

The Glasgow Financial Alliance for Net Zero

Our progress and plan towards a net-zero global economy

Acknowledgements

GFANZ would like to thank all those who have contributed to our work and development of this report in support of a net-zero climate transition, including the following individuals:

COP26 Private Finance Hub

Mark Anderson, Bethany Andrews, Özlem Bas, Michael Cotterell, Stuart Cox, Rosanne Fienga, Nadia Glasspool, Ray Hertanto, Ronan Hodge, Stuart Jefford, Sini Matikainen, Alex Michie, Yasmine Moezinia, Jen Nemeth, Curtis Ravenel, Harriet Richards, Abbie Sampson, Tanguy Séné, Dominic Tighe, Eileen Wang, Kim Wilkinson

Oliver Wyman, GFANZ knowledge partner and supporting the GFANZ Secretariat

Andrew Bailey, David Carlin, Sayli Chitre, John Colas, James Davis, Caitlin Doherty, Elizabeth Hoyler, Christopher Johnstone, Elen Jones, Adam Khadra, Ilya Khaykin, David Knipe, Kirsty McKnight, Emil Palmgren, Jack Parsons, Alban Pyanet, Lisa Quest, Louise Revell, Peter Reynolds, Victoria Davies Segura, Mosaab Tawfiq, Dominik Treeck, Julia Tringham, Jennifer Tsim, James Walker

High-Level Climate Champions

Jen Austin, Sagarika Chatterjee, Phil Drew, Patricia Hudson, Gonzalo Muñoz (High-Level Climate Action Champion at COP25), Meryam Omi, Matthew Phillips, Sue Reid, Jess Williams

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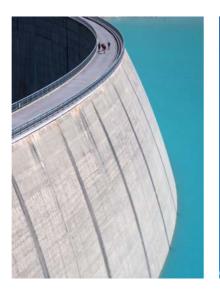
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Foreword from the Chair of GFANZ

Mark Carney

UN Special Envoy for Climate Action and Finance and the UK Prime Minister's Finance Advisor for COP26



Our planet's average temperature is already 1.1 degrees C warmer than pre-industrial levels, with the last five years the warmest on record. The impacts on the Earth's finely tuned ecosystems are intensifying. Our oceans are becoming more acidic, sea levels are rising, and the pace of polar ice loss is accelerating. Extreme climatic events – hurricanes, wildfires, and flash floods – are multiplying. Climate change is already taking lives, destroying livelihoods, eliminating habitats, and driving a sixth mass extinction of species. These tragedies will only intensify without decisive action. COP26 can be the moment we begin to turn looming disaster into sustainable growth and opportunity.

To limit the physical impacts of climate change and stay on track to meet the goals of the 2015 Paris Agreement, greenhouse gas emissions (GHG) must halve over the next decade, falling 7% every year through 2030.¹ Last year, the world met this high bar only because large swaths of the global economy were shut down and hundreds of millions of people were thrown into unemployment. This demonstrates that we cannot shrink ourselves to a net-zero economy.

We need to invest and grow to have an orderly transition to sustainability. The investment requirements are enormous: between \$100 trillion and \$150 trillion over the next three decades.² It also matters how we invest. Governments must ensure a well-managed, just transition, including by working closely with

industry and finance to protect the most impacted and vulnerable communities.

The Glasgow Financial Alliance for Net Zero, GFANZ, was created to accelerate this process. Its goal is to transform the global financial system in order to finance the investment in a net-zero economy. Launched in April, GFANZ now represents over 450 major financial institutions from across 45 countries, controlling assets of over \$130 trillion. Members represent every segment of the financial-sector value chain - asset owners, insurers, asset managers, banks, investment consultants, exchanges, rating agencies, audit firms, and other key financial service providers. Member commitments are aligned with the science on climate change and anchored in the United Nations Framework Convention on Climate Change's (UNFCCC) Race to Zero net zero criteria, including the requirements to set near-term decarbonisation targets, release plans to support their longer-term pledges and report progress annually.3 These commitments will demonstrate the determination of financial institutions to help the world decarbonise. In all aspects, GFANZ will be grounded in and guided by science, including through the GFANZ Advisory Panel of technical experts.

Only mainstream private finance can match the scale of climate action needed for the net-zero transition, including in emerging markets and developing countries. We cannot get to net zero in a niche.

¹ UN Environment Programme: Emissions Gap Report 2019.

² Based on range of estimates for 1.5 degrees C aligned net-zero scenarios from IEA, NGFS, IRENA and BloombergNEF.

³ By joining GFANZ, firms commit to manage investment, lending, underwriting and financial service activities to net zero by 2050, setting interim targets, establishing board accountability, and reporting their progress annually.

Rather, we must transition the entire financial system, alongside every sector of our economies. To mobilise the capital needed, GFANZ is developing the best practice tools and methodologies so that the climate is at the heart of every financial decision. These include driving upward convergence around corporate and financial institution net-zero transition plans, supporting frameworks and metrics to measure portfolio and sectoral net-zero alignment, creating new frameworks to wind down stranded assets responsibly in a way that is transparent and Paris-aligned, and mobilising the enormous capital required for the net-zero transition in emerging markets and developing countries.

Through GFANZ, the core of the financial system is mobilising to play its essential role in global climate solutions. But financial institutions cannot achieve this systemic change alone. We will work with companies, multilateral and development finance institutions, nongovernmental organisations, and wider civil society. And GFANZ will work with governments, which we urge to provide the commitment, clarity, and coordination required to accelerate progress. Without such policy action, the world cannot achieve an orderly transition to a net-zero global economy.

As the Chair of GFANZ, I would like to commend the many individuals and initiatives driving forward this agenda for their vision, leadership, and dedication. This includes not only the Principals Group and their teams, but also the 40 firms represented on GFANZ task forces, the 20 technical experts and scientists represented on the Advisory Panel, and the many organisations that convene and grow the finance subsector alliances that form part of GFANZ.

The body of work presented in this report has been produced in the mere six months since the launch of GFANZ. It would not have been possible without the dedication of hundreds of individuals – practitioners, government officials, scientists and NGOs volunteering their time – all working in the shared goal of decarbonising the global financial system. I would like to thank them for their hard work, which stands on the shoulders of all the pathbreaking initiatives produced over decades by those working on climate finance before it became central to global policy debates.

COP26 marks the end of the beginning for GFANZ. There are many years of intense work to come. But now the core of the global financial system, from all corners of the world, is committed to net zero and working together to transition the global economy. To support those efforts, we are launching a permanent professional secretariat. We plan to build a global physical presence in Europe, Africa, Americas, and Asia to support GFANZ's work and to facilitate ongoing collaboration with the global climate community. Going forward, GFANZ will have a reporting relationship into the Financial Stability Board to ensure we are fully embedded in the global economic system.

The combined commitments of GFANZ members mean that the money is now there to fund the enormous investments the world needs to reach net zero, and they demonstrate that the private financial sector is committed to working with governments and businesses to take the decisive actions required. Following COP26, the vital work of implementation will intensify and accelerate as we seek to turn this existential challenge into an enormous opportunity for sustainable and inclusive growth.

Foreword from the Principals Group

The United Nations recently sounded red alerts for the planet. Without bolder actions by nations, we are on course for a 2.7 degrees C rise in the Earth's temperature by the end of the century.⁴ "We have reached the tipping point on the need for climate action," the UN Secretary-General warned.

This year's UN Conference of the Parties (COP) in Glasgow is the first COP that places the private sector at the centre of the agenda. We, as finance leaders, believe this is a timely acknowledgement of the essential role that businesses can and must play if we are to halve greenhouse gas emissions by 2030 and keep the Earth's temperature from rising more than 1.5 degrees C.

As world leaders turn their attention to the outlook for the planet's climate, the financial industry finds itself in a unique position to be a critical enabler of efforts to decarbonise the global economy. Supported and underpinned by strong policy action, every company, bank, insurer, and investor will need to adjust their business models, develop credible plans for the transition to a low-carbon, climate-resilient future, and then implement those plans. Such a radical economic overhaul will require more than tripling the annual clean energy investment globally by the end of the decade to \$4 trillion, with around half of this in emerging markets and developing countries.⁵

Public finance will not be able to meet this challenge alone. The entire financial system needs to be mobilised.

Private finance can help turn the billions of climate investment to be made through public channels into trillions of total climate investment through private-sector initiatives. All corners of the financial sector must play a pivotal role in supporting this transition – from the firms that oversee global capital allocation and risk management to the firms that provide them with the services, advice, and systems to do so.

Businesses across the financial sector and real economy are developing a more sophisticated appreciation of the risks and opportunities of the net-zero transition and are acting on this new-found insight. But action needs to happen faster and be more comprehensive and ambitious. The systemic change needed to alter the planet's climate trajectory can only happen if the entire financial system makes ambitious commitments and operationalises those commitments with near-term action.

That is why we formed the Glasgow Financial Alliance for Net Zero (GFANZ), to bring together over 450 leading financial enterprises united by a commitment to accelerate the decarbonisation of the global economy. GFANZ membership now encompasses

⁴ UN Environment Programme Emissions Gap Report 2021.

⁵ IEA Net Zero by 2050 Report (2021).

firms representing all key levers of the financial sector, including banks, asset managers, asset owners, insurers, financial services providers such as stock exchanges, rating agencies, and auditors, and investment consultants. Together, we represent over \$130 trillion in assets in 45 countries as of November 2021. Grounded in the UN's Race to Zero campaign, our pledge is to mobilise finance at scale to achieve netzero emissions by 2050 or sooner and develop climate resilience around the world. Our focus is on near-term actions that drive systemic change and contribute to the 55% decarbonisation required by 2030.6 While we accept that this is a rapidly evolving space, we must not let uncertainty defer action any longer.

With the support of investors, NGOs, the public sector, and other stakeholders, the financial industry has made significant progress over the last few years:

- It is now commonplace for financial institutions to disclose climate risks and opportunities using the Task Force on Climate-related Financial Disclosures (TCFD) framework, and the industry has also achieved increased disclosure among the companies it finances.⁷
- Common standards are emerging that quantify
 the emissions financed by financial institutions
 and the impact of climate change on the industry's
 portfolios.⁸ Both have started to be priced into
 financing activities.
- The financial industry has developed and continues to develop – common views with realeconomy actors on net-zero pathways for key sectors.⁹
- Between 2011 and 2020, nearly \$4 trillion has been channelled to finance energy transition investments,¹⁰ with over \$1.5 trillion in green bonds issued since market inception in 2007.¹¹

In this report, we detail the progress GFANZ has made in the six months since launching in April 2021, and we share our near-term work plan and ambitions. In short, we have launched a programme of work to transform the financial system through commitment, engagement, investment, and net-zero alignment, drawing on the enormously valuable work of the many organisations that have driven climate action for years. We, as the GFANZ Principals Group, are leading seven workstreams, together with a network of UN and COP advisers, expert climate NGOs, and firms from across the GFANZ member base. Our collective goal is to bring together the best thinking from across the financial sector, the real economy, and NGOs to accelerate progress, elevate and mainstream best practices, and promote upward convergence around frameworks and tools that solve the thorniest challenges facing the sector's net-zero efforts.

These workstreams aim to support and raise the ambition of net-zero transition plans by real-economy companies and financial institutions as well as align portfolios to net zero. They also aim to support industrial pathways to net zero. Importantly, we have launched a workstream for the critical task of scaling capital flows to emerging markets and developing countries (EM&DCs). This work will involve the identification of Catalytic Initiatives and country platforms, as well as collaborating with our multilateral and development finance counterparts to better unlock trillions of dollars of capital flows to climate solutions in EM&DCs. We also continue to work to broaden and deepen the global membership of GFANZ and thus our impact.

⁶ UN Environment Programme Emissions Gap Report 2021.

⁷ Task Force on Climate-related Financial Disclosures (TCFD) 2021 Status Report.

⁸ PCAF Global GHG Accounting and Reporting Standard for the Financial Industry; SBTi Financial Sector Science-Based Targets Guidance; Task Force on Climate-Related Financial Disclosures (TCFD) 2021 Status Report.

⁹ IEA Net Zero by 2050 – A Roadmap for the Global Energy Sector; NGFS Climate Scenarios for Central Banks and Supervisors.

¹⁰ BloombergNEF. Note: includes asset finance for renewable energy, hydrogen, energy storage, electrified transport, electrified heat and CCS. It does not include investments not allocated to a specific country. This does not include other types of climate finance, such as. for agriculture.

¹¹ Climate Bonds Initiative.

We welcome the progress that governments and industry around the world have made ahead of COP26 - with around three-quarters of global emissions now covered by net-zero pledges.¹² But as the UN has noted, more action is needed to achieve the 55% emissions reduction required by 2030 for a 1.5 degrees C pathway. Whilst we have committed to net zero, we cannot get there without collaboration with, and ambitious climate action from, governments. That is why, ahead of the G20 summit, we outlined urgent actions that governments need to undertake or accelerate to help build a net-zero global economy. This includes setting specific net-zero targets that are both economy-wide and 1.5 degrees C aligned, mandating net-zero transition plans for public and private enterprises, phasing out fossil fuels and fossil fuel subsidies, greening the international financial regulatory architecture, establishing a material price

on carbon, and providing targeted support to small and medium-sized enterprises (SMEs), households, and communities to go green. Clear, credible, and timely policy signals are needed to enable a smooth transition.

In the six months since we launched GFANZ with our UN colleagues, we have begun building the toolkit for financial firms, the real economy, and governments to finance the transition to net zero. COP26 in Glasgow is an important milestone in the long journey to a net-zero global economy.

We are excited by the progress that has already been made, but we recognise that there is much more that needs to be done. Working together with our global peers and stakeholders across the public, private, scientific, and non-profit sectors, we look forward to delivering the necessary change.

Principals Group Members

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Nigel Topping, UN High-Level Climate Action Champion at COP26

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Joshua Oigara, KCB Group
Noel Quinn, HSBC
Alison Rose, NatWest
David Schwimmer, LSEG
Michelle Scrimgeour, LGIM
Shemara Wikramanayake, Macquarie

¹² Climate Action Tracker – Global Update: Climate Summit Momentum. Three-quarters of global emissions are covered by countries that have made net-zero pledges. However, this does not mean the policies to deliver these commitments are in place.

Statement from the Advisory Panel Chair

Nili Gilbert

Board Member, Chair of Investment Committee
David Rockefeller Fund



The fight to create a net-zero global economy raises complex questions for governments, businesses, and civil society – many of which demand novel, collaborative solutions. The deep technical expertise of the academic, scientific and climate action communities has been playing – and will continue to play – a central role in the ability of these groups to rise to this challenge.

It is for that reason, among many others, that I'm delighted to chair the GFANZ Advisory Panel.

We have drawn together 20 climate experts from nongovernmental organisations around the world to ensure that GFANZ's work is held to the highest standards of ambition while keeping climate science at the heart of everything GFANZ does. Indeed, at its core, climate change is an urgent scientific problem. Our Panel is also deeply committed to a focus on the social and global realities and opportunities embedded within the climate transition as we progress.

The work of GFANZ stands on the shoulders of innumerable organisations and individuals who have made it their mission over many years to tackle questions about the role of the financial sector in climate change and call for its support of the net-zero transition. In forming the Advisory Panel, we hope to bring in many of these voices to inform our work programme and draw on the value of diverse perspectives as we accelerate convergence around best practices and the solutions to our most difficult challenges. In providing ongoing strategic and technical advice, the Panel has and will facilitate an ecosystem-wide collaboration between GFANZ and outside climate expert groups. As both chair of the Advisory Panel and a member of the GFANZ Principals Group, I am proud to be able to provide one of those connections, conveying the views of our expert advisers directly to the top level of GFANZ.

Across the technical GFANZ workstreams, the Panel has already provided rigorous challenge and advice to help ensure that our analysis is comprehensive and robust and help shape the conclusions we have drawn from it.

As you will be able to tell from the content of this report, a huge amount of work has been undertaken by GFANZ since its launch just six months ago. Reviewing and inputting into that vast body of work took time and effort – in what has been an incredibly busy period for all of us – and I would like to thank the members of the Advisory Panel for their dedication. We're indebted to the time and expertise Panel members have given in supporting GFANZ. I know that their contributions will continue to be crucial in the pivotal years ahead as we look beyond COP26. As GFANZ evolves, we will continually review the Panel's membership to ensure it is bringing the full breadth and depth of global expertise required to fulfill its important role.

The scale of the challenge we face to transition the entire global economy to net zero by 2050 is immense. Crucially, science defines the limited range of feasible pathways and trajectories that we can take to get there if we are to limit the increase in the Earth's temperature to 1.5 degrees C, and all of our efforts rest implicitly on the foundational need for a strong social fabric worldwide. It is my goal to ensure that the best scientific and technical advice remains at the core of GFANZ's work in the years to come. I'm excited by the ambition of GFANZ, its achievements to date, and its potential impact looking forward.



GFANZ Introduction, Progress Update, and Plans

Who we are and what we are trying to achieve

The Glasgow Financial Alliance for Net Zero (GFANZ) is a global coalition of leading financial institutions in the UN's Race to Zero that is committed to accelerating and mainstreaming the decarbonisation of the world economy and reaching net-zero emissions by 2050. It provides a practitioner-led forum for financial firms to collaborate on substantive, crosscutting issues that will accelerate the alignment of financing activities with net zero and support efforts by all companies, organisations, and countries to achieve the goals of the 2015 Paris Agreement.

GFANZ was launched on the eve of U.S. President Joe Biden's climate summit in April 2021 by Mark Carney, UN Special Envoy for Climate Action and Finance and the UK Prime Minister's Finance Advisor for COP26, in collaboration with the UN's Race to Zero and the COP26 Presidency.

To ensure credibility and consistency, access to GFANZ is grounded in the UN's Race to Zero campaign, and entry requirements are tailored to the activities of the diverse firms represented. The Race to Zero campaign has an independent, academic-led Expert Peer Review Group (EPRG) tasked with reviewing applications to join the Race to Zero and ensuring they meet the ambitious criteria for participation. This means all GFANZ members must align with the Race to Zero criteria, which are:

- Use science-based guidelines to reach net-zero emissions across all emissions scopes by 2050.
- Set 2030 interim targets that represent a fair share of the 50% decarbonisation required by the end of the decade.
- Set and publish a net-zero transition strategy.
- Commit to transparent reporting and accounting on progress against those targets.
- Adhere to strict restrictions on use of offsets.

GFANZ unites net-zero finance initiatives in the UN's Race to Zero into one sector-wide strategic alliance. At the end of 2020, the only financial alliance in the Race to Zero was the UN-convened Net-Zero Asset Owner Alliance (NZAOA), which at that time consisted of 30 members controlling \$5 trillion in assets. At the start of 2021, the Net Zero Asset Managers initiative (NZAM) and the Paris Aligned Investment Initiative (PAII) were launched. This was followed by the Net-Zero Banking Alliance (NZBA) in April 2021, alongside GFANZ, providing a vehicle for banks to make similar net-zero commitments in line with the Race to Zero criteria. This momentum has continued to accelerate, and today there are three more alliances: the Net-Zero Insurance Alliance (NZIA) and – launched with the support of GFANZ during Climate Week NYC in September 2021 – the Net Zero Financial Service Providers Alliance (NZFSPA) and the Net Zero Investment Consultants Initiative (NZICI). These subsector alliances add important entry routes to GFANZ and the Race to Zero for further segments of the financial sector.

Now GFANZ membership includes more than 450¹³ financial firms from 45 countries, responsible for assets of over \$130 trillion, as of November 2021. This historic effort unites a significant and growing proportion of the global financial industry in a common mission to make climate considerations a part of every capital allocation decision.

GFANZ is led by a Principals Group of CEOs from member firms representing diverse geographies and business models. This group sets GFANZ's strategic direction and priorities and monitors progress against them. These priorities are implemented through a Steering Group comprising senior staff from each firm represented on the Principals Group and from the NGOs that convene GFANZ subsector alliances.

Figure 1: Steering Group representation of NGOs that convene GFANZ subsector alliances

Net Zero Asset Managers initiative/Paris Aligned Investment Initiative	s Net-Zero Asset Owner Alliance	Net-Zero Banking Alliance	Net-Zero Insurance Alliance
• Ceres • IIGCC	UNEP FIPRI	• UNEP FI	• UNEP FI

GFANZ has also established an Advisory Panel to ensure that the work of GFANZ is held to the highest standards of ambition while keeping climate science at the heart of everything GFANZ does. Panel members are from NGOs representing a variety of technical climate expertise, with a focus on the financial sector. The panel's role is to provide strategic and technical advice to GFANZ and facilitate collaboration between GFANZ and the wider sustainable finance ecosystem.

Figure 2: GFANZ Advisory Panel members

- 2° Investing Initiative (2DII)
- Cambridge Institute for Sustainability Leadership (CISL)
- Carbon Tracker
- Climate Policy Initiative (CPI)
- Climate Safe Lending Network (CSL)
- E3G (Third Generation Environmentalism)
- Finance Sector Expert Group for Race to Zero and Race to Resilience (FSEG)
- Global Optimism
- Instituto Clima e Sociedade (iCS)

- International Institute of Green Finance (IIGF)
- Partnership for Carbon Accounting Financials (PCAF)
- Rocky Mountain Institute Center for Climate-Aligned Finance (RMI)
- Science Based Targets initiative (SBTi) (World Resources Institute (WRI))
- SOAS Centre for Sustainable Finance
- Transition Pathway Initiative (TPI)
- World Wide Fund for Nature (WWF)
- ZeniZeni Sustainable Finance (ZZSF)

¹³ Includes members from NZAM, NZAOA, NZBA, NZIA, PAII, in addition to NZICI and NZFSPA members who are joining Race to Zero

In addition to these formal mechanisms for involving climate experts in the GFANZ structures, we collaborate closely with other mission-aligned organisations – including the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD), the Sustainable Markets Initiative (SMI), the World Economic Forum (WEF), and OnePlanet – to accelerate progress towards achieving our common goals.

Ultimately, in engaging with and supporting financial sector practitioners, climate experts, and policymakers, GFANZ endeavours to serve as a knowledge hub and forum to identify, reflect, advance, and amplify best practices that drive the transition to a net-zero-aligned global economy.

This report aims to summarise not only the work accomplished by GFANZ to date, but also the road ahead for GFANZ. It will also serve as a resource for financial services practitioners and all those who work with the financial system on net-zero issues. Our website (www.gfanzero.com) will serve as a resource for those working to decarbonise the financial system.

GFANZ programme of work

Following the launch of GFANZ in April 2021, the GFANZ Principals Group agreed on an ambitious programme of work in their first meeting. The workstreams are organised to drive the **commitment**, **engagement**, **investment**, and, ultimately, the **alignment** required to transition the financial system and global economy to net zero.

Each GFANZ workstream is sponsored by one or more Principals Group CEOs and led by a task force of leading industry practitioners. Task force members represent 40 institutions from 15 countries. Advised by expert NGOs from the Advisory Panel and the Steering Group, the workstreams aim to elevate and build on the rich body of work that has already been accomplished by the scientific community, NGOs, industry groups, and other alliances.

GFANZ is governed by Terms of Reference that formalise the coordination structures outlined briefly in this report. This report, issued by GFANZ, has been reviewed by the GFANZ Principals Group, taking into account input from the GFANZ Advisory Panel and Steering Group. The products of each workstream have been developed by task forces led by one or more of the Principals Group CEOs and comprising industry practitioners from GFANZ member firms from diverse geographies and sectors, advised by expert nongovernmental organisations from the Advisory Panel and the Steering Group. The commitment statement on Mobilising Private Capital to EM&DCs and the GFANZ Policy Call to Action are specifically endorsed by the GFANZ Principals Group. The chapters of this report relating to work on Sectoral Pathways, Real-Economy Transition Plans, Financial Institution Transition Plans, and Portfolio Alignment Measurement are endorsed by their respective CEO leads (members of the GFANZ Principals Group).

Figure 3: GFANZ programme overview

Mechanisms of change

Commitment

GFANZ's membership includes hundreds of firms committed to net zero from multiple subsectors of the finance industry and dozens of countries. This expanding coalition provides the starting point from which to create the financial architecture needed to transform the global economy and transition to net zero.



Engagement

The size and scale of GFANZ's combined member financial institutions mean we can help drive change. But we cannot achieve net zero on our own. That is why we are engaging with other key sectors of the economy, climate experts, the NGO community, and governments. GFANZ members recognise the need to advise and support clients on their own transitions – be it large corporations, institutional investors, small businesses, or individuals.



