 percent disclosed information aligned with more than 5 of the 11 recommended disclosures, and only 4 percent disclosed information aligned with at least 10 of the recommended disclosures.[49]

The need for more and better-standardized disclosures is recognized by regulators and financial institutions alike. Regulators across major financial markets are moving swiftly to clarify or require climate-related financial disclosures in line with TCFD. However, they have stopped short of stipulating detailed reporting standards, generally seeing that as the domain of the private sector. It is generally held that such a reporting standard is necessary to ensure that reporting is both robust and comparable.

There is clear demand for a market-led reporting standard. In his January 2020 letter to CEOs, Larry Fink, CEO of BlackRock Investment Management, advocated for industry-specific SASB- and TCFD-aligned reporting of climate-related risks, including climate impacts and transition strategies.[50] This reporting also aligns with the approach of State Street Global Advisors; however, it remains to be seen whether the updated EU NFRD will be prescriptive or rely on a market-driven standardization process building on the work of SASB, CDSB, GRI, and IIRC.

However, as this standardization occurs, it is crucial that such a standard increase the availability of data to improve the assessment of climate risk and alignment with climate targets. This must include the disclosure of climate impacts using industry-specific metrics as well as transition plans under low-carbon policy scenarios.

As standardization occurs, it is crucial that reporting frameworks improve the understanding of climate risks and the alignment with climate targets, and incorporate decarbonization readiness. The momentum around reporting standardization creates great clarity around climate risk and alignment factors for institutional investors. However, commercial banks and lenders will continue to face challenges of inadequate data, which can be addressed by concerted market forces or policy actions.

OVERVIEW OF EFFORTS

Climate Disclosure Standards Board

CDSB is a global coalition of nongovernmental organizations and businesses working to strengthen reporting standards of environmental impacts through the development of a reporting framework that translates disclosures to decision-useful information in existing corporate financial reporting.[51] The CDSB reporting framework aims to create a more sustainable financial system by providing flexibility in use by investors, companies, regulators, stock exchanges, and industry professionals. CDSB partners closely with the GRI, the SASB, the IIRC, and many others.

Global Reporting Initiative

GRI was founded in 1997 and has since led international efforts to standardize sustainability reporting by governments and companies on issues such as climate change.[52] GRI's global sustainability reporting standards, the GRI Standards, consist of universal reporting topics and issue-specific standards on topics such as environmental impacts. For example, GRI 305 centers on emissions reporting, and provides in-depth emissions reporting requirements that can be leveraged by organizations of all sizes, types, sectors, or geographic locations.[53]

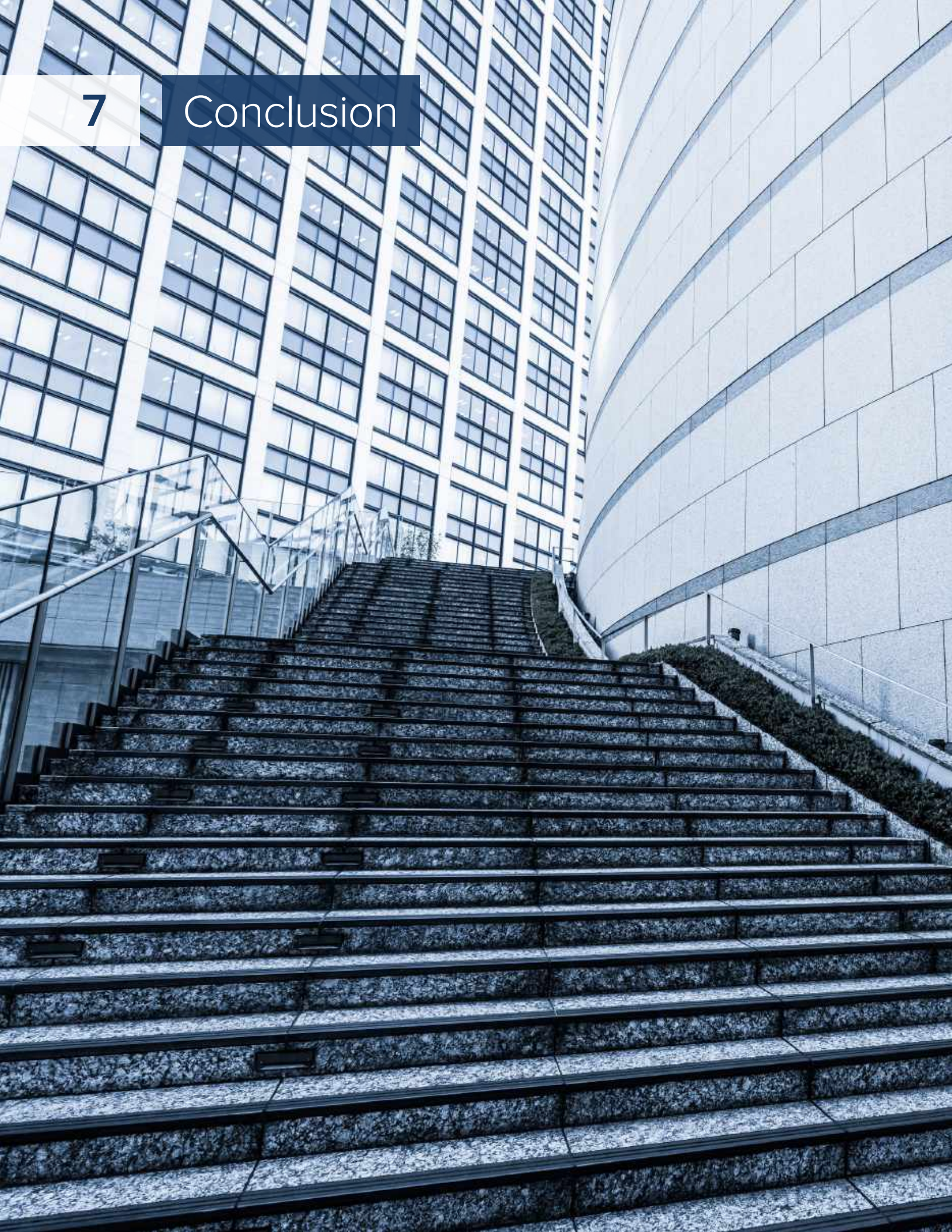
International Integrated Reporting Council