Investment

To ensure adequate investment is made to support the transition to net zero, we are actively working to make climate a central consideration in all financial decisions. As part of that, we seek to accelerate the development, amplification, and mainstreaming of leading practices and tools for the financial system to create and operationalise their climate objectives and transition plans. We recognise that the capital allocation decisions we make today will have climate ramifications for years to come.



Net-Zero Alignment

We are generating the commitment, engagement, and investment needed to accelerate financial flows to netzero-aligned companies and projects. We are working across the financial sector, real economy, and public-sector, and we are developing methods to measure the alignment of our portfolios with net zero. Increasingly, we are putting private capital to work alongside public-sector capital to meet transition needs, particularly in EM&DCs. These are the levers we have as an industry to help accelerate the transition to net zero.

Workstream Updates



Building commitment

Building and growing existing and new net-zero alliances in the UN's Race to Zero



Mobilising private capital to EM&DCs

Working with MDBs, DFIs and others to better mobilise the trillions of private capital needed to support net-zero transition in EM&DCs



Sectoral pathways

Working with the real economy to define net-zero sectoral pathways



Real-economy transition plans

Clearly defining financial sector expectations on real-economy transition strategies and disclosure to support investment in the transition



Financial institution transition plans

Bringing together and defining best practice for transition strategies in the financial sector



Portfolio alignment measurement

Further developing work on portfolio alignment metrics for financial institutions



GFANZ Policy Call to Action

Call to Action to G20 governments for the public policy necessary to build a net-zero financial system

GFANZ workstreams

What the GFANZ workstreams are and how they effect change

All workstreams incorporate the views of a diverse range of financial sector institutions and geographies – including banks, asset managers, asset owners, insurers and financial services providers – as well as advisers from leading technical experts in the NGO community. They have set ambitious objectives while also recognising the need for pragmatism and urgency. Here are brief summaries of the seven workstreams:



Building commitment

This workstream is focused on broadening the number and nature of financial firms committed to net zero. Before the launch of GFANZ, only investors had a clear way to join the movement, with limited representation from beyond Europe. There was no standardisation of what a credible net-zero commitment should look like for a bank, insurer, investment consultant, or other financial services provider. Now, in time for COP26, all key segments of the financial sector can commit to net zero in line with the UN Race to Zero criteria and get involved in the work to accelerate the transition through dedicated subsector-specific alliances. Uniting these subsectors within GFANZ helps activate the entire value chain of the financial sector and drive systemic change.



Mobilising private capital to EM&DCs

This workstream will support a significant increase in the flow of private capital to emerging markets and developing countries (EM&DCs)¹⁴ for their transition needs through privatesector investments and public-private collaboration. While GFANZ members currently represent at least \$7+ trillion in assets in EM&DCs, there is significant untapped potential to further finance the transition in those markets, especially through innovative public-private financing partnerships. This workstream is committed to working with policymakers to help create a financial architecture that will mobilise far more net-zero-aligned finance and investment into the countries that are most vulnerable to the impacts of climate change and require financing to help them transition to a net-zero future. The focus will be on four specific avenues: 1) identifying and scaling existing Catalytic Initiatives that demonstrate strong potential for impact; 2) supporting the development of country platforms that will accelerate the enabling conditions for structuring bankable projects; 3) establishing a more structured program of engagement with the multilateral development banks and development finance institutions that are key to blended finance projects; and 4) setting out a replicable and standardised EM&DC-specific reporting framework that can track the movement of GFANZ member assets into EM&DCs.

¹⁴ EM&DCs have been defined using the World Bank income classification.



Sectoral pathways

This workstream will engage and work with industries to catalyse alignment between financial institutions and major global industries on sector-specific pathways to reach netzero emissions. It has developed a framework to articulate the needs and expectations of financial institutions for actionable sectoral pathways, incorporating work from both financial industry initiatives and sectoral organisations. Over time, more detailed guidance will be added to the framework to create a resource to help financial institutions evaluate sectoral net-zero pathways and assist efforts to develop new pathways. Tackling hard-to-abate sectors and fossil fuels is at the heart of this. The workstream has prioritised three sectors for initial focus – steel, aviation, and oil and gas – and has started working with the real economy on ongoing and planned initiatives in these sectors, building on the large volume of work already being done on this topic. The workstream is also considering approaches to responsibly retire carbon-intensive assets in a way that maximises real-world decarbonisation using science-based targets, whilst seeking to minimise social and economic damage. The developments in this workstream directly feed into learnings for workstreams on developing real-economy and financial institution transition plans.



Real-economy transition plans

This workstream focuses on accelerating decarbonisation in the real economy by articulating financial sector expectations of transition plans from the companies GFANZ members invest in, insure, and finance. Since its launch, this workstream has conducted a review of existing guidance for corporate transition plans and developed an initial set of principles to guide best practice transition planning, bringing together and building on the body of work that has already been developed. Over time this workstream hopes to promote upward convergence in the transition plans of our corporate clients and investees by providing both companies and financial firms with our view of best practice. This workstream will remain closely aligned with the workstream on sectoral pathways and the workstream on financial institution transition plans.



Financial institution transition plans

This workstream will drive upward convergence around sector-wide best practices for financial institutions to design and implement credible net-zero transition plans and tackle joint challenges in a consistent way. It will work with partner NGOs, researchers, and alliances to develop and promote the adoption of best practices on cross-cutting technical issues that financial institutions face as they work on their own transition plans, including the use of internal carbon pricing, role of carbon credits, and managing issues of double-counting financed emissions. Since its launch, the workstream has compiled an inventory of existing guidance on financial institution transition plans and developed an initial set of principles to encourage upward convergence in the level of ambition of GFANZ members.



Portfolio alignment measurement

This workstream supports the further development and effective implementation of portfolio alignment metrics for financial institutions and seeks to drive convergence in the way portfolio alignment is measured and disclosed. It was established in response to growing investor and lender interest in measuring portfolios' alignment to the objectives of the Paris Agreement. This workstream builds on analysis conducted by the Portfolio Alignment Team, 15 commissioned by the TCFD. That analysis is summarised in the team's report on "Measuring Portfolio Alignment", 16 along with a technical annex. As it builds a work programme for 2022, GFANZ is in the process of consulting task force members on priorities for developing future portfolio alignment guidance.



GFANZ Policy Call to Action

This workstream advocates for the public policy needed to help build a net-zero economy and meet the goals of the Paris Agreement. Our GFANZ Call to Action, launched in October 2021, includes specific policies including economy-wide net-zero targets aligned to 1.5 degrees C, reform of financial regulations to support the net-zero transition, phaseout of fossil fuel subsidies, pricing carbon emissions, mandatory net-zero transition plans, and climate reporting for public and private enterprises. It aims to unlock the trillions of dollars of climate finance required to support developing economies' efforts to transition to net zero, which include working with farmers and businesses to stop illegal deforestation, providing viable alternatives and promoting sustainable regenerative agricultural practices, and supporting a just transition. The core of the financial system is mobilising for net zero, and our Call to Action lays out the policy action needed to accelerate that transition.

GFANZ roadmap moving forward

COP26 marks the end of the beginning for GFANZ. In the six months since launch in April 2021, our focus has been on building the coalition and frameworks to begin rapidly mobilising this work programme in collaboration with the wider climate action ecosystem. The progress has been remarkable, building on the vast body of work produced over years and decades by the sustainable finance community. But we have a long and challenging road ahead to achieve our goal of transforming the financial system so that every decision takes climate change into account.

GFANZ will be an enduring structure in the sustainable finance landscape. As we look beyond COP26, we plan to reinforce our global reach through regional hubs in key geographies and continue to embed our close links with national and international policymakers as a mechanism for institutionalising the net-zero transition and driving change. We will keep pushing for upward convergence in ambition, refining our practitioner-led work programme – in collaboration with NGOs, industry bodies, and governments – to accelerate the commitment, engagement, investment, and net-zero alignment that is required to transform our global financial system to meet the greatest challenge of our age.

¹⁵ The Portfolio Alignment Team was formed in 2020 by the UN Special Envoy for Climate and Finance, Mark Carney, and is headed by David Blood, Senior Partner at Generation Investment Management.

¹⁶ Portfolio Alignment Team (2021), Measuring Portfolio Alignment: Technical Considerations.

GFANZ subsector alliances creating change

Our subsector alliances are driving progress at the grassroots level to raise the ambition on commitments, increase engagement, and support members' acceleration of their alignment journeys.

GFANZ incorporates the growing number of finance sector alliances that have met the rigorous entry criteria of the Race to Zero and its independent academic-led Expert Peer Review Group. Some predated the launch of GFANZ: the Net Zero Asset Managers initiative (NZAM), the Net-Zero Asset Owners Alliance (NZAOA), and the Paris Aligned Investment Initiative (PAII). The Net-Zero Banking Alliance (NZBA) was launched alongside the launch of GFANZ. In recent months we have supported the launch of the Net-Zero Insurance Alliance (NZIA) in July 2021 as well as the establishment of both the Net Zero Investment Consultants Initiative (NZICI) and the Net Zero Financial Service Providers Alliance (NZFSPA) at Climate Week NYC in September 2021. GFANZ is delighted to include these important sectors of the financial industry and their members in our forthcoming work.

Net Zero Asset Managers initiative (NZAM)

The Net Zero Asset Managers initiative (NZAM), launched in December 2020, is an international group of asset managers committed to supporting the goal of net-zero greenhouse gas (GHG) emissions by 2050 or sooner, in line with global efforts to limit warming to 1.5 degrees C and investing aligned with the same goal. The Net Zero Asset Managers initiative has over 220 signatories with \$57 trillion in assets under management as of November 2021.

NZAM is endorsed by the Investor Agenda and governed by six investor networks, also known as the Network Partners. The Steering Committee of the Network Partners' CEOs is responsible for the coordination and implementation of the initiative, which includes ensuring that relevant support is provided to signatories to enable best practice implementation of the commitment. The initiative is open to any asset manager globally that is also a member of one of the Network Partners (AIGCC, CDP, Ceres, IIGCC, IGCC, and PRI).

Progress to date

In just over 10 months, NZAM has seen rapid growth, with the current set of signatories representing more than half of the entire asset management sector globally in terms of total assets under management (estimated to stand at \$110 trillion by end of 2021).¹⁷

With participation more than quadrupling since launch, the initiative already includes the world's three largest asset managers globally. Total assets collectively managed by investors as signatories to the initiative (\$57 trillion) are now greater than the combined GDP of the United States, China, and the United Kingdom (\$42 trillion).

In September 2021, Network Partners introduced a position on coal and other fossil fuel investment for the initiative. This position sets an expectation that signatories should adopt a science-based policy on investment in fossil fuels for the organisation as a whole. In relation to the assets under management, they have committed to manage in line with net zero, this policy should be consistent with one of the positions of the NZAM-affiliated organisations.

¹⁷ Morgan Stanley and Oliver Wyman Wealth & Asset Management Blue Paper: Competing For Growth, 2021.

¹⁸ BlackRock, Vanguard Group and State Street Global.

In the context of COP26, 39 signatories to the initiative have disclosed the initial proportion of the assets under management (AUM) that will be managed in line with net zero and set their interim targets for that AUM consistent with a fair share of the 50% global reduction in CO_2 identified as a requirement in the Intergovernmental Panel on Climate Change (IPCC) special report on global warming of 1.5 degrees C. The Network Partners have published a progress report on the initiative including the initial target disclosures for each asset manager.

The momentum secured over such a short time through investor participation in NZAM, driven by the investor networks behind the initiative, is serving to normalise and mainstream changes required to drive progress toward net-zero emissions. Without the asset management sector working toward net-zero emissions, the goals set out in the Paris Agreement would be more challenging, if not impossible, to meet.

The road ahead for NZAM

In delivering net-zero alignment, the asset managers commit to prioritising real-economy emissions reductions, take account of material portfolio Scope 3 emissions, create investment products aligned with net-zero emissions, and facilitate increased investment in climate solutions. In addition, to ensure investors are driving broader change, NZAM is putting in place a stewardship and engagement strategy consistent with net-zero emissions by 2050 and ensuring all policy advocacy supports the same objective.

Signatories also commit to transparent and rigorous accountability. They will publish TCFD reporting annually, including a climate action plan, and submit reports through the PRI¹⁹ and/or CDP²⁰ platforms. These reports will be reviewed by the Network Partners to ensure the approach is based on a robust methodology, consistent with the UN Race to Zero criteria, and action

is being taken in line with the commitments made. They also agree only to use offsets that involve long-term carbon removal and where there are no technologically and financially viable options to eliminate emissions.

The first wave of signatories published details of their individual emission reduction targets ahead of the COP26 in Glasgow.

Net-Zero Asset Owner Alliance (NZAOA)

Representing \$10 trillion in assets under management and endorsed by UN Secretary General António Guterres, the UN-convened Net-Zero Asset Owner Alliance (NZAOA) shows united asset owner action to align portfolios with a 1.5 degrees C scenario, taking into account best available scientific knowledge, including the findings of the IPCC based on low or no-overshoot scenarios. NZAOA was the first net-zero finance sector initiative to join the Race to Zero, having launched at the UN Secretary General's Climate Action Summit in September 2019.

NZAOA places great emphasis on ambitious, intermediary, quantitative targets being set every five years, starting with a first generation of such targets being published now for attainment by 2025,21 based on the Alliance's own and comprehensive 2025 Target-Setting Protocol, which underwent a public consultation and is revised on a yearly basis. The main authors are the NZAOA members themselves, with further input from technical and scientific specialists and civil society organisations including WWF and Global Optimism. This is a leading level of ambition demonstrating near-term, tangible action. Target-setting occurs against a five-year roadmap and along four distinct, complementary layers: i) engagement targets, ii) portfolio/sub-portfolio decarbonisation targets, iii) sector decarbonisation targets, and iv) financing transition targets.

¹⁹ PRI – Principles for Responsible Investment, a UN-supported network of investors that promotes the incorporation of environmental, social and governance factors (ESG) into investment decision-making.

²⁰ An international non-profit organisation that supports companies and cities to disclose their environmental impact.

²¹ New members have 12 months following their joining of the Alliance to set their first generation of intermediary targets, so not all members are setting targets now. Where a firm joins the Alliance and the reporting period is less than three months away, the firm has a maximum of 15 months to issue a target.

Targets need to be set within a 12-month period of joining the NZAOA.²² At present, 29 asset owner members have set a target within the 2025 Target Setting Protocol. NZAOA members aligned on an Alliance-wide Position on Thermal Coal, stating a phaseout of most thermal coal assets by 2030 for industrialised countries and a full phaseout globally by 2040.

Today NZAOA is an international group of 60 institutional investors with over \$10 trillion in assets under management as of November 2021, delivering on a bold commitment to transition their investment portfolios to net-zero greenhouse gas emissions by 2050. It has a truly multi-stakeholder governance, led by asset owner members, convened by the UN and PRI, and supported by civil society advisers WWF and Global Optimism.

Progress to date

NZAOA has made significant progress over the last year, growing the number of signatories and the assets represented. The members engage and work collaboratively within six work tracks: i) the MRV (Monitoring, Reporting and Verification) Track, ii) the Engagement Track, iii) the Policy Track, iv) the Financing Transition Track, v) the Communication Track, and vi) the Recruitment Track.

NZAOA has released a large body of practical resources, working documents, and position papers that serve to guide and support current and potential asset owner members of the Alliance and to express the Alliance's collective positions on critical topics.

These include the NZAOA positions on Thermal Coal, on the Coronavirus Recovery, on Negative Emissions

Technologies, and on Governmental Carbon Pricing. It also includes groundbreaking work on Sectoral Decarbonisation Pathways. Based on the One Earth Climate Model, it is fully aligned with the Alliance's ambition level and readily applicable by all institutional investors. These practical resources and innovation by NZAOA members provide a "public good" to global

investors around the world, with the PRI encouraging adoption of emerging good practice across its 4,000-plus signatory base.

The NZAOA recently launched its first progress report outlining the advances made in 2021. It demonstrates that 29 investors have set ambitious quantitative targets on the high end or above the recommended scientific range. NZAOA has encouraged finance sector-wide transparency through its input to TCFD and to the Future of Race to Zero. PRI has incorporated input from NZAOA in its responses to consultations on mandatory climate reporting in several jurisdictions and into the PRI Reporting Framework.

The road ahead for NZAOA

Reaching net zero by 2050 at the latest, consistent with 1.5 degrees C, presents a significant challenge.

Asset owners need policymakers to act but can play an important role in transitioning and aligning their portfolios. NZAOA's work will focus heavily on near-term action and implementation.

Since its inception in 2019, NZAOA has focused on establishing its governance and setting up the work tracks with respective working areas and yearly implementation plans. It has also fleshed out its mission and theory of change and, importantly, has facilitated members' setting of first-generation intermediary targets, to be attained by 2025. In the future, the Alliance's focus will expand toward supporting members in their actual achievement of targets and the annual tracking of member progress.

NZAOA is looking to further enhance existing work on sector pathways to net zero via the One Earth Climate Model through integrating different scenarios, adding regions and countries, and providing a download functionality. This work is needed to analyse engagement potential and to benchmark the sectors and corporations in regard to carbon emissions reductions.

Among others, a topic that the Alliance will focus on closely is future financing solutions and structuring. It will also continue following the developments of compliance and voluntary carbon markets, such as discussing credit claims and reporting requirements. NZAOA is going to build a digital roadmap, mapping climate solutions with investment opportunities.

NZAOA will continue to collaborate closely with investor groups, including via the Investor Agenda, with the broader PRI signatory base and UNEP FI members, as well as across the finance sector through GFANZ. Through this collaboration, NZAOA aims to drive ambition and convergence, align as much as possible in key messages to policymakers and the real economy, and encourage accountability.

Net-Zero Banking Alliance (NZBA)

Launched in April 2021, the Net-Zero Banking Alliance (NZBA) is the banking element of GFANZ and Race to Zero. The Net-Zero Banking Alliance is industry-led and convened by the UN Environment Programme Finance Initiative.

As of November 2021, NZBA brings together 92 banks from 37 countries representing more than \$63 trillion in assets — over 40% of banking assets globally — that are committed to aligning their lending and investment portfolios with net-zero emissions by 2050, as well as with a temperature outcome of no more than 1.5 degrees C by 2100, based on low or no-overshoot scenarios and considering best available scientific knowledge. Combining near-term action with accountability, this ambitious commitment sees banks setting intermediate targets for 2030 or sooner, using robust, science-based guidelines.

The Net-Zero Banking Alliance works to reinforce, accelerate, and support the implementation of decarbonisation strategies, providing an internationally coherent framework and guidelines in which to operate, supported by peer learning from pioneering banks.

It recognizes the vital role of banks in supporting the global transition of the real economy to netzero emissions.

Progress to date

Since launch on 21 April 2021, by 43 founding banks, NZBA has achieved significant growth of the coalition, ensuring an increasing proportion of the global banking industry joins this robust, ambitious, science-based commitment to achieve net zero by 2050. Since launch, the Alliance has grown by over 100% to 92 banks representing \$63 trillion in assets – 40% of banking assets worldwide.

The Alliance has also appointed a 12-member-strong Steering Group and Chair to oversee decision-making and strategy, guiding the technical work and collective progress of the Alliance. The governance is designed to provide accountability, as well as leverage the diversity of the membership, build consensus, and ensure best practice is adopted worldwide.

The work plan is currently under development and will aim to support members in implementing their commitments and setting and achieving their targets.

The road ahead for NZBA

The Alliance will focus on supporting members in implementing their commitments, providing a forum for banks to come together on technical developments such as carbon accounting, offsets, target-setting, and scenarios. The work programme will be designed to support the members in setting and achieving their targets for priority GHG-intensive and GHG-emitting sectors. Signatories' first targets for 2030 (or sooner) and 2050 will be published within 18 months of each bank signing the commitment.

The Alliance will also seek to maintain its growth momentum, reaching out to the wider banking industry to build awareness and capacity and bring the industry together to drive collective and consistent progress as the go-to net-zero forum for banks worldwide.

Net-Zero Insurance Alliance (NZIA)

The UN-convened Net-Zero Insurance Alliance (NZIA) brings together 13 of the world's leading insurers and reinsurers, and the world's leading insurance market, representing \$565 billion in gross premiums written – 9% of global premiums written – to play their part in accelerating the transition to net-zero emission economies. They are committed to individually transitioning their underwriting portfolios to net-zero greenhouse gas emissions by 2050, as well as with a temperature outcome of no more than 1.5 degrees C by 2100, taking into account the best available scientific knowledge, including the findings of the IPCC based on low or no-overshoot scenarios.

As risk managers, insurers and investors, the insurance industry has a key role in supporting the transition to a net-zero economy. NZIA members will individually set science-based intermediate targets every five years and independently report their progress publicly on an annual basis.

The NZIA Statement of Commitment considers the latest available scientific knowledge and associated social impacts, as well as findings of recognised reports such as those by the IPCC and the Net Zero by 2050 report by the International Energy Agency (IEA). It includes supporting the recommendations of the TCFD, considering emerging frameworks such as the Task Force on Nature-Related Financial Disclosures (TNFD), supporting the UN Sustainable Development Goals (SDGs) and the Post-2020 Global Biodiversity Framework, and signing the UN Principles for Sustainable Insurance (PSI). The statement also recommends that insurers transition their investment portfolios to net-zero GHG emissions and join initiatives such as the NZAOA for a total balance sheet approach to net zero.

Progress to date

Since its launch in July 2021, the Alliance has established its governance as well as four operational workstreams: i) Metrics and Targets, ii) White Paper on Net-Zero Insurance, focused on fleshing out the Alliance's mission and theory of change, iii)

Engagement, and iv) net zero in the life and health insurance business. It has grown its membership from eight to 13 insurers and reinsurers and one insurance market.

On 6 September 2021, the Partnership for Carbon Accounting Financials (PCAF), in collaboration with the UN-convened Net-Zero Insurance Alliance (NZIA), announced the launch of a working group of leading insurance and reinsurance companies to develop the first global standard to measure and disclose insured greenhouse gas emissions. The PCAF Insured Emissions Working Group will include PCAF insurance signatories, founding NZIA members, and other insurers and reinsurers.

A global, standardised methodology to measure and disclose the GHG emissions of insurance and reinsurance underwriting portfolios will give insurers deeper insight into the risk profile of their underwriting portfolios, stimulate innovative approaches to decarbonisation, and create comparability for stakeholders. It will help industry members understand the climate impact of their underwriting decisions, laying the foundation to decarbonise their insurance and reinsurance portfolios through target setting, scenario analysis, strategy development, and individually taking concrete actions that have real world impact through emissions reduction in the real economy.

The road ahead for NZIA

NZIA will build on the pioneering work that its founding signatories have already begun as investors through their membership in the Net-Zero Asset Owner Alliance, where all NZIA founding members are already individually setting science-based 2025 decarbonisation targets for their investment portfolios in line with a net-zero transition pathway.

NZIA will continue to advance its priorities through its workstreams, including the launch of the White Paper on Net-Zero Insurance (in fourth quarter 2021) and the publication of a target-setting protocol by January 2023 (18 months from the launch of the NZIA in July 2021).

Paris Aligned Investment Initiative (PAII)

The Paris Aligned Investment Initiative (PAII) is a collaborative, investor-led global forum enabling investors to align their portfolios and activities to the goals of the Paris Agreement.

The PAII was established in May 2019 by IIGCC. The initiative has grown into a global collaboration supported by four regional investor networks – AIGCC (Asia), Ceres (North America), IIGCC (Europe) and IGCC (Australasia).

PAII gives asset owners an opportunity to become accredited in Race to Zero through the Paris Aligned Asset Owners net-zero commitment.

Through the Paris Aligned Asset Owners net-zero commitment, signatories commit to a comprehensive range of actions toward net zero including:

- Transitioning investments to achieve net-zero portfolio GHG emissions by 2050 or sooner, with the aim of achieving emissions reductions in the real economy.
- Setting interim targets by 2030 or sooner for decarbonising portfolios and investing in climate solutions, consistent with the 50% reduction in global emissions set in the IPCC special report on global warming of 1.5 degrees C.
- Implementing a stewardship and voting strategy consistent with achieving net zero.

Signatories are also required to disclose objectives and targets, publish a clear Investor Climate Action Plan for achieving these goals no later than one year from making the commitment, and review and update targets every five years or sooner. They must also report annually on the strategy and actions implemented, progress toward achieving objectives and targets, and in line with the TCFD recommendations.

Progress to date

Through the PAII, over 140 investors, representing more than \$34 trillion in assets, have engaged in the development of the Net Zero Investment Framework,

which provides a comprehensive blueprint for asset owners and asset managers to set net-zero targets and implement their investment strategies.

To date, there have been 50 signatories to the Paris Aligned Asset Owners net-zero commitment, which was launched in March 2020, representing \$2.8 trillion in assets.

In the context of COP26, five Paris Aligned Asset Owners signatories have already submitted their interim targets to the investor networks for disclosure, with all signatories due to disclose their targets within one year of signing the Paris Aligned Asset Owners commitment.

The road ahead for PAII

Asset owners will be using the Net Zero Investment Framework as a blueprint for aligning their portfolios with a 1.5 degrees C, net-zero emissions future. The framework supports investors in developing a net-zero investment strategy built around six core components: governance and strategy, objectives and targets, strategic asset allocation, asset class alignment, policy advocacy, and investor engagement. The framework currently covers four asset classes (listed equity, corporate fixed income, real estate, and sovereign bonds), and work is being undertaken through PAII to include new methodologies and approaches for assessing alignment and supporting the transition of infrastructure, private equity, hedge funds, and derivatives. The investor networks are also developing additional tools and guidance to supplement the framework, including to support robust science-based target setting.

In relation to fossil fuel investments, the framework includes recommendations that investors should not allocate new capital to companies planning or constructing new thermal coal projects and associated infrastructure (power, mining) or taking forward new exploitation of tar sands and use escalating engagement with existing holdings to prevent these activities going forward.

Net Zero Investment Consultants Initiative (NZICI)

Investment consultants provide advisory services to asset owners on investment policies, asset allocation, and risk management amongst other areas. On a global basis, investment consultants are responsible for advising on the investment of trillions of dollars of capital. Since aligning capital flows will be critical to the net-zero transition, investment consultants can play a key role in the urgent need for coordinated finance action on climate change. These firms can facilitate understanding of climate risks and opportunities and help clients reflect net-zero alignment in asset allocation and portfolio decisions. In addition, investment consultants are often the critical link between asset owners and asset managers, with the potential to help clients select asset managers and design products that provide better alignment with net zero.

Launched in September 2021 at Climate Week NYC, the Net Zero Investment Consultants Initiative brings together 12 leading investment consultants, with collective responsibility for \$10 trillion of assets, to support the goal of reaching global net-zero greenhouse gas emissions by 2050 or sooner. First among these actions will be integrating advice on netzero alignment into investment consulting services as soon as possible and within two years of making this commitment and supporting efforts to decarbonise the global economy by helping their clients to prioritise real-economy emissions reductions. The signatories to this initiative recognise that the financial consequences of not achieving net zero are substantially adverse and this commitment is fully aligned with their clients' fiduciary responsibility toward their stakeholders, given those risks.

The commitments apply to investment advisory service and business operations. For those consultants who have fully discretionary mandates over client portfolios, the commitments include a pledge to align with the framework of Net Zero Asset Managers initiative.

Net Zero Financial Service Providers Alliance (NZFSPA)

Achieving net zero will require all parts of the financial system to be aligned in supporting the transition, including the services and products that inform financial decisions and form key parts of the market infrastructure. Launched in September 2021 at Climate Week NYC, the Net Zero Financial Service Providers Alliance brings together 22 leading organisations, including the world's two largest credit rating agencies, six major audit networks, three leading index providers, two global stock exchanges, data providers, and providers of advisory services, who will all be critical to unlocking a net-zero financial system.

As members of the NZFSPA, these organisations have committed to aligning all relevant services and products to net zero by 2050. Members will set science-based targets for their emissions, including interim targets for 2030, and report on their progress against those targets annually, including disclosures using existing frameworks such as those the TCFD recommendations.

This is a transformative step in embedding net zero across the whole financial system. Services providers play key roles in the assessment of risk and the provision of data and information that influence investment decisions. With this commitment, services providers will help to ensure that financial institutions have the data, information, and products needed to achieve their own net-zero goals, accelerating the transition and ensuring climate is considered at the heart of every professional financial decision.

Workstream Updates

Building Commitment



What commitment means

To ensure credibility, entry to GFANZ is grounded in the principles underpinning the UN's Race to Zero campaign. Members must use science-based guidelines to develop plans to reach net-zero emissions. The guidelines cover all emission scopes,²³ require 2030 interim targets, and commit alliance members to transparent reporting and accounting.

The Race to Zero campaign has an independent academic-led Expert Peer Review Group (EPRG) tasked with reviewing Race to Zero partner applications and ensuring that the initiatives meet the ambitious criteria established for participation.

Table 1: Race to Zero 'Starting Line' criteria

1	Pledge	 Pledge at the head-of-organisation level to reach net-zero GHGs as soon as possible, and by mid-century at the latest, in line with global efforts to limit warming to 1.5 degrees C
		$ullet$ Set an interim target to achieve in the next decade, which reflects maximum effort toward or beyond a fair share of the 50% global reduction in CO $_2$ identified as a requirement in the IPCC special report on global warming of 1.5 degrees C
2	Plan	Within 12 months of joining, explain what actions will be taken toward achieving both interim and longer-term pledges, especially in the short to medium term
3	Proceed	• Take immediate action toward achieving net zero, consistent with delivering interim targets specified
4	Publish	• Commit to publicly report progress against interim and long-term targets, as well as the actions being taken, at least annually
		 To the extent possible, report via platforms that feed into the UNFCCC Global Climate Action Portal
5	Scope	Cover all emissions, including Scope 3 for businesses and investors where they are material to total emissions and where data availability allows them to be reliably measured, and all territorial emissions for cities and regions
		 Leading targets may also include: cumulative emissions (for all actors) and consumption emissions (for cities, states and regions)
6	Sinks and credits	Alongside immediate abatement measures, potentially including external opportunities, transition to limiting offsets to neutralize "residual" emissions
		 Offsets portfolios should transition to permanent removals by the time net zero is achieved; ensure that all offsets meet robust standards for additionality, permanence, accounting, etc.
7	Empowerment and Equity	Seek to enable all actors to contribute to the global transition toward net zero through engagement, information sharing, access to finance, and capacity building

²³ Including portfolio Scope 1 & 2 emissions and, to the extent possible, material portfolio Scope 3 emissions.

The importance of commitment

This workstream is focused on broadening the nature and number of financial firms credibly working towards net zero. Now, in time for COP26, all key segments of the financial sector can get involved through dedicated subsector alliances that have rigorous entry requirements tailored to sector activities. Prior to GFANZ, there were no formal Race to Zero channels for banks, insurers, investment consultants, and financial services providers, and therefore no standardisation of what a credible net-zero commitment should look like from these firms.

GFANZ has experienced rapid growth since its launch in April, nearly tripling the number of firms from the original 160. Now, over 450 member firms represent over \$130 trillion in assets and a wide range of subsectors, firm sizes, business models, and geographies from Bangladesh to Brazil, Canada to the Caribbean, Kenya to South Korea, and Singapore to South Africa. This growth has been driven by both increasing membership in existing subsector alliances as well as the launch of new subsector alliances like the Net-Zero Insurance Alliance, the Net Zero Investment Consultants Initiative, and the Net Zero Financial Service Providers Alliance, whose commitments and plans are outlined in the section above.

In helping to create these subsector alliances and also helping grow existing alliances, GFANZ is mobilising the core of the financial system for the transition to net zero. In uniting all corners of the financial sector, GFANZ hopes to increase sector-wide collaboration on tackling common obstacles and pushing for system-wide change.



The Race to Zero is all about driving near-term action and systemic changes to put the entire world economy on a trajectory toward netzero emissions by 2050 at the latest. Because the financial sector plays a pivotal role in that transition, the High-Level Champions are delighted that GFANZ has united the world's largest coalition of financial institutions to take credible, impactful actions. Now the focus needs to be on real world outcomes. For these, we need delivery of net-zero targets, sector transition and phase out of fossil fuels with a just transition, and to work together on mobilisation, nature and resilience.

- Nigel Topping

UN High-Level Climate Action Champion at COP26

Figure 4: GFANZ and Race to Zero membership and the financial assets they represent

November '20²⁴ April '21 November '21 **Total Number of Member Firms** 160 **Financial Assets Across** \$130+ **Member Firms** (Tn) \$\$\$\$\$\$\$\$\$\$\$\$\$\$\$ \$ \$ \$ \$

²⁴ Membership and financial assets in Race to Zero prior to the launch of GFANZ.

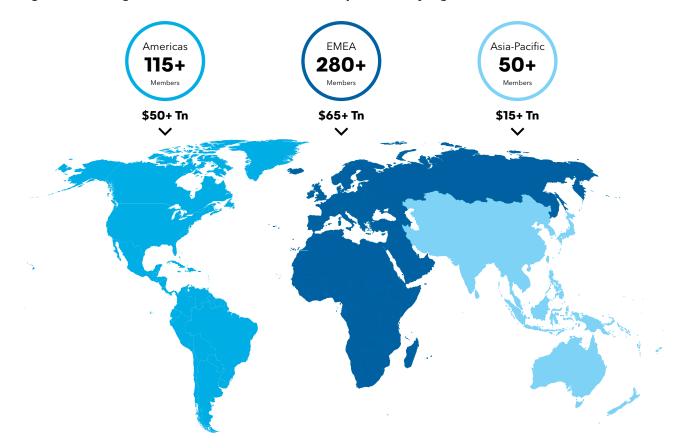


Figure 5: GFANZ global reach – members and assets represented by region²⁵

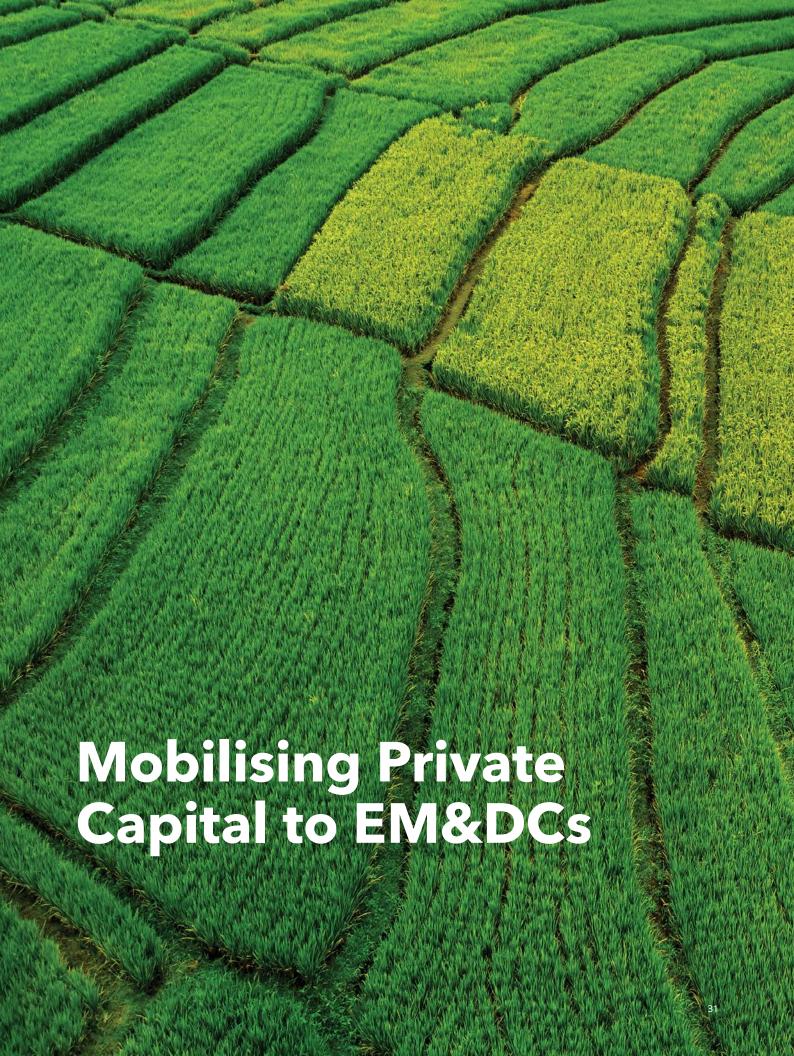
The road ahead

While GFANZ already engages with a large section of the financial industry, we want to continue to build our coalition to engage further and more effectively with governments and industries from around the world and help to amplify net-zero best practices throughout the economy. To that end, we will continue to work across alliances to build commitment and raise ambition, especially in underrepresented areas in Africa and Asia. We will also support the establishment of new alliances where needed.

We acknowledge that making a net-zero commitment is just the first step. More important are the implementation strategies for the short, medium, and long term, including interim targets for 2025 or 2030.

To support these efforts, GFANZ is working with its members to translate its net-zero ambitions into near-term actions. As outlined in the rest of this progress report, the GFANZ Principals Group, at the inaugural meeting in June, agreed to an ambitious work plan of deliverables to be taken forward under GFANZ auspices, working with a wider community of climate and other technical experts. GFANZ is committed to building on all the important work of subsector alliances as well as many other key climate finance initiatives in order to cross-fertilise, disseminate best thinking, and implement best practice.

²⁵ Assets represented by region based on member HQ domicile.



Vision and objectives

Our vision: supporting the mobilisation of private capital into emerging markets and developing countries (EM&DCs)²⁶ through private-sector leadership and public-private collaboration.

Transitioning the entire world economy to a net-zero pathway in time to avoid dangerous warming will require massive investment in EM&DCs. Current private-sector finance in these countries is a fraction of the order of magnitude needed. Previous attempts to expand private capital investments have foundered on fragmented approaches that are difficult to scale without the appropriate standards and conditions.

GFANZ can help policymakers create an international financial architecture that will more effectively mobilise capital for the climate mitigation and resilience needs of EM&DCs. This includes supporting the establishment of appropriate enabling policies foundational to increasing levels of private investment.

According to BloombergNEF (BNEF) and the Climate Finance Leadership Initiative (CFLI), lower-middle and low-income countries accounted for half of the world's population in 2020, but recorded just 5% and 0.3%, respectively, of annual global energy transition investment between 2011 and 2020.²⁷ The IEA estimates that clean-energy investments reached less than \$150 billion in EM&DCs in 2020 (excluding China).²⁸

Reflecting this, four key objectives have been agreed upon for the mobilising private capital task force:

- Increase private-sector capital flows to fund the climate transition in EM&DCs, and improve the
 reporting on climate transition capital flows to EM&DCs and on the enabling environment actions
 that support them.
- 2. Support the development of ambitious country platforms to accelerate action through stronger collaboration at the country level.
- 3. Deliver a step change in GFANZ members' engagement with key initiatives to catalyse funding in EM&DCs. This will be done through endorsement and, where relevant, funding commitments.
- 4. Increase the level of constructive engagement and collaboration between the private financial sector and multilateral development banks (MDBs) and development finance institutions (DFIs).

²⁶ EM&DCs have been defined using the World Bank income classification.

^{27 &}quot;Unlocking Private Climate Finance in Emerging Markets: Private Sector Considerations for Policymakers," CFLI, 2021, referencing BNEF data.

²⁸ Financing clean energy transitions in emerging and developing economies, IEA, 2021.

This task force's membership is broad – both in terms of its representation of business activities, which cover insurance, banking, asset management, pension schemes, and financial market infrastructure, and its geographic footprint, which spans Europe, North America, Africa, South America, and the Asia-Pacific region. This helps ensures that a broad financial sector perspective is represented throughout the work and that key learnings from EM&DCs are reflected.

Programme of work

There has been significant work done to date on mobilising capital to EM&DCs. We have conducted a stocktake exercise to understand how the existing work pieces together and helps define the ways that GFANZ can meaningfully contribute. This includes a review of key barriers to private-sector investment within EM&DCs,²⁹ a long list of Catalytic Initiatives that could channel further capital into these markets,³⁰ and a review of existing work on MDB reform that could inform potential collaborations going forward.³¹

EM&DC member financing activity and opportunity

GFANZ member institutions have over \$130 trillion in assets, of which about \$57 trillion is from members of the Net Zero Asset Managers initiative and over \$63 trillion is from the Net-Zero Banking Alliance.³² Of this, an estimated \$7+ trillion³³ is currently allocated to EM&DCs. As GFANZ members are committed to supporting the decarbonisation of their activities, including within EM&DCs, this places the \$7+ trillion on a pathway to net zero emissions.³⁴

However, EM&DCs require substantially more net-zero aligned capital. The IEA estimates that by the end of this decade, new investment in the energy transition of EM&DCs must expand by more than seven times, to above \$1 trillion per year, to put the world on track to reach net zero emissions by 2050. Furthermore, this a conservative estimate – it is just the investment need for transition of the energy sector and excludes China.

²⁹ Example materials reviewed include efforts such as SMI's Scaling Private Sector Investment report.

³⁰ Sources include Climate Champions, task force members, and independent research.

³¹ Reports include the G20 Eminent Persons Report, and the SMI's 'Towards a New Bretton Woods' concept document.

³² As per data provided by subsector alliances as of November 2021.

³³ Analysis of public disclosures complemented by third party data (including Capital IQ, Bloomberg, Refinitiv, Morningstar, Broadridge, Preqin) and public disclosures. Estimates subject to change with changes or additions to GFANZ membership.

³⁴ Financing clean energy transitions in emerging and developing economies, IEA, 2021.

Subject to the appropriate enabling conditions, GFANZ members from across the financial sector value chain stand ready to increase their funding to help close this gap (see Mobilisation Statement of Support). This would include fresh capital investments as well as enabling the recycling of committed capital and corporate financing by supporting more activity in public markets and creating appropriate opportunities for institutional investors to participate.

Going forward, GFANZ also recognizes the importance of better monitoring and understanding the drivers of climate finance flows across EM&DCs and reporting on progress and challenges. We commit to explore and support new initiatives that can address this information gap in the months after COP26.



GFANZ supports the development of ambitious country platforms that accelerate climate action through stronger collaboration at the country level. CFLI India is a promising first example in bringing together international and domestic financial institutions, corporates, governments and existing sustainable finance initiatives to create the necessary investment conditions to accelerate India's journey towards net zero. Moving beyond India, the country platform model has the potential to be replicated and adapted to more sectors and new geographies to drive change on a global scale.

- Shemara Wikramanayake

Managing Director and Chief Executive Officer, Macquarie

Country platforms

A country platform is a mechanism that convenes and aligns stakeholders – including national and international governments, businesses, NGOs, civil society organisations, donors and other development actors – around a specific issue or geography to agree on and coordinate priorities.³⁵

These present a unique opportunity to align available financing to investible projects that are net-zero-aligned and that support ambitious Nationally Determined Contributions (NDCs). They can also catalyse the enabling environment reforms that will mobilise further capital.³⁶ Such platforms provide a supportive environment for the private sector to deploy and scale up capital in EM&DCs by bringing transparency, accountability, and support from public and international financial institutions, which can deploy measures to lower risk where relevant.

Stakeholders expressed the view that country platforms represent a key opportunity for GFANZ member collaboration. We acknowledge that high levels of collaboration between investors and project sponsors are required to drive learning on both sides and make projects attractive as investments. Country platforms have been tested as a means for international cooperation, including receiving support at the G20 level.³⁷

One early example of a country platform initiative is CFLI's³⁸ Country Pilot in India. Launched in September 2021, it is led by Bloomberg's CFLI, supported by the governments of India and the UK, and involves major private-sector Indian and multinational corporations and financial institutions. GFANZ will work to support CFLI Country Pilots in India and other countries as they emerge. GFANZ members are also already working on country financing models through the SMI, and as opportunities arise, will look to collaborate with other initiatives and organisations.³⁹

³⁵ Country platforms were highlighted in the G20 Eminent Persons Report, which outlined some of the principals of country platforms.

³⁶ CFLI's private sector considerations for policymakers "highlights the policies that governments in emerging markets can advance – with support from business and the international community – to facilitate the mobilisation of private-sector investment highlights the policies that governments in emerging markets can advance – with support from business and the international community – to facilitate the mobilisation of private-sector investment".

³⁷ Country partnership platforms have received support from the international community. For example, the G20 Eminent Persons report offers this as a recommendation. The G20 Leaders' Declaration from the 2020 G20 Riyadh summit offers support for the G20 Reference Framework for Effective Country Platforms.

³⁸ Climate Finance Leadership Initiative.

³⁹ For example, the Country Financing Roadmap (CFR) for Sustainable Development Goals (SDGs) in Ghana, launched in June 2021, a partnership between the Ghanaian government and the World Economic Forum's Sustainable Development Investment Partnership (SDIP), and involving consultations with more than 50 local and global stakeholders – involving public sector institutions, thought leaders, investors, development finance institutions and other actions, such as the SMI. Another example could be SMI's work on developing an investment pipeline tool.

We expect country platforms to lead to broad financing opportunities across the investment value chain and also offer a platform for appropriate Catalytic Initiatives to be effectively deployed. Select GFANZ members involved with country platforms will engage in the following ways:

- Specification of key elements of the country partnership platform. GFANZ members can actively help define elements required in country platforms that will maximize opportunities for net-zero-aligned, private-sector financial institutions to participate.
- Define the areas where there is most opportunity for private- and public-sector collaboration in a country. GFANZ members will need to coordinate with MDBs and DFIs to scale up investment in target bankable projects.
- Estimates of private capital mobilisation potential and prioritise sectors for investment.

 When GFANZ members have a market presence in the country where the partnership platform is being implemented, they could provide input on the sizing of required funding needs (for projects in areas such as renewable energy) and provide a view of potentially available financing.
- Integration of appropriate Catalytic Initiatives. A number of the GFANZ-selected Catalytic Initiatives relate to the financing needs in targeted EM&DCs. GFANZ members could facilitate the link between Country Platforms and the related Catalytic Initiatives.
- Enable scaling and replication of models that have worked elsewhere. GFANZ members can enable scaling of country partnership platform models that have proven successful to more sectors and new geographies.

Going forward, GFANZ is keen to work with the international community, public finance institutions (PFIs), DFIs, MDBs, and EM&DC governments to provide input on both the design and implementation of country platforms. Through the support of GFANZ, we intend to maximize the private capital mobilisation potential of these platforms.

Catalytic Initiatives specific to EM&DCs

GFANZ CEO Principals have agreed to endorse CFLI Country Pilots, ⁴⁰ FAST-Infra, Global Energy Alliance for People & Planet (formerly known as Smart Power X), Mobilist and Innovative Finance for the Amazon, Cerrado, and Chaco (IFACC)⁴¹ as the initial Catalytic Initiatives. This is intended to raise the profile of selected initiatives, provide a formal connection between the initiatives and GFANZ members, and offer a path toward additional capital mobilisation to EM&DCs. Furthermore, by showcasing the mechanisms and successes of these initiatives, we hope to incentivize and encourage other GFANZ members to participate and thereby ratchet up capital flows to net-zero aligned climate solutions in EM&DCs. GFANZ members will continue to evaluate and endorse, as appropriate, an evolving list of specific Catalytic Initiatives after COP26.

⁴⁰ As a starting point GFANZ members could be involved with CFLI's India pilot. CFLI would welcome GFANZ members being part of forthcoming country pilots.

⁴¹ All Catalytic Initiatives will require a GFANZ member sponsor and need to be 'signed off' in accordance with working group governance processes.

We have adopted the following approach to selecting initiatives for GFANZ member endorsement:

- Monitor, on an ongoing basis, Catalytic Initiatives for potential GFANZ endorsement, including suggestions by alliance members and technical experts. Collate into a 'long-list' for review every six months. Prior to COP26, a list of about 70 Catalytic Initiatives had been identified. Sources include Climate Champions, task force members and workstream leads.
- Adopt an assessment framework to determine which initiatives represent best practice
 and which would benefit most from GFANZ endorsement (Figure 6). The framework outlines
 seven criteria to evaluate EM&DC-specific Catalytic Initiatives for endorsement.
- Determine the GFANZ endorsement activities that are the most useful to the initiative. Work with the short-listed initiatives to determine the specific ask of GFANZ members and what GFANZ endorsement effectively means.
- **Define a GFANZ member 'sponsor' for each initiative.** Different initiatives will understandably ask for and require different support. While we aspire for multiple GFANZ members to get involved with a given initiative, in practice we expect that there will need to be at least one GFANZ main sponsor for an initiative.