IIRC, formed by GRI and others, represents a global coalition of corporations, investors, academics, regulators, and other industry professionals striving to improve communication and best practices around corporate reporting on sustainability topics to support financial stability and sustainable development.[54] The IIRC developed the International Integrated Reporting Framework and is working to drive alignment on climate-related reporting by collaborating with SASB, GRI, and CDSB.

The Sustainability Accounting Standards Board

SASB aims to establish industry-specific standards for the recognition, disclosure, and reporting of financially material sustainability topics and the governance of those topics. SASB currently has the support of investors representing over $48 trillion in AUM and by companies and investors in over 200 countries.[55] SASB's standards are leveraged by companies and investors to implement integrated reporting frameworks and the recommendations of TCFD. SASB has developed a materiality map, an interactive tool for identifying and comparing sustainability issues across industries and sectors that are most likely to impact the financial condition or operating performance of companies.[56]

7 Conclusion



Conclusion

Efforts to understand climate-related risks proliferated in the years leading up to the establishment of the TCFD by the G20 Financial Stability Board in 2015. While TCFD implementation is far from full today, it has established crucially important "guide rails" for deliberations around climate-related risks that are often both technical and political.

Today, efforts to mobilize financial institutions as a "driving force" for decarbonization are proliferating. While the expectation that the financial sector *should* play a proactive role in supporting decarbonization is clear, navigating a shifting landscape of market trends, policy efforts, regulatory stipulations, and voluntary initiatives is clearly challenging. Similar to the run-up to the establishment of the TCFD, there is a need to ask which "guide rails" would be helpful to a financial sector stepping into a new, sometimes uncomfortable, role.

What is being asked of the financial sector today? Financial institutions across the investment chain are being asked to be *proactive* in support of decarbonization rather than *reactive* to policy. For asset owners and banks (particularly commercial banks), climate alignment commitments—commitments to align portfolios with the temperature goals of the Paris Agreement—may become a norm. As asset owners push the implementation of these commitments down the investment chain and investor interest continues to shift toward ESG issues, this shift will have significant implications for asset managers as well.

What does it look like in practice? A climate alignment commitment is a commitment to assess alignment with climate targets and improve that alignment through product offerings, investment and financing decisions, and engagement. In other words, a meaningful climate alignment commitment is a commitment to influence the real economy. While not all financial institutions will make such commitments, the expectation that they should play a proactive role supporting decarbonization will extend beyond those who make them. There are limitations to the influence of financial institutions, but this does not absolve them of the responsibility to proactively support decarbonization. Instead, financial institutions should be expected to develop ambitious, sophisticated, and transparent approaches to influencing the real economy that span all levers of influence.

What may be needed to ensure that actions taken by the financial sector in support of decarbonization are effective and that expectations are realistic?

- **Harmonized alignment assessment methodologies**—Harmonized methodologies for assessing the climate alignment of financial institutions across the financial sector are needed to ensure that progress can be reported in a fashion that is comparable with other financial institutions while also acknowledging that both policy and the real economy are not aligned with climate targets. Methodologies must be pragmatic.

- **Decarbonization pathways**—A shared understanding and vision of real economy sector-specific decarbonization pathways, including quantitative emissions benchmarks and transition pathways, must form the foundation of actions taken by financial institutions—regardless of type or whether they have formally made a climate alignment commitment—in support of decarbonization. Pathways must be informed by industry.

- **Collective action with individual leadership and accountability**—Collective action initiatives can help establish assessment methodologies and decarbonization pathways more quickly and at lower cost. They reduce the risks to first movers and make actions more effective. These advantages must not diminish the importance and necessity of leadership by and accountability of individual financial institutions.

- **Data**—More and better-standardized data is needed to understand climate risk, the alignment of climate impacts with climate targets, and the decarbonization readiness of corporates, all of which are needed to fully mobilize the financial sector.

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