Figure 6: Assessment criteria to select and endorse EM&DC-specific Catalytic Initiatives

Alignment

The objectives of the initiative are aligned with GFANZ's objectives and commitment to net zero (e.g. provision of public capital to catalyse private flows in EM&DCs)

9 Geographic focus

The initiative would have a material impact on lower, lower-middle or upper-middle income countries, and/or Small Island Developing States (SIDS)

2 Eligibility as a climate postitive solution

The initiative is a clear and measurable climate positive solution that supports the transition toward net zero

■ Mobilisation

The initiative directly and/or indirectly enables the mobilisation of previously underutilised capital pools for the transition in EM&DCs, especially institutional investors and public markets

Impact

GFANZ member involvement could have a significant impact on the initiative with regard to institutional recognition and/or access to funding that otherwise would not have been available

Scalability

The initiative is ready to execute at scale within a reasonable timeframe. It can also be further replicated across sectors and/or geographies with investment

7 Credibility

The initiative has effective governance established in order to manage the investment opportunity and accelerated growth

GFANZ endorsement of Catalytic Initiatives could take the following forms:

- Providing technical advice or subject matter expert input.
- Committing capital.
- Scaling up to other sectors or countries.
- Supporting the institutionalisation of principles and standards.
- Encouraging public- and private-sector collaboration.

Going forward, GFANZ will put in place a governance framework that will allow GFANZ members to regularly identify, select, and short-list (via assessment criteria) the Catalytic Initiatives for future endorsement. GFANZ will also monitor and report the impact of endorsed initiatives.

Proposals to increase MDB-private sector collaboration

MDBs play a critical role in helping to grow investment flows to reflect the seven-fold increase that will be required for clean energy alone within EM&DCs by the end of the decade.⁴² Their contribution to climate finance has increased to around \$40 billion per year over the 2018-2020 period, but the level of private finance mobilisation varies greatly from a ratio of 0.14 dollar of private to public capital mobilisation at the lower end to 2.42 at the higher end.⁴³ The recent clearance of the \$660 billion in special drawing rights by the International Monetary Fund (IMF) also creates an unprecedented opportunity to increase multilateral financial flows to support a green recovery and accelerate the transition of EM&DCs to net zero.

This changing global landscape of MDBs, and their approaches to mobilizing climate finance, follow multiple rounds of recommendations on how the overall system could be improved. In October 2018, the G20 published a comprehensive study on Global Financial Governance,⁴⁴ led by an Eminent Persons Group (chaired by Tharman Shanmugaratnam), which developed broad recommendations on reforms to the global financial architecture and governance of the system of international financial institutions to promote economic stability and sustainable growth. The UN's Global Investors for Sustainable Development (GISD) alliance outlined a set of recommendations to support private finance mobilisation in its paper on asks towards the development community. Another important effort, led by a number of financial institutions under the SMI, has developed a pragmatic concept note titled "Seizing the New Bretton Woods Moment" (September 2021), offering actions to facilitate increased private capital flows and provide systems-level solutions.

⁴² Refers to clean energy investment only and excludes need in China. Financing clean energy transitions in emerging and developing economies, IEA, 2021.

⁴³ Climate Finance Joint Report on MDBs 2020, (ratios are for EM&DCs only, with IDBG the highest). Reflects private finance dollars raised for every dollar of public finance.

⁴⁴ Report of the G20 Eminent Persons Group on Global Financial Governance (EPG): Making the Global Financial System Work for All, 2018.

These papers, and others reviewed as part of our stocktake exercise on existing work on MDB reform, offer several suggestions as to how the private sector can work with MDBs to materially move the dial for mobilisation of private capital in climate finance in EM&DCs.

Going forward, we will use GFANZ to support stronger engagement between private-sector financial institutions, MDBs, and DFIs in partnership with other groups like SMI.

Policy Call to Action

Our workstream also provided input to the overall GFANZ policy Call to Action to G20 leaders. The challenges in mobilizing climate finance to EM&DCs require concerted action by governments around the world. Below is our contribution to the policy call to action:

Mobilise capital flows to emerging markets and developing countries.

There is an urgent need to deploy private capital in emerging markets and developing countries to enable them to realize the commitments made in the Paris Agreement. The current scale of public and private capital flows is modest in relation to the trillions of dollars in sustainable investment needed for these nations to meet the challenges ahead.

To unlock this capital, the international community, led by the G20, should coordinate to:

- Develop a network of country mobilisation platforms, supporting the work of the CFLI,⁴⁵ to bring together governments and policymakers with public and private finance institutions and Catalytic Initiatives. These platforms would help identify barriers to investment, support the creation of investment-friendly policy frameworks, better coordinate financial and technical assistance, and mobilise international and domestic private capital, to support the delivery of ambitious NDCs.
- 2. Support the work of multilateral development banks and development finance institutions to strengthen their private climate finance mobilisation plans to enable increased private-sector capital deployment in emerging markets and developing countries. When geared to catalyze private-sector investment, MDBs have already demonstrated that they can mobilise twice as much private capital as the public resources they deploy in a project or fund.⁴⁶
- 3. Ensure that changes in global financial regulation recognize the unique challenges faced by EM&DCs in their transition to net zero and enable the increased mobilisation of public markets and institutional investors to increase the level of finance they deploy to these markets in the future.

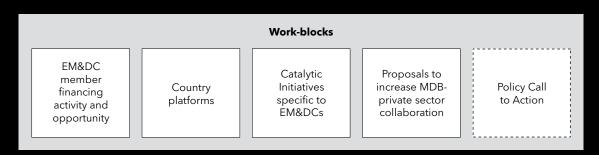
GFANZ commits to use our collective positive influence to work with governments, regulators, societies, and others to accelerate the world's transition to net zero.

⁴⁵ Further details of CFLI and their approach provided on their website.

⁴⁶ The recent report, Joint Report on Multilateral Development Banks' Climate Finance 2020, references private funding that was catalysed as a result of public investment.

GFANZ Mobilisation Statement of Support

The below 'Statement of Support' will be publicised at a COP26 Capital Mobilisation event during Finance Day on the 3 November. The content is a summary of the detail provided in the earlier sections of this chapter (see figure below).



GFANZ Mobilisation Statement of Support

With sufficiently ambitious Nationally Determined Contributions (NDCs) and the right country platform frameworks, GFANZ expects the flow of private financing of EM&DC transitions to be consistent with the annual investment needs of over \$1 trillion by the end of this decade. This is a sevenfold increase in today's investment levels. ⁴⁷ GFANZ members will work with stakeholders to create the right conditions for this increased investment, are already committed to aligning their current \$7+ trillion of assets in these countries to a net zero pathway and help catalyse public markets to finance the transition to net zero in EM&DCs.

- GFANZ members recognize that many emerging markets and developing countries (EM&DCs) are most vulnerable to the devastation of climate change and least equipped to finance their transition and resilience needs.
- As the world's largest coalition of financial institutions committed to transitioning the world economy to net zero, GFANZ members commit to working with policymakers to create a new financial architecture with the enabling conditions required to transform the current billions of finance and investment into the trillions needed for EM&DCs. To that end, we are:

⁴⁷ Reflects clean energy investment need only. In reality, the investment need required will be much bigger and include other types of climate finance. Source: Financing clean energy transitions in emerging and developing economies, IEA, 2021. Reflects clean energy investment need that will be required by the end of the decade within EM&DCs if the world is to meet net zero by 2050. Estimates exclude China.

- Committing to working with the G20, Multilateral Development Banks (MDBs), Development Finance Institutions (DFIs), EM&DC governments, and private-sector partners to provide support on the expansion of country platforms globally, a model that focuses on public-private collaboration on enabling environments, creating catalytic finance opportunities, and mobilizing more parts of the private finance sector value chain, including public institutional investors. This dovetails with the work of the Climate Finance Leadership Initiative (CFLI),⁴⁸ which, through their country pilots, is testing a model that tailors country platforms to climate and private capital.⁴⁹
- Endorsing an initial set of impact-driven Catalytic Initiatives, which together represent tens of billions in investment opportunity and, more importantly, allow GFANZ to play market and investment-enabling roles. These are CFLI Country Pilots,⁵⁰ FAST-Infra, Global Energy Alliance for People & Planet, Mobilist and Innovative Finance for the Amazon, Cerrado and Chaco (IFACC).⁵¹ We will continue to grow the list of initiatives we endorse and support in the years to come.⁵²
- Committing to an ongoing, structured engagement with MDBs and DFIs to strengthen relationships and identify tangible mechanisms through which more private capital can be catalyzed.^{53,54} MDBs have already demonstrated that they can mobilise twice as much private capital as the public resources they deploy in a project or fund. Their contribution to climate finance has increased to around \$40 billion per year over the 2018-2020 period, but the level of private capital mobilisation varies greatly, from 0.14x of private to public capital mobilisation ratio at the lower end to 2.42x at the higher end.⁵⁵ We will seek to build on existing work and collaborate through a constructive partnership to materially move the dial for mobilisation of private capital in climate finance in EM&DCs.
- We understand and recognise the specific needs and challenges around scaling up climate finance investments in these markets. To enable greater levels of private capital investment, countries need to create the right high-level, cross-cutting enabling environments. This will establish investment-friendly business environments; a replicable framework for deploying private capital investments; and pipelines of bankable investment opportunities.⁵⁶ Private capital and investment will flow to these projects if governments and policymakers create the appropriate conditions.

⁴⁸ Further details of CFLI and their approach provided on their website.

⁴⁹ This also connects with the work being done by the Sustainable Markets Initiative (SMI) on country financing roadmaps and capital mobilisation.

⁵⁰ As a starting point GFANZ members could be involved with CFLI's India pilot. CFLI India would CFLI would welcome GFANZ members being part of forthcoming country pilots.

⁵¹ All Catalytic Initiatives will require a GFANZ member owner and need to be 'signed off' in accordance with working group governance processes.

⁵² These will be published and updated on the GFANZ website on an ongoing basis. We understand identification of initiatives is a tangible but initial step on the journey to mobilising capital to climate solutions in low-, lower- and middle-income countries. Future initiatives will vary across geographies and include Small Island Developing States (SIDS).

⁵³ This will involve building on the significant work that has already been done. The changing global landscape, and proliferation of various development institutions and MDBs, have led to multiple rounds of recommendations on how the overall system could be improved. They include the G20's comprehensive study on Global Financial Governance (the Eminent Persons report) in 2018, the UN's Global Investors for Sustainable Development (GISD) report in October 2021, and the Sustainable Market Initiatives in September 2021.

⁵⁴ We are looking to explore how we can collaborate with the Sustainable Markets Initiative on these issues as well.

⁵⁵ Climate Finance Joint Report on MDBs 2020, (ratios are for EM&DCs only, with IDBG the highest).

⁵⁶ An example of this is the CFLI India pilot.

- Where countries have established these investor-friendly environments, there has been increased
 private-sector capital deployment, most often in middle-income emerging market countries.
 The challenge is most acute in developing countries where there will be a need for stronger
 partnerships between private and public finance to support their transitions.
- GFANZ members already have a significant presence in EM&DCs, with an estimated \$6 trillionplus currently allocated to these countries. With sufficiently ambitious NDCs and the right
 country platform approach in place, we are committed to supporting the decarbonisation of our
 investment and financing activity in these markets and deploying additional capital to enable
 EM&DCs to achieve net zero targets.

Estimates indicate that by the end of the decade over \$1 trillion will be required for clean energy investment alone if we are to reach net zero by 2050. This reflects a sevenfold increase from today's levels, 57 even before considering other types of climate finance needs, like agriculture. Beyond finance for new assets, delivering the transition across EM&DCs will also require mobilizing public markets to fund corporate and sovereign decarbonisation strategies and attracting institutional investors to recycle deployed capital.

The road ahead

Moving forward, this task force will focus on the priority areas outlined above. We will ensure GFANZ is connected to efforts underway in other GFANZ workstreams and to the activities of other stakeholders working to mobilise capital in EM&DCs.

⁵⁷ Reflects clean energy investment need only. In reality, the investment need required will be much bigger and include other types of climate finance. Source: Financing clean energy transitions in emerging and developing economies, IEA, 2021. Reflects clean energy investment need that will be required by the end of the decade within EM&DCs if the world is to meet net zero by 2050. Estimates exclude China.



Vision and objectives

Our vision: to catalyse successful agreement on net-zero pathways with several major global industries, thus enabling clearer financial decisionmaking in support of transitioning sectors.

Defining net-zero sectoral pathways is critical for the global economy to reach net zero and for financial institutions seeking to align their portfolios with that goal. A sectoral pathway sets out a clear roadmap for decarbonisation in a given industry. This, in turn, provides an important reference point for financial institutions to understand how well aligned individual companies or projects are to net zero, which further drives decisions around capital allocation and climate-related engagement.

Several multi-stakeholder initiatives are developing decarbonisation pathways for certain sectors, but many sectors lack sufficiently detailed, ambitious, and credible pathways. Across existing pathways, key assumptions differ, for example over issues such as the use of negative emissions and possible technology developments. These differences hold potentially significant implications for the rate of decarbonisation in the sector.

Reflecting this, four key objectives have been agreed to for this task force:

- 1. Articulate the needs and expectations of financial institutions for actionable sectoral pathways.
- 2. Engage with sector initiatives as they develop sectoral pathways to represent financial perspectives.
- 3. Support the adoption and enhancement of sectoral net-zero pathways.
- 4. Support the development of mechanisms for the responsible retirement of carbonintensive assets.



Developing sectoral-specific pathways to net zero will enable the financial sector and key industries to work together to accelerate our transition.

Jane Fraser
 Chief Executive Officer, Citi

Conclusions and key outputs from the stocktake

This workstream began by taking stock of the existing spectrum of work on sectoral net-zero pathways. Whilst there is no single authoritative definition of a sectoral net-zero pathway, it can be considered as a set of qualitative and quantitative steps that a sector needs to follow to reach a decarbonisation goal and the corresponding key economic and emissions variables for the industry.

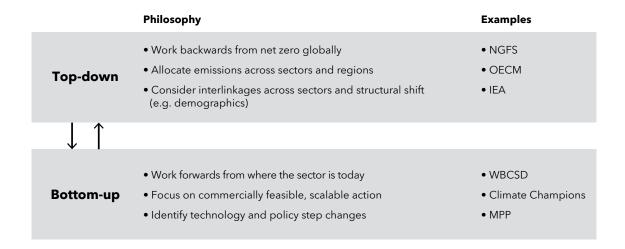
One driver of differences in output and structure of sectoral net-zero pathways is that existing pathways' development has been both bottom-up and top-down.

Bottom-up pathways are generally the outputs of industry-based net-zero initiatives. These initiatives typically have less of a focus on interaction effects across the economy and more of a focus on the practical steps that the industry at issue can take to make progress. There are fewer of these bottom-up pathways in existence, and many gaps currently remain in sector coverage and alignment. Examples of bottom-up pathways include those developed by the UNFCCC's Climate Champions and those being worked on by the Mission Possible Partnership (MPP).

Top-down pathways, by contrast, are typically created by integrated models like those used by the Network for Greening the Financial System (NGFS). These include many variables and – by design – create a pathway for the economy as a whole to move towards net zero. However, given the size and complexity of these models, they require a simplification of assumptions when applied to specific sector behaviour.

Both types of pathway provide valuable insights for financial institutions looking to support real economy decarbonisation. Top-down pathways often best represent the ambition level to get to net zero, while bottom-up pathways represent the industry's view of the most feasible steps to get there. At the same time, existing differences between top-down and bottom-up perspectives present challenges to financial institutions seeking clarity on credible pathways against which to gauge progress.

Figure 7: Overview of top-down vs. bottom-up pathways



Differences also exist in the key assumptions and structures of existing pathways. These start with the definition of net zero. Whilst many overall and sectoral net-zero pathways have been created, they may define net zero differently. For example, some pathways define net zero as net zero for CO₂, whereas others consider net zero to mean net zero for all greenhouse gases. There are also important differences in the granularity of the output – for example, by activity or geography.

The evolution of whole industries and their impact on the climate is inherently complex to model, and there will be important matters on which informed experts will disagree. Yet the more that pathways can be expressed in a common language, with common ways of explaining the gap between what is commercially feasible today and what still relies on breakthroughs in technology and policy, the more valuable they will be to financial institutions seeking to use them to inform their investing and lending decisions. A helpful conception of the credible range of values between different pathways is as a corridor – see Figure 8 for an illustrative example. It is essential to understand the underlying assumptions driving the differences in approaches to be able to converge on preferred pathways (or corridors) that are high ambition, commercially feasible, technologically viable, and economically just. Given the scale of the transition required, the path followed will have significant economic and social impacts – for example, potentially causing changes in inflation and shifts in energy supplies.

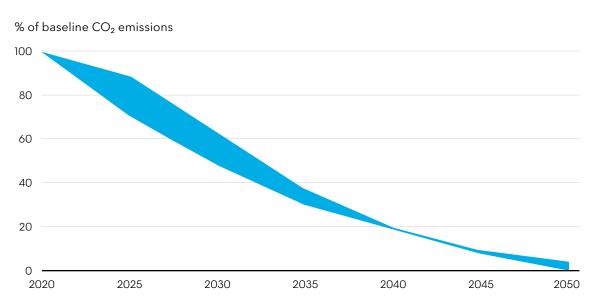


Figure 8: Illustrative example of a corridor for the development of global emissions spanned by various 1.5 degrees C scenarios

Pathway maturity also varies significantly across sectors. Financial initiatives have begun by examining pathways in a few carbon-intensive sectors, such as energy (in particular, electric power generation), transportation, and heavy industries. However, work is lagging in other carbon-intensive sectors such as agriculture. Figure 9 summarises the current state of sectoral pathways across key sectors.



The financial sector stands behind the ambition to decarbonise the real economy. We will help finance this transition and work with different industries to define the sectoral pathways. It is also crucial for a successful transformation that it is implemented fairly for the majority of people and that they support it.

- Oliver Bäte

Chief Executive Officer, Allianz SE

Figure 9: Overview of current state of sectoral net-zero pathways used by financial institutions as of Q3 2021

	One Earth Climate Model	Network for Greening the Financial System	International Energy Agency	Mission Possible Partnership	Climate Action 100+	Transition Pathway Initiative	World Business Council for Sustainable Development
Agriculture	√	√					√
Aluminium	√	√		√		√	
Cement	√	√	√	√	✓	√	_
Chemicals	√	√	√	√	✓	√	_
Coal	√	√	√		✓	√	_
Commercial & Residential Real Estate	√	√	√				– Sector work
Steel (& Iron)	√	√	√	√	✓	√	more focused on SDGs rather
Oil & Gas	√	√	√		√	√	 than explicit decarbonisation
Power Generation	V	V	√		√		— pathways
Transport	√	√	√		√	√	_
a. Aviation	√		√	√	✓	√	_
b. Shipping	√		√	√		√	_
c. Trucking	√		√	√			_
d. Autos	√		√			√	_

Programme of work

Engagement with industry initiatives to develop sector pathways

To articulate the needs and expectations of financial institutions for actionable sectoral pathways, this task force has developed a draft framework for sectoral net-zero pathways that incorporates work from both financial initiatives and sectoral organisations. This framework intends to provide structure in engaging with pathway developers. Over time, more detailed guidance may be added to the framework to create resources to help financial institutions evaluate sectoral net-zero pathways and assist pathway developers. In evaluating a pathway, the framework considers the Race to Zero criteria committed to by GFANZ member alliances.

Table 2: Draft framework for developing, interpreting and assessing sectoral net-zero pathways

Key	pat	hwa	ıy
cons	side	rati	ons

Key questions to consider

Ambition and alignment with existing commitments

Net-zero and temperature alignment

- Is there alignment to net zero by 2050? Does that include all GHGs or just CO₂?
- Is there alignment to a 1.5 degrees C low or no-overshoot scenario?
- Is the pathway consistent with a 1.5 degrees C world in 2050?

Negative emissions

- To what extent does the pathway rely on GHG removals?
- What are assumptions around carbon sinks? What technologies are considered?
- Are removal assumptions consistent with commonly-used, net-zero aligned, top-down models?

Metric type

- What types of metrics are included in the pathway (production, emissions, etc.)?
- Are metrics absolute or intensity based?

Feasibility and development process

Economic feasibility

• Have the appropriate parties been engaged to evaluate (a) the economic feasibility of the pathway and its associated decarbonisation actions, (b) the way in which it has been modelled?

Commercial feasibility

• Have the appropriate groups been engaged to evaluate the commercial feasibility of the pathway?

Technological assumptions

- What are the underlying assumptions? Have they been assessed by appropriate industry groups?
- Are technological elements adequately defined?
- Is there detail around achievability of technology used within the pathway and policy guidance on how to get there?

Policy details

• Have the appropriate parties been engaged to evaluate (a) the assumptions around policy in the pathway, (b) the way in which policy implications have been factored into the pathway?

Scope and coverage

Geographical granularity

• Is the pathway sufficiently granular in terms of geography?

Subsector granularity

- Are there subsectoral pathways?
- Do sector and subsector definitions align with commonly used industry classification systems?

Integration with other sectors

- To what extent does the pathway consider impact on or of other sectors?
- What are the Scope 3 emissions reporting and reduction policies?

Integration with other sustainability goals

- Does the pathway support other local or global sustainability or environmental goals?
- Does the pathway create conflicts with other local or global sustainability or environmental goals?

Emissions

- Will the pathway achieve net zero for the sector across Scopes 1, 2, and 3 (both upstream and downstream Scope 3 emissions)?
- Are subsector emissions defined?

Investment/ financing needs

- Are factors including financing and investment included in the pathway?
- Are there clear ways that the financial sector can support sectoral decarbonisation?

Frequency of milestones • Is the timing/frequency of interim stages in line with credible, net-zero aligned, top-down models?

This task force will work with the real economy and plug into sectoral initiatives, financial initiatives, and financial alliances driving pathway development. GFANZ does not intend to establish its own sectoral net-zero pathways through this workstream. Instead, GFANZ seeks to catalyse and support pathway development already underway. By bringing a broad financial perspective, the workstream will consider how a sectoral pathway fits into the wider vision of a low-carbon economy. In more mature sectors, this task force will support existing efforts – for instance, by joining industry working groups and referencing the task force's sectoral net-zero pathway framework (see Table 2) to review progress and mainstream the adoption of net-zero pathways.

There are a number of models that produce top-down decarbonisation pathways for a wide range of sectors. A few of these are already being used by financial institutions to conduct scenario analyses and set net-zero targets. This workstream has begun outreach to the developers of these commonly-used models to better understand their key assumptions and identify the attributes of credible, high-ambition pathways. The organisations that the workstream has initially engaged include:

- The University of Technology Sydney (UTS), which was commissioned by the NZAOA to develop a global pathway to net zero. UTS has created the One Earth Climate Model (OECM), which provides a low or no-overshoot 1.5 degrees C aligned net-zero pathway with carbon emissions, energy intensity and carbon intensity milestones in five-year intervals for all major sectors.
- The International Energy Agency (IEA) is considered the world authority on energy. The IEA released a Net Zero by 2050 (NZE 2050) pathway for the global energy system earlier this year.
 NZE 2050 details the steps required to transition to a clean, dynamic and resilient economy powered by renewables.
- The Network for Greening the Financial System (NGFS) is a collection of nearly 100 central banks and supervisors interested in promoting financial stability and sustainability. In coordination with three globally renowned climate research institutes Potsdam Institute for Climate Impact Research (PIK), the University of Maryland (UMD), and the International Institute for Applied Systems Analysis (IIASA) the NGFS has developed climate scenarios for financial sector users. Their orderly net-zero 2050 scenario defines an ambitious and coordinated action to a net-zero economy.

The workstream has also begun exploring the bottom-up sectoral pathways and the industry initiatives that have created them.

This task force will take a sector-by-sector approach to engagement, initially engaging with two primary sectors: aviation and steel. The task force selected these sectors based on their prioritisation by financial initiatives and alliances, their appreciable and growing share of global emissions, and the presence of initial sectoral net-zero pathways, which GFANZ can engage with. In addition, the task force will explore oil and gas and connect with relevant industry initiatives, but more comprehensive sectoral engagement will commence after the work in steel and aviation.

Table 3: Rationale for selecting initial prioritised sectors

Sector	Overall rationale	Priority for net- zero alliances	Current state of sectoral pathway development	Materiality of emissions
Aviation	 Intensive and growing share of emissions Challenges to decarbonisation 	Transport is a priority sector for NZAOA & NZBA	Sector pathways developed, including by MPP (Clean Skies) and NZAOA	Transport accounted for 21% of CO ₂ emissions in 2020, with aviation accounting for nearly 10% of that and rising
Steel (& Iron)	 Hard to decarbonise sector Key contributor to industrial emissions 	Priority sector for NZAOA & NZBA	Sector pathways developed, including by MPP (Net Zero Steel)	Industry accounted for 25% of CO ₂ emissions in 2020, of which steel is a large contributor
Oil & Gas	 Major contributor to emissions Decarbonisation requires significant transformation of the industry 	Priority sector for NZAOA & NZBA	Sector pathways can draw on detailed IEA modelling; pathways are being explored by industry groups such as the Oil and Gas Climate Initiative (OGCI)	Oil & Gas are major energy sources for transportation and power generation and as such drive a large share of global emissions

Initially prioritised sectors

For aviation, most pathways emphasise a massive expansion in the use of sustainable aviation fuels (SAF), although current market penetration of these fuels is low and they are expensive. Regionally distinct aviation regulations also pose challenges for the development of a coordinated decarbonisation pathway.

Important industry-led aviation initiatives include Clean Skies for Tomorrow (CST), part of the Mission Possible Partnership (MPP). The initiative's primary focus is around expanding the use of SAF and is supported by 13 global aviation companies. The International Civil Aviation Organization (ICAO), the world's largest aviation industry group, has created the Global Coalition for Sustainable Aviation to explore technology, operations, and infrastructure solutions to decarbonisation. Within Europe, Destination 2050 is a collective effort that has developed a pathway for getting that continent's aviation emissions to net zero by 2050.

For steel, electrification of production is widely acknowledged as a method to reduce emissions in this energy-intensive sector. Hydrogen has also recently emerged as a promising energy source for iron reduction. While multiple steel pathway initiatives exist, some lack nuances, such as a distinction between primary and secondary steelmaking, which produce very different levels of emissions.

Industry-led steel initiatives include the Net-Zero Steel Initiative (NZSI), part of MPP. NZSI focus areas include the development of a net-zero roadmap and the creation of a coalition of industry actors committed to net zero. The Net-Zero Steel Pathway Methodology Project (NZSPMP) has produced guidance for steelmakers seeking to commit to net zero and has set interim emission-reduction targets. It is comprised of 15 of the largest global steelmakers.

For oil and gas, decarbonisation demands a transformation of the sector's business model. As a result, decarbonisation pathways show significant variation. However, pathways typically contain three decarbonisation strategies to reach net zero: reductions in emissions intensity, replacement with zero-emission energy sources, and negative emissions technologies such as carbon capture and storage (CCS).

Important industry-led oil and gas initiatives include the Oil and Gas Climate Initiative, which has declared support for the Paris Agreement and its goals. It is focused on reducing methane and CO_2 emissions intensities and developing economically viable commercial scale CCS. The International Petroleum Industry Environmental Conservation Association (IPIECA) is a broad group of firms that is working on outlining decarbonisation pathways for the sector.

Engagement with sectoral initiatives and pathway creators will enable financial institutions to use these pathways more effectively in their overall decarbonisation strategy.

Responsible retirement of assets

Another critical piece of work of this task force is developing mechanisms for the responsible retirement of carbon-intensive assets in order to ensure that these assets are decommissioned in a time frame consistent with a science-based net zero pathway by 2050 without endangering a just transition.

Transitioning, decommissioning, or retiring carbon-intensive assets in line with a net-zero pathway will require ongoing or additional financing, particularly to meet broader social goals. Without a Paris-aligned mechanism to provide and receive finance from existing carbon-intensive assets, corporate leaders may not be able to achieve required rates of emissions reductions without divestment. However, actors from both finance and civil society have noted that divestment of carbon-intensive assets can be ineffective and even lead to real-world increases in emissions. This is because divestment can lead to carbon-intensive assets moving from owners that are committed to more responsible operation and decarbonisation to owners that are not. This problem can be further exacerbated where divestment moves carbon-intensive assets into private ownership, where public pressure and transparency requirements are often less stringent.

The task force's work on responsible retirement focuses on developing a set of solutions to provide owners of carbon-intensive assets with tools to incentivise and facilitate asset retirement and decarbonisation in line with a science-based net-zero pathway. These solutions must consider differences across geography and sector, as well as the societal impact of a transition to minimise job loss and economic dislocation across impacted communities. This is particularly pertinent for certain regional and emerging markets.

The workstream has so far completed a landscape analysis of stakeholders currently working on this challenge. This includes analysis of relevant existing and proposed initiatives as well as direct interviews with practitioners in the financial, energy and hard-to-abate sectors, in addition to climate experts. It is also mapping the attributes of responsible retirement and decarbonisation so that a common baseline exists for investors and other providers of capital.

The road ahead

Moving forward, this task force has two priorities.

The first priority is to deepen engagement between the financial sector and the real economy. The task force will collaborate directly with pathway developers from the priority sectors to support their creation of net-zero pathways that meet the needs of net-zero-committed financial institutions. Specifically, the task force will work closely with real economy initiatives to provide robust, actionable feedback from a financial perspective and support the definition of credible net-zero aligned pathways. Where relevant, the task force will seek to coordinate between alliances and real economy sectoral initiatives to support the further refinement of pathways. Following successful engagement with the two priority sectors, the task force plans to engage with additional sectors. The task force is mindful that sectoral pathways will also provide a benchmark to corporations developing net-zero transition plans and, as such, the task force will remain closely aligned with the GFANZ workstream on real-economy transition plans.

The task force's second priority is to develop a set of solutions for the responsible retirement of carbon-intensive assets. As GFANZ considers next steps after COP26, the workstream intends to engage with leading NGOs and civil society organisations to develop these solutions so that they are consistent with a science-based net-zero pathway and also ensure a just transition.



As the financial sector promotes real economy decarbonisation, it is critical to consider the responsible retirement of highly emitting assets. Promoting a just transition means thoughtfully addressing the impacts of these assets both on global emissions and local communities. A just transition also requires the careful management of energy demand and supply as we shift to cleaner energy sources.

Larry Fink

Chairman and Chief Executive Officer, BlackRock Inc.

Real-Economy Transition Plans



Vision and objectives

Our vision: to accelerate the net-zero transition in the real economy by describing financial sector expectations, best practices, and ambitions for corporates.

Now more than ever, financial institutions are committing to align their portfolios to net zero, a critical step for the world economy in the fight against climate change. To achieve their own climate goals and accelerate the net-zero transition, financial institutions need to ensure their financing activities are aligned with this goal. This can be through changing their portfolios or through engaging the users of their capital to ensure they have ambitions and plans consistent with a transition to net zero. Corporate transition plans can provide the information that financial institutions need to understand where and whether a client fits into their decarbonisation strategy.

There is a growing body of guidance available to support the development of corporate transition plans. This guidance typically explores an aspect of transition planning, such as risk management, or focuses on the needs of a specific user group, such as investors.

The aim of this GFANZ task force, therefore, is to draw together the common elements across existing transition plan guidance, highlighting commonalties and helping drive the adoption and convergence around what financial institutions understand to be best practice transition plans to net zero.

While different parts of the financial sector have somewhat different uses for corporate transition plans, broadly, financial institutions need to know whether a company has:

- 1. A strategy that sets out how the company will reach net zero, in a manner consistent with the goals of the Paris Agreement.
- 2. Governance that gives confidence in the ability to deliver on the strategy.
- 3. Targets and metrics that allow external stakeholders to track progress in reducing emissions.
- 4. An understanding of the risks and opportunities around the proposed plan.

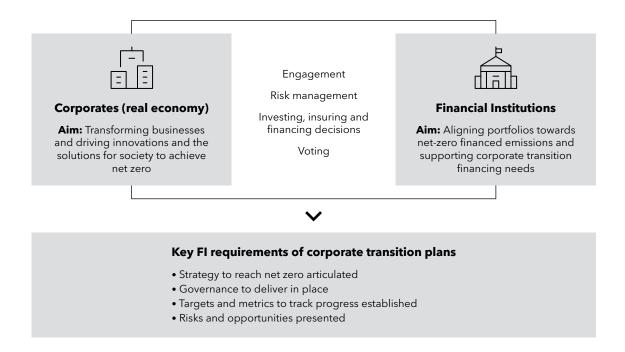


This workstream will directly benefit financial institutions who have set net-zero targets. The ability to review and assess corporate transition plans will promote the better allocation and pricing of capital, improved risk management, and the identification of opportunities to accelerate the transition.

- Thomas Buberl

Chief Executive Officer, AXA

Figure 10: Financial institutions' requirements for corporate transition plans



Transition plan guidance often covers one or more of these elements. However, owing to the different requirements of investors, banks, and insurers, guidance for corporates may vary in form and structure. Transition plans themselves may vary widely in quality and consistency, omitting metrics and information important for financial stakeholders. These factors can make it a challenge for financial institutions to compare transition plans between companies and to assess them in relation to net-zero pathways. This will be an area for coordination with the GFANZ Sectoral Pathways workstream which is focused on identifying credible net-zero pathways.

To address these issues, the workstream has two overall objectives:

- 1. Facilitate the development of effective, credible net-zero transition plans by corporations to help raise ambitions in the real economy to reach net zero.
- 2. Advance the ability of financial institutions to evaluate corporate net-zero transition plans and promote the reallocation of capital to decarbonisation efforts.

Achieving these objectives will benefit both financial institutions and businesses. For financial institutions, benefits include better allocation and pricing of capital, more effective management of risk, and greater alignment within the financial sector in accelerating the transition. For businesses, there is the ability to anticipate and respond to the requirements of finance providers to access capital more cost effectively and enhance their own long-term planning for the transition.

Conclusions and key outputs from the stocktake

This workstream undertook a stocktake exercise to understand the spectrum of existing guidance on real-economy net-zero transition plans and identify best practices. The stocktake was broad in scope, covering five subsector alliances and nine NGOs that the task force deemed highly relevant, based on their ongoing work on transition plan guidance. In recent months, multiple initiatives have published guidance or frameworks on transition planning. An important point is that there is already much convergence and alignment between these, and some have already achieved significant scale.

The Task Force on Climate-related Financial Disclosures (TCFD) provides a framework focused primarily on climate risk disclosure and risk management. It has been endorsed by the G7 and several other countries amid a growing push for mandatory climate risk reporting. Given the increasingly widespread use of the TCFD's framework, the workstream has so far leveraged the TCFD's output as the organising framework for analysis. This year, the TCFD published guidance on what should be disclosed in transition plans, but this guidance does not yet explicitly concern net-zero 2050 transition plans.

In addition to the TCFD, several other initiatives have provided valuable transition plan guidance, approaching the topic from distinct vantage points. Climate Action 100+ (CA100+) brings together over 600 of the world's biggest investors, with a total of over \$55 trillion in assets under management, to engage corporations in a consistent manner. CA100+ is itself the outcome of a collaboration of numerous regional and global investor coalitions and research initiatives⁵⁹ to align themselves specifically on corporate engagement.

CDP (Carbon Disclosure Project) provides tools to enable corporates to disclose climate and environmental data, and, through the Assessing Low Carbon Transition (ACT) framework, has published a framework for transition plans. The Science Based Targets initiative (SBTi) has developed global standards and a five-step pathway for setting transition plan targets. The Transition Pathways Initiative (TPI) offers an assessment tool to rate corporations' preparedness for a net-zero transition and gives a benchmark for corporate climate action. The range of guidance considered in the stocktake is summarised in Table 4.

⁵⁹ CA100+ was set up by Ceres (North American), IIGCC (European), AIGCC (Asian), IGCC (Australian), and PRI (Global). Its assessment methodology uses data from the Transition Pathway Initiative, FTSE Russell, Carbon Tracker, 2DII, and Influence Map, and is publicly available.

In addition to explicit guidance on transition plans, financial initiatives have also provided their members with guidance on transition-aligned financing. An important example comes from the Paris Aligned Investment Initiative (PAII), created by the Institutional Investors Group on Climate Change (IIGCC), which has developed a detailed net-zero investment framework with comprehensive guidance for investors on how to decarbonise their portfolios. Such guidance is complementary to the more explicit guidance on corporate transition plans.

Table 4: Key organisations, initiatives and frameworks reviewed in stocktake

Org./Initiative/Framework	Key features	Relevant documents consulted		
TCFD (Task Force on Climate-related Financial Disclosures)	Developed a framework to help public companies and other organisations disclose climate-related risks and opportunities. This is reflected at some level in all of the other frameworks, and enables consistency	Proposed guidance on climate- related metrics, targets, and transition plans (2021)		
CA 100+ (Climate Action 100+)	Coalition of over 600 investors, with \$55 trillion in AUM with the goal of securing transition plans from the largest GHG emitters aligned with the Climate Action 100+ Net Zero Company Benchmark. TPI is the key data partner on the CA100+ benchmark	Net-zero company benchmark Investor interventions to accelerate net zero steel Recommended investor expectations for net-zero aviation		
TPI (Transition Pathway Initiative)	Global, asset-owner led initiative which assesses companies' preparedness for the transition to a low carbon economy	TPI state of transition 2021Carbon performance assessments		
CBI (Climate Bonds Initiative)	Investor-focussed not-for-profit working to mobilise the bond market for climate change solutions through the development of the Climate Bonds Standard and Certification Scheme, Policy Engagement and Market Intelligence work	Transition finance for transforming companies		
CSL (Climate Safe Lending Network)	Transatlantic multi-stakeholder collaborative of banks, NGOs, academics, investors, and others aiming to accelerate the decarbonisation of the banking sector to secure a climate-safe world	Forthcoming guidance on transition plans		
CDP (Carbon Disclosure Project)	Not-for-profit that runs the global disclosure system for investors, companies, cities, states, and regions to manage their environmental impacts (note CDP is behind the ACT)	 Climate change 2021 reporting guidance ACT framework (see line below) 		
ACT (Assessing Low Carbon Transition Initiative, CDP)	Provides sectoral methodologies to evaluate past and expected emissions trends, low-carbon investments and research and development, transition plans, engagement with suppliers and clients, and progress in developing low-carbon business models	 ACT assessment methodology- generic ACT assessment methodology- transportation 		
SBTi (Science Based Targets Initiative)	Drives ambitious climate action in the private sector by enabling companies to set science-based emissions reduction targets	 Science-based target setting manual Guidance for the aviation sector Draft guidance for the steel sector 		

As part of the stocktake, the workstream considered existing transition plan guidance to identify best practices and commonalities. Given widespread familiarity with the TCFD framework, the workstream adapted its four pillars (Governance, [Decarbonisation] Strategy, Risk Management, and Metrics & Targets) and used them to structure this synthesis.

The landscape of guidance is rapidly evolving and already provides much of what is needed. Despite differences in emphasis and focus across the guidance, there are many commonalities, as Figure 11 below details. This task force aims to drive convergence around best practices and enable corporates to develop net-zero transition plans that meet the needs of financial actors.

Programme of work

Based on this landscape review, the task force developed an initial view of the elements present in best practice net-zero corporate transition plans, summarised in Table 5 and structured around the four TCFD pillars. The aim of this work is not to create a new framework but simply to reflect the most important and consistently referenced components from the key frameworks identified in the stocktake.



The industrial transition to net zero requires the business and finance sectors to work together towards global decarbonisation. This initiative aims to provide clarity for companies navigating climate assessment and engagement frameworks across the financial industry, from investors to banks and insurance.

- David Schwimmer

Chief Executive Officer, London Stock Exchange Group (LSEG)

Table 5: Initial view of categories of information that form part of best practice net-zero corporate transition plans

(Please see Figure 11 for how each element relates to the existing frameworks identified)

	Pillar	Categories of information
1	Governance	Describe the board and management's oversight and approval of the net-zero transition plan
		 Describe the reporting to be done in support of the net-zero transition plan and the process for its review and update
		 Describe the incentives and impacts on remuneration tied to the execution of the net-zero transition plan
2	Decarbonisation strategy	Describe the planned roadmap and the phasing of the specific actions required to reach net zero (e.g. technologies deployed, energy efficiency measures taken)
		• Describe the usage of carbon credits and offsets with reference to emerging industry guidance (e.g. type of credits used, price applied, verification). Credits and offsets should be disclosed separately from gross emissions figures
		 Describe the size and nature of current and future low-carbon capital investments (capital allocation alignment)
		• Describe current and future engagement with customers, clients, and suppliers
		• Describe current and future engagement with policy and advocacy efforts
		• Describe how the transition plan supports a just transition
		 Explore the impacts of different transition scenarios on the firm's decarbonisation strategy
		• Describe the responsible retirement plans for high-emitting corporate assets (capital allocation alignment)
3	Risk management	Describe the operational challenges likely to be encountered in transitioning to a net-zero business
		• Describe the ways in which the firm will overcome these challenges
		• Describe the size and nature of the transition and physical risks facing the firm in the short, medium, and long term
		• Describe the climate impacts that result from firm activities (e.g. risks posed by the firm to the climate)
4	Metrics and targets	• Explicitly state the ambition of the transition plan in terms of net-zero date, interim targets, and the pathway used to develop the net-zero transition plan
		 Describe short-, medium-, and long-term decarbonisation targets for the firm and individual business lines (if relevant)
		• Disclose Scope 1, 2, and 3 baseline emissions
		• Disclose progress made against emissions reductions targets
		• Disclose other relevant metrics for assessing transition progress (e.g. emissions intensity metrics, energy use, production plans)

To identify the items above, the task force drew on the core elements from the existing guidance and frameworks. Figure 11 provides the broader picture of what guidance is available to corporates. Establishing a clear view of where specific elements can be found and identifying commonalities and differences between existing guidance is a key step to support the task force's aim of signposting and amplifying what is available and supporting corporates to understand best practice.

Figure 11: Sources of existing guidance on key elements of transition plans

		Common users	All Eco	All Economy		Investors		Banks Corpora	
			TCFD	SBTi	CA 100+	TPI	CSL	CDP	ACT
1	Governance	Describe the board and management's oversight and approval of the net-zero transition plan							
		Describe the reporting to be done in support of the net-zero transition plan and the process for its review and update							
		Describe the incentives and impacts on remuneration tied to the execution of the net-zero transition plan							
2	Strategy	Describe the planned roadmap and the phasing of the specific actions required to reach net zero (e.g. technologies deployed, energy efficiency measures taken)							
		Describe the usage of carbon credits and offsets with reference to emerging industry guidance (e.g. type of credits used, price applied, verification). Credits and offsets should be disclosed separately from gross emissions figures							
		Describe the size and nature of current and future low-carbon capital investments (capital allocation alignment)							
		Describe current and future engagement with customers, clients, and suppliers							
		Describe current and future engagement with policy and advocacy efforts							
		Describe how the transition plan supports a just transition							
		Explore the impacts of different transition scenarios on the firm's decarbonisation strategy							
		Describe the responsible retirement plans for high-emitting corporate assets (capital allocation alignment)							
3	Risk mgmt.	Describe the operational challenges likely to be encountered in transitioning to a net-zero business							
		Describe the ways in which the firm will overcome these challenges							
		Describe the size and nature of the transition and physical risks facing the firm in the short, medium, Wand long term							
		Describe the climate impacts that result from firm activities (e.g. risks posed by the firm to the climate)							
4	Metrics & targets	Explicitly state the ambition of the transition plan in terms of net-zero date, interim targets, and the pathway used to develop the net-zero transition plan							
		Describe short-, medium-, and long-term decarbonisation targets for the firm and individual business lines (if relevant)							
		Disclose Scope 1, 2, and 3 baseline emissions							
		Disclose progress made against emissions reductions targets							
		Disclose other relevant metrics for assessing transition progress (e.g. emissions intensity metrics, energy use, production plans)							

[■] Element incorporates guidance from initiative ■ Element does not incorporate guidance from initiative

Across the four pillars, there is broad alignment across initiatives in terms of which elements are included in their guidance. To date, governance has been the primary focus of investor guidance on transition plans; this is reflected in the above mapping, which shows strong consensus in terms of governance disclosure expectations. With respect to metrics and targets, guidance diverges in terms of recommended level of detail and degree of disclosure. This is addressed by the latest TCFD guidance, which should support consistency and clarity. These quantitative disclosures are some of the most important areas for financial institutions seeking to assess their own progress towards net-zero goals.

At this stage, this overview is deliberately high level and descriptive. Over the coming months this task force will explore the more prescriptive elements of guidance – how best practice is defined against each element of the transition plan and which elements should be prioritised.

The road ahead

The immediate focus of the task force will be to advance work on best practice guidance for corporate net-zero transition plans. As noted earlier, the aim is not to create a new framework but to clarify for companies the expectations of the finance sector based on the leading initiatives and frameworks. This will entail further consultation with advisers, industry organisations, corporates, and financial institutions on the components of best practice guidance. These consultations may potentially advance more prescriptive definitions of what constitutes best practice for the categories of information included above.

It is important to note that good transition plans require detailed financial and emissions data. Improving emissions reporting is critical to effectively evaluating and comparing transition plans. The data challenge is significant, and this workstream aims to work with other parts of GFANZ as well as external organisations that are leading the drive to improve emissions data.

In addition, the task force will apply a sector-specific lens to best practices, potentially seeking examples of "what good looks like" for individual elements of transition plans. The task force proposes aligning with the sectoral pathways workstream on the initial sectors to engage with (namely aviation, steel, oil and gas), although it may consider a wider range of sectors. Through this work, the task force seeks to identify where GFANZ can add value, with the goals of connecting, amplifying, and building on the ongoing work of market-specific initiatives to engage corporates and help them understand and navigate the needs of the financial sector.

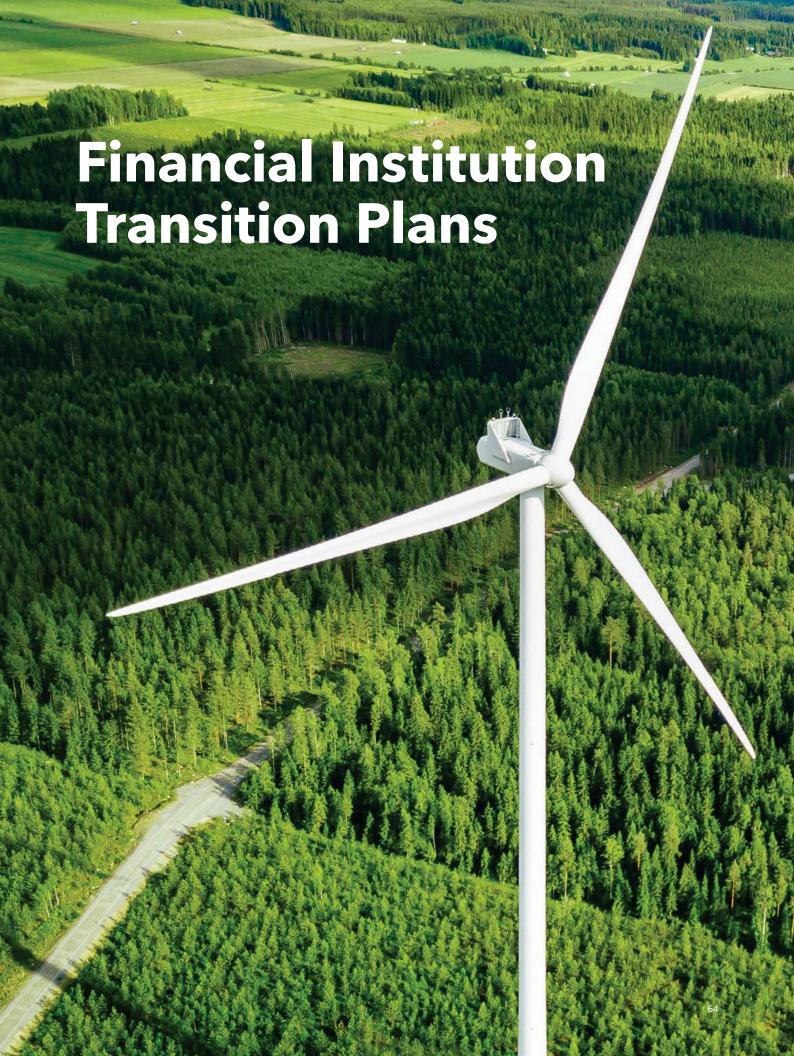
GFANZ's second priority is to deliver recommendations for how financial institutions across different subsectors can coordinate their work in assessing corporate transition plans. GFANZ aims to deliver these in 2022. As part of its work, this task force will seek to engage and coordinate with developments in the GFANZ Sectoral Pathways workstream, including formalising this link through having some shared task force members and joint resourcing across the secretariat for the GFANZ programme. Links will also be made to the ongoing work of the GFANZ Financial Sector Transition Plans workstream. As transition plans are a key input for alignment tools, a connection will also be maintained with the GFANZ Portfolio Alignment Measurement workstream.



By consolidating the wealth of guidance on corporate transition plans, this work will strengthen the connection between financial institutions and their real-economy clients and empower both in the drive to net zero.

- Alison Rose

Chief Executive Officer, NatWest



Vision and objectives

Our vision: to support the development and effective implementation of ambitious, credible net-zero transition plans for financial institutions.

Financial institutions have a vital role to play in supporting and accelerating the decarbonisation of the real economy. As growing numbers of financial institutions have made individual commitments to align their businesses and portfolios to net zero, many have begun to develop plans that demonstrate how they will seek to achieve their climate goals. To meet this need, a range of industry groups have put forward guidance on developing transition plans. The suggested approaches share much in common, but also contain important differences that reflect the different roles that various types of institutions play in reducing real-economy emissions to net zero.

The levers available to financial institutions to support and accelerate the reduction of emissions in the real economy can be divided into three main categories:

- 1. New financing or investments that can contribute to the creation or reduction of emissions as companies grow or transform their businesses.
- 2. Managing existing financing or investments, whereby financial institutions can influence the cost of capital and shape economic activity and therefore emissions through lending decisions and security selection as well as through their role as stewards and use of voting rights.
- 3. Engagement with corporations on credible transition plans as well as advocacy with policymakers to allow the cost of capital to reflect the negative externalities of greenhouse gas emissions by pricing carbon.

Each category of levers is important, but their application differs depending on the type of institution and its role in the financial system (see Table 6), and this is reflected in differences in emphasis in the subsector alliances. For instance, the Net-Zero Asset Owners Alliance places emphasis on setting investment mandates and portfolio emission targets, exercising voting rights in investee companies, and providing transition financing, while the Net-Zero Banking Alliance places emphasis on the role banks can play in reducing the emissions associated with the companies and projects they finance.



One of the greatest impacts that the finance industry can have is to come together to share best practice, so that we can all partner with the businesses we serve in the transition to net zero. Financial institutions' portfolio emissions reflect emissions in the real economy, so supporting clients and investors in driving progress is critical in turning commitments into action.

- Noel Quinn

Group Chief Executive, HSBC

Table 6: Illustration of the key levers available per type of financial institution to help influence realeconomy emission reductions

Lever type	Lever	Influence on real-economy emissions	Banks	Asset managers	Asset owners ³	Insurers
	Capital market origination	Proactively steer capital markets origination towards net-zero aligned projects and corporates, including through labelled Green and Transition Finance				
New capital investments	General purpose lending	Consider corporate net-zero alignment as part of lending decisions, reflecting through, for instance, loan covenants and exclusions				
	Specialised lending ¹	Proactively steer lending towards lower carbon projects, assets or infrastructure, including through labelled Green and Transition Finance				
	Insurance and risk management	Provide risk management to support the development of low-carbon projects; consider net-zero alignment in underwriting decisions				
	Security selection & trade facilitation	Consider the emissions and transition profiles of corporates as part of security selection decisions facilitated in the secondary markets				
Managing invested	Stewardship	Leverage voting rights and influence to encourage corporate management teams to take steps to drive decarbonisation ²				
capital	Investment products	Create and market net-zero aligned savings and investment products (e.g. Funds, Pensions, Life Insurance)				
	Investment mandates	Embed net-zero considerations into investment mandates awarded to asset managers				
F	Corporate engagement	Engage with corporates clients or investees on their net-zero transition plans				
Engagement and advocacy	Policy advocacy	Advocate with policymakers and regulators to influence market conditions and in turn emissions				

Availability of each lever per institution

Higher Medium Lower

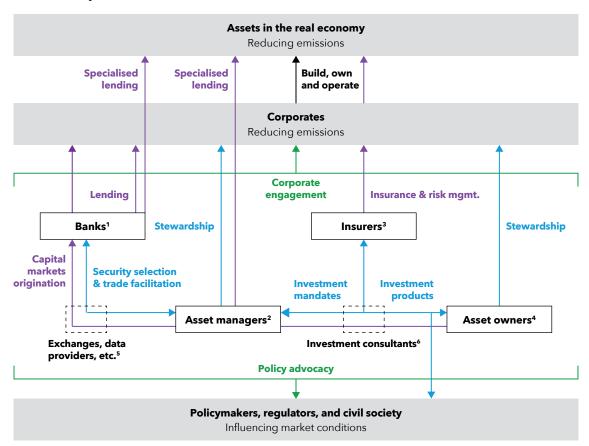
 $^{1. \,} Specialised \, lending \, refers \, to: infrastructure, \, asset, \, and \, project-based \, financing.$

^{2.} Banks are not equity owners but can exercise loan covenant voting.

^{3.} Practices vary across asset owners – some directly perform asset management activities such as securities selection and specialist lending, while others delegate more of this activity to third party managers.

While the areas of focus for different types of financial institutions vary, they operate within an interconnected financial system where the action of one group will be greatly amplified if aligned with others (see Figure 12). Asset owners, for instance, can award investment mandates to asset managers who share their net-zero goals. Asset managers can seek to achieve net-zero goals on behalf of their asset owner clients through direct engagement with portfolio companies and security selection, which in turn can influence the cost of capital for companies. Banks provide those same companies with lines of credit and direct financing for existing and new operations while also facilitating access to capital markets. These capital markets are supported by exchanges and data providers that offer the venues, data, and standards that underpin their safe functioning. Additionally, insurers provide risk management services, which are often a prerequisite for making projects investable and accessible to finance. Finally, all types of financial institutions have a role to play in advocating for government and policymakers to improve the market conditions for a net-zero transition.

Figure 12: The interconnection between key levers across the financial sector to influence real-economy emissions – illustrative



Key levers to influence real-economy emissions

- New capital investments (showing only those ranked high in Table 6)
- Managing existing capital (showing only those ranked high in Table 6)
- Engagement & advocacy

Related subsector alliance: 1. Net-Zero Banking Alliance, 2. Net Zero Asset Managers initiative, 3. Net-Zero Insurance Alliance, 4. Net-Zero Asset Owner Alliance and Paris Aligned Investment initiative, 5. Net Zero Financial Service Providers Alliance, 6. Net Zero Investment Consultants Initiative

Overall, while there are important differences across institutions, there are also many shared challenges and commonalities across the system to influence real-economy emissions. The task force's focus is to build on the extensive work that has already been conducted across the industry, especially within the subsector alliances, and focus on the common areas where we can help drive upwards convergence and accelerate the move from net-zero commitment to action. Specifically, the workstream has two key objectives:

- 1. Articulate the best practices for developing credible net-zero transition plans for financial institutions.
- 2. Identify cross-cutting technical challenges in the design and implementation of these plans and provide a platform for the industry to address them.

To accomplish these objectives, it will be critical to collaborate across other GFANZ workstreams, including with the Sectoral Pathways workstream, to understand decarbonisation pathways for each industry, the Real-Economy Transition Plans workstream to engage with real-economy actors, and the Portfolio Alignment Measurement workstream to develop common industry standards on alignment metrics.

Conclusions and key outputs from the stocktake

Many industry groups have already published work on best practices for effective transition plans for financial institutions. Thus, it was important for this workstream to undertake a detailed stocktaking exercise to understand the range of existing guidance and assemble the best practices already identified.

This analysis covered three types of industry groups (see Table 7). The first was the group of five GFANZ subsector alliances (NZBA, NZAM, NZAOA, PAII, NZIA) that have published sector-specific net-zero guidelines. The second was a series of NGOs that have released industry guidance on specific topics, such as the PCAF on emissions accounting, the SBTi on targets, and the CSL on lending. The third and final group covered organisations that have published transition benchmarks or practitioners' guidance, including the TCFD, CA 100+, SMI, and the Investor Agenda (IA). While the stocktake has not been exhaustive, the organisations selected were prioritised based on their level of industry recognition.

Table 7: List of organisations reviewed in the stocktake

Org.	Brief description	Guidance examined in stocktake			
NZAM	The UN-convened Net Zero Asset Managers initiative brings together asset managers to reach net-zero portfolio emissions by 2050.	The NZAM Commitment Statement (prerequisite for joining)			
NZAOA	The UN-convened Net-Zero Asset Owner Alliance brings together institutional investors to reach net-zero portfolio	The NZAOA Commitment Statement (prerequisite for joining)			
	emissions by 2050.	Inaugural 2025 Target Setting Protocol			
NZBA	The UN-convened Net-Zero Banking Alliance brings together banks to reach net-zero portfolio emissions	 The NZBA Commitment Statement (prerequisite for joining) 			
	by 2050.	Guidelines for Climate Target Setting for Banks			
NZIA	The UN-convened Net-Zero Insurance Alliance brings together insurers and reinsurers to reach net-zero portfolio emissions by 2050.	The NZIA Commitment Statement (prerequisite for joining)			
PAII	The Paris Aligned Investment Initiative was established by the IIGCC at the request of asset owner members.	Paris Aligned Asset Owners Net Zero Commitment			
		• The Net Zero Investment Framework			
CSL	The Climate Safe Lending Network is a trans-Atlantic multi-stakeholder collaborative of banks, NGOs,	CSL integrated approach to removing climate emissions from lending			
CSL	academics, investors and others aiming to accelerate the decarbonisation of the banking sector to secure a climatesafe world.	 CSL guidance on aligning finance for the net- zero economy 			
PCAF	The Partnership for Carbon Accounting Financials was set up for financial institutions to develop and implement a harmonised approach to assess and disclose the GHG emissions of their loans and investments.	The Global GHG Accounting and Reporting Standard for the Financial Industry			
SBTi	SBTi drives ambitious climate action in the private sector by enabling companies to set science-based emissions	Financial Sector Science Based Targets Guidance			
	reduction targets.	Forthcoming Net Zero Guidance for Fls			
CA 100+	Climate Action 100+ is an investor-led initiative to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change.	Net-Zero Company Benchmark			
	The Investor Agenda is a collaboration of seven major	The ICAPs Expectations Ladder			
IA	groups working with investors – AIGCC, CDP, Ceres, IGCC, IIGCC, PRI, and UNEP FI.	• The ICAPs Guidance			
SMI	The Sustainable Markets Initiative's Financial Services Taskforce (FSTF) is a collection of the world's largest banks committed to mobilising finance, and working with customers to support their transition.	Letter of Intent from the FSTF			
TCFD	The TCFD has developed a framework to help public companies and other organizations disclose climate-related risks and opportunities.	Proposed guidance on climate-related metrics, targets and transition plans (2021)			

FI initiative categorisation

■ Subsector alliances ■ Specific topic guidance ■ Transition plan/Practitioner's guidance

There is much common ground across these initiatives, but also important areas where they differ. For example:

Target setting: Some frameworks provide guidance on net-zero target setting, yet there are many differences in the parameters used, such as in the treatment of capital markets, off-balance sheet financing, carbon credits, and how to reflect double counting of emissions.

Governance and implementation: Many frameworks note the importance of governance and practical implementation plans, yet there is less clarity on how to link senior management remuneration most effectively to transition plan targets or to what extent to tie operational activity to transition plan targets. This might include internal carbon charges, phaseout policies, growth targets, and metrics.

Disclosure: The TCFD has done much to drive more and better disclosure on climate-related financial risks and opportunities, but common standards for disclosure on net-zero efforts are still to emerge.

Looking across this body of work, we have distilled the observed guidance into four broad sets of principles that were identified as critical for developing credible net-zero transition plans:

- 1. Amplifying the central role of financial institutions in supporting the real-economy transition.
- 2. Setting emission reduction targets to drive change.
- 3. Taking tangible steps to deliver on these targets.
- 4. Committing to regular disclosure.

This task force seeks to raise the collective ambition of the financial sector's transition plans and has therefore drawn on the best practices from across the industry to develop the principles. This should help accelerate the financial sector's progress in supporting the reduction of emissions in the real economy.

These principles are set out below, together with more detailed statements that elaborate on them. The principles are designed to be applicable across the financial sector and act as helpful guidance for institutions rather than new commitments. The task force also recognises that not all the detailed statements will be relevant to every institution, depending on their scope of activity, and institutions may explain where this is the case.

Financial institution best practices for net-zero transition plans – principles

- Commit to supporting the real economy in its transition to net zero by 2050 or sooner.
 - Actively engage with clients or investee companies on their net-zero transition journeys and help mobilise capital towards major decarbonisation.
 - Advocate for climate and energy policies aligned with achieving global net-zero
 emissions by 2050 or sooner, and ensure that government advocacy activity –
 and where possible that of clients or investee companies does not contravene
 these efforts.
- Commit to achieve the greenhouse gas (GHG) reductions required to meet a **1.5 degrees C low or no-overshoot scenario** in financing activities, as well as in operations, and to **set interim targets** for 2030 (or sooner) and a 2050 target.
 - Ground actions in scientific pathways and the best available economic and technological knowledge of what it will take for the real economy to transition to net zero.
 - Where there are multiple, credible scientific pathways or multiple standards, aim for convergence where it aids comparability using judgements, and disclose clearly the rationale for those judgements.
 - Integrate the principles of a 'Just Transition' and UN SDGs.
- Commit to taking meaningful measures to **embed net-zero commitments** in business practices.
 - Implement a strong governance framework that articulates the board's accountability and oversight for achieving net-zero targets.
 - Incorporate net-zero targets into business and investment strategies, risk management and decision-making processes.
 - Implement and disclose specific policies on key topics, such as the use of carbon credits, fossil fuels, coal, and deforestation.
- Commit to acting now and disclosing activity to stakeholders.
 - Disclose progress annually with transparency allowing stakeholders to understand and compare the impact of activities.
 - Act now and revisit choices in time, accepting this is a rapidly evolving space.

Furthermore, the stocktake also revealed that there are technical challenges to achieving consensus on industry standards, many of which are being tackled by specific industry initiatives. For example, there is a lack of primary data for SMEs in EM&DCs and in certain sectors like agriculture and real estate that prevents financial institutions accounting for emissions production in their investment decision-making. While these challenges should not preclude starting the transition, there is a need to develop workable solutions to them.

Programme of work

A. Elements of a credible transition plan

To build on the principles, this task force will consider the best way to provide more detailed guidance for financial institutions designing and implementing net-zero commitments in partnership with the subsector alliances, with the aim to elevate best practices across the industry and supporting consistency where relevant, helping to accelerate progress toward net zero.

As a first step, this task force has drafted a list of elements that it believes a best practice transition plan should include to be considered credible, based on the findings from the stocktake (see Table 8). The bar for a "credible" transition plan is continually being raised as industry standards evolve and mature. As such, it is likely that many firms' current plans will not yet cover all elements in the table below.

In many cases, approaches will depend on the type of financial institution. For example, stewardship and engagement will be a larger focus for asset managers and asset owners, while banks will focus on financing and lending to transition-aligned projects and technologies. Therefore, firms will move at different paces in adopting best practices, and GFANZ will look to work with the industry and the subsector alliances to define and share these best practices while addressing impediments and accelerating adoption. GFANZ is engaging and consulting with stakeholders to refine this list, and it welcomes input and feedback.

Table 8: GFANZ list of elements to consider for financial institution transition plans

	Principles	Sub-themes	Items to be included for a transition plan to be credible
1	Supporting the real economy	Clients or investee companies	Engagement and stewardship with clients or investee companies to develop and implement their net-zero transition plan
	,		Supporting the mobilisation of capital towards major decarbonisation
			Addressing risks and building climate resilience
		Government & Industry	Advocacy for climate and energy policies (such as carbon pricing) aligned with achieving global net-zero emissions by 2050 or sooner; assurance that government advocacy activity, and where possible client or investee company activities, do not contravene these efforts
			Engagement with third-party players (e.g. exchanges, data & analytics providers, investment consultants) to support the industry to develop and implement net-zero transition plans
2	Targets	Overall ambition	Declare the overall ambition of the organisation's transition plan to achieve net zero by 2050 or sooner
	Defining medium- and longer- term		Defining medium- and longer- term emissions reductions targets for Scope 1, 2 and 3 emissions, where medium-term should be 2030 or sooner
			Defining targets to cover a significant majority of Scope 3 emissions, including those from carbon-intensive sectors, and scope coverage should increase between each review period
		Grounded in science	Alignment of targets with science-based 1.5 degrees C low or no-overshoot benchmark pathways that achieve net zero by 2050
			Any of use carbon credits (or offsets) to support portfolio emissions reduction targets should refer to emerging industry guidance (e.g. TSVCM's Core Carbon Principles or a comparable standard)
		Industry convergence	Science-based decarbonisation scenarios leveraged to define the transition plan and decarbonisation actions, and update models used in the transition plan to remain aligned with the latest widely accepted scientific standard
			Adoption and disclosure of best-practice financed emissions measurement approaches in line with emerging global standards e.g. PCAF or a comparable standard)
			Adoption and disclosure of best-practice portfolio alignment metrics in line with emerging global standards (e.g. Portfolio Alignment Team's "Measuring Portfolio Alignment: Technical Considerations" or a comparable standard)
			Engagement with industry, policy and regulatory bodies to support the development of a harmonised and net-zero aligned global policy framework
		Just Transition	Alignment with just transition principles and the UN SDGs (e.g. Declaration of International Support for a Just Transition)

	Principles	Sub-themes	Items to be included for a transition plan to be credible	
3	Business practices	Governance	Board's oversight and approval of the transition plan	
	P		Linking of incentives and senior management remuneration to net-zero targets	
			Senior management roles, responsibilities and expertise for execution of the transition plan	
		Strategy, risk management & decision making	Assessment of business model resilience under different climate- related scenarios	
			Create mechanisms, such as target capital allocations, to promote the use of labelled green and transition finance products	
			Integration of client/investee firms' transition plans into financing decision-making and financial performance metrics	
			Processes for identifying, assessing, and managing climate-related risks and opportunities over the short, medium, and long term, considering their impact on the organisation's businesses, strategy, and financial planning and integrating these into the organisation's overall risk management	
			Linking of risk appetite to the organisation's transition plan	
		Specific policies	Energy transition policies including phase out of coal financing, the use of carbon credits, and fossil fuels	
			Deforestation policies including the assessment of financing linked to deforestation activities	
4	Action & Disclosure		Disclosure of Scope 1 and Scope 2 greenhouse gas (GHG) emissions	
-	Disclosure		Disclosure of Scope 3 portfolio or financed emissions, covering Scope 1, Scope 2, and Scope 3 greenhouse gas (GHG) emissions of the clients/assets that are financed and/or invested in (including on and off balance sheet activities where appropriate)	
			Disclosure of the key actions that the organisation is taking to support the real economy to transition and the impact of these	
			Disclosure of how the organisation is integrating net-zero targets into the core business processes	
			Disclosure of the financial impact of climate on the organisation considering different scenario pathways including a 1.5 degrees C low or no-overshoot scenario	
			Disclosure of the policies, metrics, and methodology used by the organization to set and manage to net-zero portfolio emissions targets	
			Frequency at and conditions under which targets are revisited	

B. Key challenges for developing credible transition plans for financial institutions

Despite ongoing efforts by relevant financial firms and NGOs, there remains much work to be done to address the many challenges, such as those related to data availability and scenario selection, in creating high-quality net-zero transition plans. This task force has developed a list of the most important challenges to the successful development and execution of a net-zero transition plan, and it has sought to identify where best to address them in its workstreams (Table 9). High-impact issues are defined as those where the task force can assist by driving consistency around gold-standard guidance. Medium-impact issues are those where the task force can advocate for the creation of extensive analytical material – in particular involving data and scenario gaps – and engage with other initiatives and governments to commission work.



All GFANZ members have committed to net zero, but we need to be consistent, robust, and ambitious in explaining what that means. This workstream brings together best practices on how to create net-zero transition plans that raise ambitions and improve consistency and harmonisation within and between financial sectors. This is vital to avoid greenwashing and actually deliver on our net-zero ambitions.

- Amanda Blanc

Chief Executive Officer, Aviva

Table 9: GFANZ list of cross-cutting challenges faced by financial institutions in transition planning and implementation

Topic	Challenge faced by financial institutions in their transition planning	Prioritisation (where GFANZ can provide the most impact)	Most relevant GFANZ workstream(s)	
Data	Limited robust current and forward-looking emissions data available universally, with significant gaps for SMEs, EM&DCs, and certain sectors (e.g. Agriculture and Real Estate)		GFANZ Policy Call to Action	
	Lack of a methodology to assess financed emissions for some services and asset classes (e.g. underwriting services, derivatives)		Portfolio Alignment Measurement	
Pathways	Often difficult to access appropriate transition pathways:			
	 For real estate, pathways are regional, but issues are country- specific, relating to housing stock and grid electricity mix 			
	• For aviation and shipping, available transition pathways are hard to finance given reliance on early stage technologies with high risk and low returns (e.g., Sustainable Aviation Fuel, green fuels such as ammonia, hydrogen)		GFANZ Policy Call to Action and Sectoral Pathways	
	• For agriculture, there are few clear pathways, combined with very distinct financing arrangements		occiorar r atriways	
	• For heavy industry, the pathway landscape is fragmented with different roadmaps proposed for the same sectors (e.g., SMI, MPP)			
Lack of projects	Lack of commercially viable, lower-risk ventures in certain sectors (e.g. in heavy industry) that allow financial institutions to maintain funding levels while successfully transitioning to net zero. Also, limited consensus of what constitutes a '1.5 degrees C low or no- overshoot' aligned project		Mobilising Private Capital to EM&DCs and GFANZ Policy Call to Action	
Methodology issues	Inconsistent definitions and treatments in transition plans of: (shadow) carbon pricing, carbon credits, carbon capture, coal exposure			
	Inconsistent coverage of products and business lines in financial institution transition plans		Financial Institution Transition Plans	
	Inconsistent methodologies for assessing impact of climate risks and opportunities on valuations and resource allocation across financial institutions			
	Double counting of financed emissions, disproportionally impacting smaller companies due to increased fragmentation of their value chains versus larger integrated players		Financial Institution	
	Inconsistent methodologies and implementation of enhanced due diligence checks of client's environmental data (e.g., to safeguard deforestation-free finance)		Transition Plans	
	Lack of mechanisms for successfully running off non- aligned ("dirty") assets, rather than simply selling them to private investors		Sectoral Pathways	
	Limited ways to integrate climate factors into portfolio metrics and incentivize progress towards net zero in a way that doesn't encourage rapid divestment		Financial Institution Transition Plans and Portfolio Alignment Measurement	

For each challenge, this task force will identify credible organisations already working on the topic. It will engage with these organisations and coordinate with GFANZ members and subsector alliances to support and amplify their work. Where no credible organisations are working on a specific topic, this task force will identify appropriate organisations to undertake the project and advocate for its delivery.

The road ahead

This task force's priority is to consult with members, advisers and industry bodies to determine the most effective way to deliver more detailed best-practice guidance on each component of credible net-zero transition plans. In parallel, this task force is composing a comprehensive roadmap to address key cross-cutting technical challenges. This work will include the acceleration of solutions already underway and the start of work on other solutions in collaboration with NGOs, industry bodies, alliances, and governments. We expect to finish development of the initial roadmap in Q4 2021.

Additionally, this task force is beginning to engage with industry bodies and NGOs to develop a mechanism to assess the credibility of transition plans created by financial institutions as well as the degree to which these are being implemented. In the same way the financial institutions will be supporting and reviewing real-economy transition plans, this task force recognises the criticality of applying a similar lens to financial institutions through an independent third party.

Portfolio Alignment Measurement

Vision and objectives

Our vision: to support the development and effective implementation of portfolio alignment metrics for financial institutions.

To limit the increase in the Earth's temperature to 1.5 degrees C, climate science tells us that the global economy needs to achieve net-zero emissions by 2050.⁶⁰ For financial institutions, that implies a pathway to net zero for their own operations and, more importantly, those of the counterparties they finance.

However, tracking the decarbonisation trajectories of the individual companies in an institution's portfolio is complex. A key step in decarbonising finance is to develop common industry standards and best practice on how to measure alignment with the 1.5 degrees C Paris objective and subsequently catalyse uptake amongst financial institutions. Currently, there is no consensus on which tools and metrics to use or how and when to apply them. However, they are crucial for bringing a forward-looking view to a counterparty's future emissions and its level of alignment to net zero.

GFANZ's workstream on portfolio alignment has two main objectives:

- 1. Drive convergence of portfolio alignment measurement across the financial services industry.
- 2. Increase adoption and disclosure of portfolio alignment metrics.



There is an urgent need for more comparability, transparency, and consistency in the ways we measure the progress of financial institutions and companies towards alignment with the goal of limiting warming to no more than 1.5 degrees C. This workstream exists to help financial institutions ensure that their capital allocation and company engagement is consistent with the requirements of the net-zero transition, and to bring enhanced transparency to stakeholders on the performance of financial institutions and companies against their climate commitments.

- David Blood

Senior Partner, Generation IM

History of the Portfolio Alignment Effort

Prior to GFANZ adopting this work, it was overseen by the Portfolio Alignment Team (PAT) formed by Mark Carney, the UN Special Envoy for Climate Action and Finance. The PAT was set up to respond to growing investor and lender interest in measuring portfolio alignment against the objectives of the Paris Agreement and to advance the adoption of consistent, robust, and transparent tools that enhance financial decision-making.

The Task Force on Climate-related Financial Disclosures (TCFD) commissioned the PAT to develop a technical report on emerging best practices in climate-related portfolio alignment measurement and to identify those areas where further research was needed to determine best practice. To do so, the PAT drew on extensive work and guidance in this field, including from the world's foremost portfolio alignment method providers, and published its report earlier this year. Given the importance of further refining these tools so that financial practitioners and policymakers can better track financial institutions' progress towards net zero, GFANZ has established a dedicated workstream to build on the initial research and development.

Perspectives on portfolio alignment and the Portfolio Alignment Team report ("the Report"61)

By contextualising financed emissions with a forward-looking view, well-designed portfolio alignment tools can incentivise a whole-economy transition, minimising the risk of encouraging wholesale divestment of all currently high-emitting industries or companies, regardless of their commitment to emissions reduction consistent with the Paris Agreement. While financial institutions can progress towards net-zero portfolios by withdrawing finance from today's carbon-intensive sectors, this strategy would not help provide capital to counterparties that are credibly engaged in net-zero transition, nor resolve the demand-side of the equation. To accelerate real-world decarbonisation, it is important that the financial industry both reallocates capital and works alongside those carbon-intensive companies that are committed to an urgent and orderly net-zero transition. Specifically, financial services firms should ensure that companies have credible transition plans — the focus of the Real-Economy Transition Plans workstream — that support the delivery of a robust transition pathway. Financial institutions can therefore guide both their capital allocation and their company engagement using portfolio alignment metrics, an emphasis in the Financial Institution Transition Plans workstream.

Portfolio alignment metrics provide important context on the pathway en route to net zero and not just the 2050 end point – they measure both the ambition and progress being made on this journey. Crucially, since global warming results from cumulative emissions, well-designed tools can help assess how counterparties' emissions are forecast to change cumulatively over time and whether that is sufficient to achieve net zero. Finding the right pathway to net zero will depend on the sectoral and geographic composition of each institution's portfolio, reflecting material differences in decarbonisation feasibility.

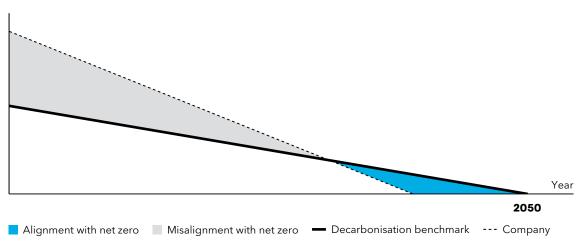


Figure 13: Stylised portfolio alignment measurement

The PAT report identifies three key categories of portfolio alignment tools that can help financial institutions achieve these goals:

- **Binary target measurements:** These tools measure the alignment of a portfolio with a given climate outcome based on the percentage of investments or counterparties in a portfolio with net-zero, Paris-aligned targets.
- Benchmark divergence models: These tools assess portfolio alignment at an individual
 counterparty level by constructing normative benchmarks (emissions pathways that describe what
 must be done to achieve a given warming target) from forward-looking climate scenarios and
 comparing counterparty emissions against them.
- Implied temperature rise (ITR) models: These tools extend benchmark divergence models one step further, translating an assessment of alignment/misalignment with a given benchmark into a measure of the consequences of that alignment/misalignment in the form of a temperature score, which describes the most likely global warming outcome if the global economy were to exhibit the same level of ambition as the counterparty in question.

All these models compare a counterparty's emissions performance with forward-looking climate scenarios. If a counterparty is reducing emissions according to the requirements of a given science-based scenario to achieve net zero and keep global warming to 1.5 degrees C, it is assigned a good alignment score – even if it is in a high-emitting industry. If it is not doing what's needed, it is assigned a bad alignment score. The PAT report recommends that financial institutions use whichever model of portfolio alignment tool best suits their context and capabilities. It also suggests that portfolio alignment tools be further developed and used alongside existing approaches to support setting emissions reduction targets and decision-making on investments.

The report provides a common framework for providers and users that breaks down the process into three steps and nine design judgements for all portfolio alignment tools, except binary target models. The report then provides best practice recommendations against each of these points for financial institutions and metrics providers, with the goal of promoting more consistent, robust, transparent, and useful portfolio alignment tools.

Table 10: Overview of key PAT recommendations⁶²

Design Judgement

Step 1: Translating scenario-based carbon budgets into benchmarks

- What type of benchmark should be built?
 - The PAT recommends using benchmarks based on single scenarios to maximize transparency, interpretation, and simplicity. To construct benchmarks, financial institutions should either (a) follow the fair-share carbon budget approach for all sectors, or (b) prioritise convergence-based benchmarks for the sectors for which it is possible to extract such benchmarks from reference scenarios and to use rate-of-reduction benchmarks for those sectors for which it is not
- How to select a scenario for building benchmarks?

 The PAT recommends the use of 1.5 degrees C scenarios to benchmark financial activities and following SBTi standards on scenario choice as minimum criteria. The PAT also suggests the use of granular benchmarks where it matters to recognise that different sectors and geographies will decarbonise at different rates.
- Should absolute emissions, production capacity, or emissions intensity units be used?

 The PAT recommends two possible approaches to assess companies' alignment. First, follow an absolute-emissions, fair-share carbon budget approach for all sectors. Second, use physical intensity-based, convergence pathways for homogenous sectors and absolute rate-of-reduction benchmarks for sectors where it is difficult to find physical intensity benchmarks. Note: an exception is carved out for fossil fuel companies.
- What scope of emissions should be included?

 The PAT recommends including in emissions benchmarks for Scope 1 and Scope 2 emissions, as well as Scope 3 emissions for the sectors for which they are most material and for which benchmarks can be easily extracted from existing scenarios (fossil fuels, mining, automotive). As better Scope 3 data and scenario benchmarks become available, the PAT suggests expanding Scope 3 coverage to additional sectors as appropriate.

Step 2: Assessing counterparty-level alignment

- How should emissions baselines be quantified?
 - The PAT recommends following the PCAF accounting standard for quantifying or estimating counterparty emissions. When the PCAF standard does not provide appropriate guidance, the PAT suggests following the GHG protocol. Data sources and methodologies used to estimate emissions should be transparently disclosed.
- How should forward-looking emissions be estimated?

 The PAT recommends using a mix of forward-looking targets and historical data for projecting future emissions, subject to credibility analysis using other data, such as transition planning, external target validation, and near-term Capex plans.
- How do you measure alignment with a benchmark?

 The PAT recommends measuring alignment on a cumulative emissions basis in order to appropriately accommodate the physical relationship between cumulative emissions and warming outcomes.

Step 3: Assessing portfolio-level alignment

- How should alignment be expressed as a metric?
 The PAT suggests using whichever alignment metric is most informative for a specific institution and use-case. If the method of alignment is to be expressed in temperature scoring, the PAT recommends using in the short term the TCRE multiplier. In the medium term, financial institutions should consider moving to a multiple benchmark interpolation approach as consistency between climate scenarios improves.
- How should counterparty-level scores be aggregated?

 The PAT recommends that alignment scores be aggregated and reported externally using the aggregated budget method, as it better represents financed emissions. In any case, financial institutions should label the aggregation method applied. The PAT notes that measuring the alignment of a full portfolio is currently unlikely given data availability, so financial institutions should indicate the alignment of the proportion of a portfolio for which data is available. The PAT also recommends that appropriate disclosure be provided on uncertainties and updates of the alignment scores.

Lastly, the report identifies three major gaps that prevent investors from taking full advantage of portfolio alignment tools. These gaps are in the areas of data, scenarios, and methodology.

To overcome the shortfall, the PAT recommends that the full stakeholder community of data providers, financial institutions, nonprofits, non-financial institutions, and governments follow these steps:

- Improve corporate data and disclosures: Key inputs into portfolio alignment measurement include emissions, targets, and transition plans. But the level and quality of disclosure of these inputs remain limited for some portfolio companies. Financial institutions, non-financial institutions, and governments have critical roles to play in developing a disclosure environment that supports portfolio alignment assessments.
- Ensure fit-for-purpose scenarios: Financial institutions that are managing net-zero targets remain limited to applying a relatively narrow set of appropriate benchmark scenarios, which were not explicitly designed for this purpose. The PAT recommends the funding of research into appropriate net-zero scenarios for alignment benchmarking that are frequently updated to reflect the dynamics of the situation.
- **Drive methodological convergence:** The consequences of certain methodology choices are not fully clear. The PAT recommends that toolkits be developed in an open and collaborative way: adherence to the design considerations within the report should be disclosed, transparency should be increased, and agreed-upon best practice should be refined through testing. To drive convergence, PAT suggests that data and analytics providers should disclose their choices against the nine key judgements of the report and explain reasons for diverging from core considerations. These will aid iteration and ultimately inform the development of more-refined standards.

The road ahead

As it builds a work programme for 2022, GFANZ is in the process of consulting task force members on priorities for developing future portfolio alignment guidance. The work programme will consider:

- Coverage of asset classes and financial activities.
- Use of portfolio alignment metrics by retail finance customers.
- Key challenges in the portfolio alignment metrics ecosystem, such as emissions data, fit-forpurpose scenarios, methodological transparency, and testing.



GFANZ Call to Action was originally published on 11 October 2021.

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Climate scientists warn that time is running out in the battle against climate change. We must act now. Many governments and businesses have committed to reaching net zero GHG emissions by 2050 at the latest. But much more needs to be done for the world to avoid a catastrophic, irreversible rise in temperatures and to increase global resilience.

The Glasgow Financial Alliance for Net Zero (GFANZ) represents more than 450 firms from across the financial sector in 45 countries, collectively responsible for over \$130 trillion in assets. ⁶³ We acknowledge the critical role that we must play to support the transition to a green economy, which requires clean energy investment to triple by 2030. ⁶⁴ By mobilising the world's capital, we can power growth and create green jobs, while cutting emissions and protecting nature. Furthermore, we can mobilise billions of our investors and customers – individuals and businesses – by helping them to go green.

To achieve this, we have committed to use science-based guidelines to reach net zero emissions, 2030 interim target setting, and transparent reporting and accounting in line with the United Nations Race to Zero criteria.⁶⁵

However, if the world is to avoid a disorderly transition to net zero – which would create massive economic and financial instability – more governments must follow through on their commitments to the Paris Agreement objectives, whilst ensuring a Just Transition for all. ⁶⁶ Governments need to set out the specific steps they plan to take nationally, while delivering on their goal to mobilise at least \$100 billion ⁶⁷ annually in climate finance to support the needs of emerging markets and developing countries. They must lead by establishing global policy frameworks that correct existing market failures and enable action at scale. Doing so will enable GFANZ to turn the billions of dollars currently invested in climate finance into the trillions of dollars that are required to affect real change. Action by financial institutions, while critical, is no substitute for action by government and certain responsibilities cannot be shifted to finance. As a sector we are committed to supporting these ambitious policy proposals as they are advanced by governments and working with G20 governments to do so. To accelerate our progress, there is a need for more:

⁶³ Asset data compiled from data at an institution level provided by each subsector Alliance as of November 2021 for their member firms. The Call to Action first published on 11 October 2021 reflected GFANZ membership as of September 2021. At that time there were 295 firms from across the financial sector in 40 countries, collectively responsible for more than 90 trillion dollars in assets.

 $^{64\,}As\ defined\ in\ the\ IEA\ report,\ "Net\ Zero\ by\ 2050:\ A\ Roadmap\ for\ the\ Global\ Energy\ Sector".$

⁶⁵ The Marrakech Partnership for Climate Action have set out recommendations for action, including related to the issues included in this call to action, in a thematic Climate Action Pathway for finance. The High Level Climate Action Champions have outlined 2030 Breakthroughs which summarise the key actions that different actors can and must contribute to drive progress along these pathways.

⁶⁶ As referenced by the UK's Department for Business, Energy & Industrial Strategy's (BEIS) in their written evidence underpinning the Government's Ten Point Plan for a Green Industrial Revolution.

^{67 \$100} billion figure as defined by the COP16 accord. Refer to the Independent Expert Group on Climate Finance "Delivering on the \$100 billion climate finance commitment and transforming climate finance" report, 2020.

Commitment

More governments need to commit to the Paris target of 1.5 degrees C by 2050. They need to make immediate cuts to emissions and explicitly pledge to sustainable and climate-resilient development.

Clarity

Governments need to establish practical steps to cut emissions and clarify the roles expected to be played by different agents. Making clear the ambition and the pathway to net zero alignment is key for success.

Coordination

Governments and global regulators need to work faster, together to ensure the world's economic and regulatory framework supports and incentivises green investment.

Set economy-wide, net-zero targets for 2050 or earlier

Leaders must give certainty of ambition, direction, and alignment to the Paris Agreement while underpinning bold ambitions with detailed and expansive plans.

To accomplish this, G20 governments should:

Declare net zero targets in line with 1.5 degrees C warming by 2050 at the latest with interim targets for 2025 and/or 2030.⁶⁸

Complement net zero targets with clear communication to the private sector and consumers, and an economy-wide transition plan.⁶⁹

Issue credible and predictable sector-specific policies, targets, and transition plans to ensure concrete and effective actions. Governments should institute pathways⁷⁰ that align the most carbon-intensive sectors with net-zero. They should develop supportive public policies to address the impact that firms have on the climate and environment.⁷¹ This should include phase-out of unabated coal and oil power plants by 2040.^{72,73,74}

Set phase-out goals for fossil fuels and fossil fuel subsidies and ensure that these subsidies are redistributed to support the 'Just Transition' for all.

Set a target for mandatory TCFD-aligned⁷⁵ risk management, disclosures, and net-zero transition plans by 2024 for public and private enterprises, including Financial Institutions and SMEs.⁷⁶ A phasing-in of requirements will be required in case of SMEs.

Align debt issuance with sustainability goals and create market for net-zero-aligned sovereign debt to ensure portfolios line up with net-zero targets and to incentivise governments to cut emissions and protect biodiversity.

⁶⁸ Intermediate targets should be commensurate with 'fair-share' of reductions and accelerate progress towards net zero. NZBA members, a subsector alliance of GFANZ, has committed to setting an intermediate target for 2030 or sooner, using robust, science-based guidelines.

⁶⁹ Please refer to GFANZ Workstream on Sectoral Pathways on retiring assets responsibly.

⁷⁰ The Investor Agenda, formed by AIGCC, CDP, Ceres, IGCC, IIGCC, PRI and UNEP FI, have set out a '2021 Global Investor Statement to Governments on the Climate Crisis' signed by 587 investors representing over \$46 trillion dollars in assets. It urges governments to address gaps in climate ambition, policy action and risk disclosure with urgency. Specifically, it calls upon governments to "outline a pathway with ambitious interim targets including clear decarbonisation roadmaps for each carbon-intensive sector".

⁷¹ G7 Finance Ministers and Central Bank Governors Communiqué, 2021.

⁷² As defined in the IEA report, "Net Zero by 2050: A Roadmap for the Global Energy Sector".

⁷³ G7 communique recognises that continued global investment in unabated coal power generation must stop.

⁷⁴ The We Mean Business Coalition – with the core group of BSR, CDP, Ceres, CLG Europe, Climate Group, The B Team and WBCSD – has set out a call for phase out coal-fired power generation by 2030 for advanced economies, and 2040 for other countries.

⁷⁵ Task Force on Climate-related Financial Disclosures (TCFD).

⁷⁶ Small and Medium-sized Enterprises (SMEs) employ fewer than 250 people as defined by the OECD.

Green the multilateral and international financial architecture to deliver net zero

Given the global nature of climate change, we need an effective coordinated global response to help developed and developing countries reach net zero faster. Critically, all of society – public and private enterprises in all regions – must move forward together and the global financial architecture must ensure this. The current architecture was born in the age of fossil fuels to meet the challenges of the post-war era. We need to reset it in order to address the challenges of the green transition. The success of individual companies or sectoral initiatives depends on global action by those who oversee and govern financial markets.

To address this, G20 governments should:

Align regulatory frameworks to

net zero and ensure consistency and coherence across global regulatory frameworks aligned to net zero, including disclosures, metrics, and methodologies.⁷⁷

Encourage global coordination between

regulators on issues such as central bank climate stress testing⁷⁸ to create a level playing field and to avoid penalising certain jurisdictions. Timely action should be taken and ensure coherence.

Provide central banks and finance regulators with specific climate change and net-zero financial stability mandates, so that they can address climate change across all of the activities they currently conduct.

Direct the G20 Sustainable Finance Working

Group to undertake a collaborative review of the work to date on climate change by the bodies that make up the international financial architecture, to identify enhancements for financial stability, net-zero alignment, climate resilience and wider consideration of impacts on nature.^{79,80}

⁷⁷ Please refer to GFANZ Workstreams on Real Economy and Financial Institution Transition Plans, respectively.

⁷⁸ Other considerations to include would be harmonisation of disclosure requirements, taxonomies, and rating methodologies. With regards to stress testing: The Bank for International Settlements' paper on 'Stress-testing banks for climate change – a comparison of practices', discusses the challenges that emerge when trying to adapt traditional stress tests to banks' climate-related risks including the lack of well-established common practices for banks' climate risk stress testing across countries.

⁷⁹ Includes IMF, FSB, OECD, global standard setters and the multilateral development banks.

⁸⁰ Specifically, the G20 Sustainable Finance Working Group should conduct a stock take of article 2.1.c of the Paris Agreement on international flows of public and private finance and to make specific policy recommendations to Indonesia's 2022 G20 Presidency on how to enhance the international financial architecture to support greater consistency with article 2.1. The review should provide recommendations of how these bodies could better oversee and manage financial flows towards net zero with amendments of their mandates to explicitly direct this, including the creation and stewardship of a Global Finance Transition Strategy. Such a strategy would ensure consistent and predictable regulatory signals to market participants, and coordination of action by the international financial regulatory architecture to avoid regulatory market fragmentation as well as seeing the implementation of the Paris commitment to make finance flows consistent with a pathway towards low emissions and climate-resilient development.

Commit to pricing the externalities of carbon emissions

Pricing the externality of carbon emissions is an essential way to drive the transition and we do not see industry moving fast enough without it. There are a range of ways to do this, and the definition of "price" is broad, and it is the decision of member states to implement an approach appropriate to each jurisdiction, whilst ensuring coherence between jurisdictions as much as possible.

G20 leaders must therefore go beyond the positive language in the July 2021 Finance Leaders communique to:

Introduce policies, regulatory approaches and incentives that price the externalities of carbon emissions in line with the science and that give clear, credible, and specific forward guidance on measures to value carbon and the actual carbon price, allowing businesses to adequately prepare and fund the transition.

States should work with, e.g. the Network for Greening the Financial System (NGFS) to produce credible and specific forward curves on carbon pricing. Other interventions could include market-based solutions, regulatory standards (e.g. for clean energy in the case of the energy sectors); market regulation (including monetary policy and data standards) and taxes. It is up to each member state to determine the most appropriate solution such that the cost of capital reflects the full cost of carbon.

Reinvest proceeds from direct carbonpricing regimes into a just and green transition through, e.g. clean energy research and development; worker retraining; and dividends to lower income households. (See topic 4.) Carbon pricing, alone, will not get the world to reach net-zero emissions by 2050.

Commit to supporting efforts to standardise and scale the Voluntary Carbon Market globally. Ensure that there is coherence across jurisdictions to prevent double counting of carbon credits.⁸¹

Commit to supporting an international body to provide guidance on appropriate use of offsets, including quality standards and acceptable offset types (e.g. carbon removals), that would indirectly price carbon as companies implement net-zero transition mandates.

⁸¹ Article 6 of the Paris Agreement recognizes that some Parties choose to pursue voluntary cooperation in the implementation of their NDCs to allow for higher ambition in their mitigation and adaptation actions and to promote sustainable development and environmental integrity.

Create incentives to help people, businesses, and communities to go green as countries recover from the pandemic

While unlocking the trillions of dollars of capital needed to fund the green transition, we must also support millions of people and small and medium-sized businesses as they go green. Millions of new jobs must also be created to help companies and nations transition.

To achieve this, G20 governments should work with the private sector and financial institutions to:

Create incentives for people, businesses, and communities to go green as countries recover from the pandemic. Ensure solutions are affordable, accessible, and well understood – consistent with the principles for a Just Transition and gender equality – in relation to purchases and services such as buying a car, saving for retirement, buying and/or retrofitting a home, and choosing an energy provider.

Develop a plan to help retrain people in

industries that need to transition and equip new entrants to the workforce with skills required in a sustainable and economically just economy.⁸² Work with farmers and businesses to stop illegal deforestation and to provide viable alternatives. Promote sustainable regenerative agricultural practices.

Support research and development that will lower the cost of green energy solutions such as green hydrogen and sustainable aviation fuels. Fund sustainable infrastructure.⁸³

⁸² Education and Training under Article 6 – seeks to reduce the impact of climate change by enabling society to be part of the solution.

⁸³ Policymakers can leverage suitable recommendations from across the body of climate action work focused on scaling up innovative climate technologies and lowering associated green premiums. The Mission Possible Partnership and the World Economic Forum's Financing the Transition initiative are some examples of the industry-led work in this space.

Mobilise capital flows to emerging markets and developing countries

There is an urgent need to deploy private capital in emerging markets and developing countries to enable them to realize the commitments made in the Paris Agreement. The current scale of public and private capital flows is modest in relation to the trillions of dollars in sustainable investment needed for these nations to meet the challenges ahead.

To unlock this capital, the international community, led by the G20, should coordinate to:

Develop a network of country mobilisation

platforms, supporting the work of Climate
Finance Leadership Initiative (CFLI) country pilot
platforms⁸⁴, to bring together governments
and policymakers with public and private
finance institutions and Catalytic Initiatives.
These platforms would help identify barriers to
investment, support the creation of investment
friendly policy frameworks, better coordinate
financial and technical assistance, and mobilise
international and domestic private capital, to
support the delivery of ambitious NDCs.

Ensure that changes in global financial regulation recognize the unique challenges faced by EM&DCs in their transition to net-zero and enable the increased mobilisation of public

markets and institutional investors to increase the level of finance they deploy to these markets in the future.

Support the work of multilateral development banks and development finance institutions

to strengthen their private climate finance mobilisation plans to enable increased private sector capital deployment in emerging markets and developing countries. When geared to catalyze private sector investment, MDBs have already demonstrated that they can mobilise twice as much private capital as the public resources they deploy in a project or fund.⁸⁵

⁸⁴ Further details of CFLI and their approach provided on their website.

⁸⁵ The recent report, Joint Report on Multilateral Development Banks' Climate Finance 2020, references private funding that was catalysed as a result of public investment.



To maximise our impact, governments and regulators need to work urgently together to set out clear pathways to net zero and reset global financial regulations to support a just transition. If we are to save the ambitions the world agreed to in Paris in 2015, the time for talk is over – we now need action.

- Ana Botín

Executive Chairman, Santander



We need to unlock trillions of private finance to speed up the transition to net zero. It starts with policies that genuinely drive technology, innovation and finance in the right direction, including carbon pricing schemes and credible net zero plans. Private finance will only flow at scale when the cost of polluting is built into market prices.

- Amanda Blanc

Chief Executive Officer, Aviva

GFANZ commits to use our collective positive influence to work with governments, regulators, societies, and others to accelerate the world's transition to net-zero.

Appendix A

GFANZ governance

Principals Group Members

Mark Carney, Chair and UN Special Envoy for Climate Action and Finance and the UK Prime Minister's Finance Advisor for COP26, GFANZ

Nigel Topping, UN High-Level Climate Action Champion at COP26

Oliver Bäte, Chief Executive Officer, Allianz SE

Amanda Blanc, Group Chief Executive Officer, Aviva

David Blood, Senior Partner, Generation IM

Ana Botín, Executive Chairman, Santander Group

Thomas Buberl, Chief Executive Officer, AXA

Larry Fink, Chairman and Chief Executive Officer, BlackRock Inc.

Jane Fraser, Chief Executive Officer, Citi

Nili Gilbert, Board Member and Chair of Investment Committee, David Rockefeller Fund

Seiji Inagaki, President, Dai-ichi Life

Jon Johnsen, Chief Executive Officer, PKA

Juan Carlos Mora Uribe, Chief Executive Officer, Bancolombia

Brian Moynihan, Chairman of the Board and Chief Executive Officer, Bank of America

Joshua Oigara, Chief Executive Officer/Managing Director, KCB Group

Noel Quinn, Group Chief Executive, HSBC

Alison Rose, Chief Executive, NatWest Group

Michelle Scrimgeour, Chief Executive Officer, Legal & General Investment Management (LGIM)

David Schwimmer, Chief Executive Officer, London Stock Exchange Group (LSEG)

Shemara Wikramanayake, Managing Director and Chief Executive Officer, Macquarie

GFANZ Ambassadors

Michael Bloomberg, UN Special Envoy on Climate Ambition and Solutions and Global Ambassador for the Race to Zero and Race to Resilience campaigns

Hiro Mizuno, UN Special Envoy on Innovative Finance and Sustainable Investments

Mary Schapiro, TCFD Secretariat and Bloomberg

GFANZ Advisory Panel Member Organisations

2° Investing Initiative (2DII)

Cambridge Institute for Sustainability Leadership (CISL)

Carbon Tracker

Climate Policy Initiative (CPI)

Climate Safe Lending Network (CSL)

E3G (Third Generational Environmentalism)

Finance Sector Expert Group for Race to Zero and Race to Resilience (FSEG)

Global Optimism

Instituto Clima e Sociedade (iCS)

International Institute of Green Finance (IIGF)

Partnership for Carbon Accounting Financials (PCAF)

Rocky Mountain Institute Center for Climate-Aligned Finance (RMI)

Science Based Targets initiative (SBTi) (World Resources Institute (WRI))

SOAS Centre for Sustainable Finance

Transition Pathway Initiative (TPI)

World Wide Fund for Nature (WWF)

ZeniZeni Sustainable Finance (ZZSF)

GFANZ Steering Group

Steering Group Conveners

GFANZ Secretariat

Race to Zero/High-Level Climate Champions

Steering Group CEO

Representatives' organisations

Allianz

Aviva

AXA

Bank of America

Bancolombia

BlackRock

Citi

Dai-ichi

David Rockefeller Fund

Generation IM

HSBC

KCB

LGIM

LSEG

Macquarie

NatWest

PKA

Santander

Standard Chartered

Subsector alliance conveners

Ceres

IIGCC

PRI

SBTi

UNEP FI

Observers

AIGCC

Bloomberg

CDP

FCCM chair

GFANZ Task Forces

Building Commitment

Amalgamated Bank

AXA (CEO sponsorship)

Dai-ichi Life

HSBC (CEO sponsorship)

LSEG (CEO sponsorship)

Mobilising Private Capital

Bancolombia
Bank of America
Brookfield AM

Deutsche Bank

HSBC

KCB Group

Macquarie (CEO sponsorship)

Ninety One

PKA

Standard Chartered

Ceres (Workstream adviser)

CFLI (Workstream adviser)

UNEP FI (Workstream adviser)

Sectoral Pathways

Allianz (CEO sponsorship)

BlackRock (CEO sponsorship)

Citi (CEO sponsorship)

Credit Suisse

LSEG Mirova

Nordea

Shinhan Financial

Storebrand Wellington

PRI (Workstream adviser) RMI (Workstream adviser)

SBTi (Workstream adviser)

Real-Economy Transition Plans

AXA (CEO sponsorship)

BBVA

Brunel Pension Partnership (including Avon Pension Fund, Environment Agency, Cornwall Pension Fund, Oxfordshire County Council, Devon

County Council)
Deutsche Bank

LSEG (CEO sponsorship)

Montanaro Morgan Stanley

MUFG

NatWest (CEO sponsorship)

Shinhan Financial
Standard Chartered

UBS

Wellington

CDP (Workstream adviser)

IIGCC/CA100+ (Workstream adviser)

PRI (Workstream adviser)

Financial Institution Transition Plans

Aviva (CEO sponsorship)

Deutsche Bank

HSBC (CEO sponsorship)

L&G LGIM MUFG

Nationwide

NEST

UBS

Ceres (Workstream adviser)

SBTi (WRI) (Workstream adviser)
UNEP FI (Workstream adviser)

WWF (Workstream adviser)

Portfolio Alignment Measurement

Allianz

AXA

Bank of America

Deutsche Bank

Generation IM (CEO sponsorship)

Lombard Odier

Mirova MUFG

Shinhan Financial

UBS

2DII (Workstream adviser)

CDP (Workstream adviser)

McKinsey (Workstream adviser)

UNEP FI (Workstream adviser)

GFANZ Policy Call to Action

Amalgamated Bank

Aviva (CEO sponsorship)

Deutsche Bank

Federated Hermes International

HSBC

KCB Group

Lloyds Banking Group

Morgan Stanley

MUFG

Nationwide

Santander (CEO sponsorship)

Standard Chartered

UBS

CDP (Workstream adviser)

E3G (Workstream adviser)

IIGCC (Workstream adviser)

PRI (Workstream adviser)

UNEP FI (Workstream adviser)

WWF (Workstream adviser)

Appendix B

GFANZ Members

Net Zero Asset Managers initiative (NZAM)

A S R Asset Management	Netherlands
Aberdeen Standard Investments	United Kingdom
ACTIAM	Netherlands
Addenda Capital	United States
Aegon Asset Management	Netherlands
Affirmative Investment Management	United Kingdom
Aker Horizons	Norway
Aktia Bank plc	Finland
Aktie-Ansvar AB	Sweden
Algebris Investments	United Kingdom
Allianz (AGI)	Germany
Alpha Trust	Greece
Alquity	United Kingdom
Amundi Asset Management	France
Anaxis Asset Management	France
Angel Oak Capital	United States
APG Asset Management	Netherlands
Apostle Funds Management	Australia
Arcadian Asset Management	United States
Arisaig	Singapore
Arjuna Capital	United States
Artemis Investment Management LLP	United Kingdom
Ashmore Group	United Kingdom
Asset Management One	Japan
Asteria Investment Managers	Switzerland
Atlas Infrastructure	United Kingdom
Aviva	United Kingdom
AXAIM	France
Baillie Gifford & Co	United Kingdom
BankInvest	Denmark
BBVA Asset Management	Spain
Bentall Green Oak	Canada
Bin Yuan Capital	China
BlackRock	United States
BMO GAM	United Kingdom
BNK Asset Management	South Korea
BNP Paribas Asset Management	France
Border to Coast Pensions Partnership Limited	United Kingdom
Boston Common Asset	United States

Boston Trust Walden	United States
Brandywine Global Asset Management	United States
Brawn Capital	Hong Kong
Bregal Investments LLP	United Kingdom
Brewin Dolphin	United Kingdom
Bridges Fund Management	United Kingdom
Brookfield Asset Management	Canada
Brown Advisory	United States
BT Funds Management NZ	New Zealand
Calvert Research and Management	United States
Camco Clean Energy	United Kingdom
CANDRIAM	Luxembourg
Capricorn Investment Group	United States
Cardano	United Kingdom
CCLA	United Kingdom
Clean Energy Ventures	United States
Clearbridge Investments LCC	United States
Colony Capital (DigitalBridge)	United States
Columbia Threadneedle Investments	United States
Community Capital Management, LLC	United States
Coutts & Co	United Kingdom
cos	United Kingdom
Danskebank	Denmark
Deka Investment GmbH	Germany
Deka Vermögensmanagement GmbH	Germany
Desjardins Global Asset Management	Canada
Developing World Markets	United States
DIF Capital Partners represented by DIF Management BV	Netherlands
Dream Unlimited	Canada
DSC Meridian	United States
DUGUUD	United Kingdom
DWS	Germany
Earth Capital	United Kingdom
Ecofin	United States
ESPIRIA	Sweden
Ethical Partners	Australia
Eurizon Capital	Italy
EV Private Equity	Norway
Evenlode Investment Management	United Kingdom

FARA	D 'I
FAMA	Brazil
Fidelity	United Kingdom
Fideuram Asset Management Ireland	Ireland
Fideuram Asset Management SGR	Italy .
Fiera Capital Corporation	Canada
Franklin Templeton	United States
FSN Capital Partners	Norway
FullCycle	United States
GAM Investments	Ireland
Generation IM	United Kingdom
GMO	United States
Great Lakes Advisors	United States
Green Century Capital Management	United States
Green Investment Partners	United Kingdom
Greencoat Capital LLP	United Kingdom
Grupo Bancolombia	Colombia
Gulf International Bank	United Kingdom
Asset Management	C I.
Handelsbanken	Sweden
Hannon Armstrong	United States
Hg	United Kingdom
HSBC Asset Management	United Kingdom
Ibercaja AM	Spain
ICG	United Kingdom
IFM Investors	Australia
IG4CAPITAL	Brazil
Impax Asset Management	United Kingdom
InfraRed Capital Partners Limited	United Kingdom
Inherent Group	United States
Insight Investment	United Kingdom
Intech Investments	United States
Invesco Limited	United Kingdom
Investible	Australia
Investindustrial	United Kingdom
J Safra Sarasin	Switzerland
JGP	Brazil
JP Morgan AM	United States
Jupiter AM	United Kingdom
Jyske Capital	Denmark
KBI Global Investors	Ireland
Kempen	Netherlands
Kerogen Capital	Hong Kong
La Banque Postale Asset Management	France
La Financière de l'Echiquier	France
La Française Group	France
LaSalle Investment Management	United States
Lazard AM	United States
LGIM	United Kingdom
LGT Capital Partners	Switzerland
Linzor Capital Partners	Chile
Local Pensions Partnership Investments Ltd	United Kingdom

Local Tapiola Asset Management	Finland
Lombard Odier Investment	Switzerland
Managers (LOIM)	
M&G	United Kingdom
Mackenzie Investments	Canada
Macquarie	Australia
Maitri Asset Management	Singapore
Majedie	United Kingdom
Man Group plc	United Kingdom
Maple-Brown Abbott	Australia
Martin Currie Investment	United Kingdom
Management Limited	
Meridiam	France
Metric Credit Partners Pty Limited	Australia
Metzler Asset Management	Germany
MFS Investment Management	United States
MidOcean Partners	United States
Mirova	France
Mitsubishi UFJ Asset Management (UK) Ltd.	Japan
Mitsubishi UFJ Kokusai Asset Management	Japan
Mitsubishi UFJ Trust & Banking Corp	Japan
Montanaro	United Kingdom
MU Investments	 Japan
Munich Re Investment Partners	Germany
Muzinich & Co. Inc	United Kingdom
NEI Investments	United States
Neuberger Berman	United States
New Forests Advisory	Australia
Newton Investment Management/BNY	United Kingdom
Mellon Investment Management	
Nikko Asset Management Co., Ltd.	Japan
Ninety One	South Africa
Nissay AM	Japan
NN IP	Netherlands
Nomura Asset Management	Japan
Nordea Investment Funds	Sweden
Nykredit Asset Management	Denmark
Oakham Wealth Management	United Kingdom
OP Asset Management	Finland
OP Real Estate Asset Management Ltd	Finland
Orchard Street Investment Management	United Kingdom
Ownership Capital	Netherlands
Payden & Rygel	United Kingdom
Pemberton Asset Management S.A.	United Kingdom
Pictet Group	Switzerland
PineBridge Investment	United States
Polymer Capital Management	Hong Kong
Quinbrook Infrastructure Partners	United Kingdom
Quoniam Asset Management	Germany
RAM Active Investments SA	Switzerland
Rathbone Brothers	United Kingdom

Rathbones Greenbank	United Kingdom
Ridgewood Infrastructure	United States
River and Mercantile Group PLC	United Kingdom
Robeco	Netherlands
RockCreek	United States
Rockefeller Asset Management	United States
Rothschild & Co Asset Management Europe	France
Royal London Asset Management	United Kingdom
Russell Investments	United Kingdom
Sage Advisory	United States
Salm-Salm & Partner GmbH	Germany
Santander Asset Management	Spain
Sarasin & Partners LLP	United Kingdom
Savills Investment Management	United Kingdom
Schroders	United Kingdom
SEB Investment Management	Sweden
Shinhan Asset Management Co. Ltd	South Korea
SKY Harbor Capital Management	United States
SLGI Asset Management Inc.	Canada
Sprucegrove Investment Management	Canada
Stafford Capital Partners	United Kingdom
Stance Capital, LLC	United States
State Street Global Advisors	United States
Stonepeak	United States

Storebrand ASA	Norway
Sumitomo Mitsui Trust Asset Management	Japan
Swedbank Robur Fonder AB	Sweden
Swisscanto Invest by Zurcher Kantonal Bank	Switzerland
Taaleri Plc	Finland
Terra Alpha Investments	United States
The International Business of Federated Hermes	United Kingdom
Tikehau Investment Management	France
Trillium Asset Management	United States
Troy Asset Management	United Kingdom
UBS AM	Switzerland
Union Asset Management Holding AG	Germany
Valo Ventures	United States
Vancity Investment Management Ltd. (VCIM)	Canada
Vanguard	United States
Veritas Asset Management	United Kingdom
Vert Asset Management	United States
Vista Equity Partners	United States
Wellington	United States
WHEB	United Kingdom
Willis Towers Watson	United Kingdom
-	-

Net-Zero Asset Owners Alliance (NZAOA)

AkademikerPension	Denmark
Alecta Pensionsforsakring	Sweden
Allianz SE	Germany
AMF	Sweden
ARC	Bermuda
Aviva Plc	United Kingdom
AXA Group	France
Bayerische Versorgungskammer	Germany
BNP Paribas Cardif	France
BT Pension Scheme	United Kingdom
Caisse de dépot et placement du Québec (CDPQ)	Canada
California Public Employees' Retirement System CalPERS	United States
CBUS Superannuation Fund	Australia
CDC - Caisse des dépôts et consignations	France
Church Commissioners for England	United Kingdom
Church of England Pensions Board	United Kingdom
CNP Assurances	France
Credit Agricole Assurance	France

Dai-ichi Life Insurance Company	Japan
Danica Pension	Denmark
David Rockefeller Fund	United States
Detailhandel	Netherlands
ERAFP - Etablissement de Retraite Additionnelle de la Fonction Publique Pension Scheme	France
Folksam	Sweden
Fonds de réserve pour les retraites - FRR	France
Generali Group	Italy
HanseMerkur	Germany
KENFO	Germany
Lægernes Pension	Denmark
Legal & General	United Kingdom
M&G (formerly Prudential)	United Kingdom
MAIF	France
Meiji Yasuda Life Insurance	Japan
Munich Re	Germany
Nippon Life	Japan
Nordea Life & Pensions	Sweden
P + for Akademikere	Denmark

Pension Insurance Corporation	United Kingdom
PensionDanmark	Denmark
PFA Pension	Denmark
Phoenix Group	United Kingdom
PKA	Denmark
Prudential Plc	Hong Kong
QBE Insurance Group Limited	Australia
Rothesay	United Kingdom
SCOR SE	France
Societe Generale Assurances	France
Sparkassenversicherung SV	Germany
St. James's Place Group	United Kingdom

Stichting Pensioenfonds IBM Nederland	Netherlands
Storebrand ASA	Norway
Sumitomo Life	Japan
Swiss Re Ltd	Switzerland
The Co-operators	Canada
UNIQA	Austria
United Nations Joint Staff Pension Fund	United States
University of Toronto Asset Management - Endowment	Canada
Univest Company BV (Unilever Pensions)	Netherlands
Wespath Benefits and Investments	United States
Zurich Insurance Group	Switzerland

Net-Zero Banking Alliance (NZBA)

ABANCA Corporación Bancaria S.A.	Spain
Ålandsbanken Abp	Finland
Allied Irish Banks (AIB)	Ireland
Amalgamated Bank	United States
Australia and New Zealand Banking Group	Australia
BAC Credomatic	Costa Rica
Banca Ifis	Italy
Banco Bradesco	Brazil
Banco de la Produccion S.A Produbanco	Ecuador
Banco Grupo Promerica Nicaragua	Nicaragua
Banco Guayaquil S.A.	Ecuador
Banco Itaú Unibanco S.A	Brazil
Banco Mercantil del Norte, S.A.	Mexico
Banco Promerica Costa Rica, S.A	Costa Rica
Banco Sabadell	Spain
Banco Santander	Spain
BancoEstado de Chile	Chile
Bancolombia	Colombia
Bank of America	United States
Bankinter	Spain
Barclays Group plc	United Kingdom
Basellandschaftliche Kantonalbank	Switzerland
BBVA (Banco Bilbao Vizcaya Argentaria)	Spain
BMO Financial Group	Canada
BNP Paribas	France
BPCE Group	France
Caixa Geral de Dépositos (CGD)	Portugal
CaixaBank	Spain
Canadian Imperial Bank of Commerce	Canada
CIMB Bank Berhad	Malaysia
Citigroup Inc.	United States
Commercial International Bank (CIB)	Egypt
Commerzbank AG	Germany

Coöperatieve Rabobank U.A.	Netherlands
Coopservidores	Costa Rica
Crédit Agricole	France
Credit Mutuel	France
Credit Suisse	Switzerland
Danske Bank AG	Denmark
Deutsche Bank	Germany
Ecology Building Society	United Kingdom
Erste Group Bank AG	Austria
Fana Sparebank	Norway
First Abu Dhabi Bank (FAB)	United Arab Emirates
Garanti BBVA	Turkey
GLS Gemeinschaftsbank eG	Germany
Goldman Sachs	United States
HSBC	United Kingdom
lbercaja Banco S.A.	Spain
IDLC Finance Limited	Bangladesh
Industrial Bank of Korea (IBK)	South Korea
ING Bank N.V	Netherlands
Intesa Sanpaolo	Italy
Investec Group	South Africa
Íslandsbanki.hf.	Iceland
JB Financial Group	Japan
JPMorgan Chase	United States
KB Financial Group Inc.	South Korea
KCB Group	Kenya
La Banque Postale	France
LGT Private Banking	Liechtenstein
Liechtensteinische Landesbank Group	Liechtenstein
Lloyds Banking Group	United Kingdom
Macquarie Financial Group	Australia
Mizuho Financial Group	Japan
Morgan Stanley	United States

MUFG (Mitsubishi UFJ Financial Group)	Japan
National Bank of Canada	Canada
Nationwide Building Society	United Kingdom
NatWest Group	United Kingdom
Nomura Holdings, Inc.	Japan
Nordea	Finland
Republic Financial Holdings Limited	Trinidad
Royal Bank of Canada	Canada
Shinhan Financial Group	South Korea
Skandinaviska Enskilda Banken (SEB)	Sweden
Société Générale	France
SpareBank 1 Østlandet	Norway
Spuerkeess Banque et Caisse d'Épargne de l'État	Luxembourg

Standard Chartered	United Kingdom
Sumitomo Mitsui Financial Group	Japan
Sumitomo Mitsui Trust Holdings, Inc.	Japan
Svenska Handelsbanken publ	Sweden
Swedbank AB	Sweden
TD Bank Group	Canada
The Bank of Nova Scotia	Canada
Triodos Bank	Netherlands
UBS	Switzerland
UniCredit Group	Italy
Vancity	Canada
Virgin Money UK	United Kingdom
VP Bank	Liechtenstein
Wells Fargo	United States

Net-Zero Insurance Alliance (NZIA)

Allianz SE	Germany
American Hellenic Hull	Cyprus
Aviva plc	United Kingdom
AXA Group	France
Generali	Italy
Hannover Re	Germany
ICEA LION Group	Kenya

Lloyd's	United Kingdom
Munich RE	Germany
NN Group	Netherlands
SCOR	France
Shinhan Life Insurance	South Korea
Swiss Re Ltd	Switzerland
Zurich Insurance Group	Switzerland

Net Zero Investment Consultants Initiative (NZICI)

Barnett Waddingham	United Kingdom
bfinance	United Kingdom
Cambridge Associates	United States
Cardano	United Kingdom
Frontier	Australia
Hymans Robertson	United Kingdom

JANA	Australia
- JANA	Australia
LCP	United Kingdom
Meketa	United States
Redington	United Kingdom
Willis Towers Watson	United Kingdom
Wilshire	United States

Net Zero Financial Service Providers Alliance (NZFSPA)

BDO	Belgium
Bloomberg	United States
Bolsa Mexicana de Valores	Mexico
Campbell Lutyens	United Kingdom
Clarity AI	United States
Deloitte	United Kingdom
deVere Group	United Arab Emirates
EY	United Kingdom
Grant Thornton	United States
Johannesburg Stock Exchange (JSE)	South Africa
KPMG	Netherlands

LSEG	United Kingdom
LuxSE	Luxembourg
Minerva Analytics	United Kingdom
Moody's	United States
Morningstar	United States
MSCI	United States
PWC	United Kingdom
Qontigo	Germany
S&P Global	United States
SGX	Singapore
Solactive	Germany

Paris Aligned Investment Initiative (PAII)

ABP	Netherlands
Accident Compensation Corporation	New Zealand
AP Pensions	Denmark
AP2 (Second Swedish National Pension Fund)	Sweden
AP7	Sweden
Avon Pension Fund	United Kingdom
Barclays Bank UK Retirement Fund	United Kingdom
Brunel Pension Partnership (including Avon Pension Fund, Environment Agency, Cornwall Pension Fund, Oxfordshire County Council, Devon County Council)	Sweden
BT Pension Scheme	United Kingdom
Bundespensionskasse AG	Austria
Church of England Pensions Board	United Kingdom
Church of Sweden	Sweden
Church Pension Fund	United States
Cornwall Pension Fund	United Kingdom
Devon County Council	United Kingdom
Elo Mutual Pension Insurance Company	Finland
Environment Agency Pension Fund	United Kingdom
Government Superannuation Fund Authority	New Zealand
HESTA	Australia
HSBC Bank Pension Trust (UK) Ltd.	United Kingdom
Ilmarinen Mutual Pension Insurance Company	Finland
Lægernes Pension	Denmark
Lloyds Banking Group Pensions Trustee Limited	United Kingdom
London Pension Funds Authority	United Kingdom
National Grid UK Pension Scheme	United Kingdom
National Provident Fund	New Zealand

National Trust for Places of Historic Interest or Natural Beauty	United Kingdom
NEST Corporation	United Kingdom
New York City Board of Education Retirement System (BERS)	United States
New York City Employee's Retirement System (NYCERS)	United States
New York State Common Retirement Fund	United States
New Zealand Superannuation Fund	New Zealand
NN Group	Netherlands
Northern LGPS (Greater Manchester Pension Fund, Merseyside Pension Fund, West Yorkshire Pension Fund)	United Kingdom
Oxfordshire County Council Pension Fund	United Kingdom
Pædagogernes Pension	Denmark
PenSam	Denmark
PenSam PensionDanmark	Denmark Denmark
PensionDanmark	Denmark
PensionDanmark PKA	Denmark Denmark
PensionDanmark PKA Royal London Mutual Insurance Society	Denmark Denmark United Kingdom
PensionDanmark PKA Royal London Mutual Insurance Society RPMI Railpen Scottish Widows, part of Lloyds	Denmark Denmark United Kingdom United Kingdom
PensionDanmark PKA Royal London Mutual Insurance Society RPMI Railpen Scottish Widows, part of Lloyds Banking Group	Denmark Denmark United Kingdom United Kingdom United Kingdom
PensionDanmark PKA Royal London Mutual Insurance Society RPMI Railpen Scottish Widows, part of Lloyds Banking Group Sierra Club Foundation	Denmark Denmark United Kingdom United Kingdom United Kingdom United Kingdom
PensionDanmark PKA Royal London Mutual Insurance Society RPMI Railpen Scottish Widows, part of Lloyds Banking Group Sierra Club Foundation South Yorkshire Pensions Authority Teacher's Retirement System of the City	Denmark Denmark United Kingdom United Kingdom United Kingdom United Kingdom United Kingdom
PensionDanmark PKA Royal London Mutual Insurance Society RPMI Railpen Scottish Widows, part of Lloyds Banking Group Sierra Club Foundation South Yorkshire Pensions Authority Teacher's Retirement System of the City of New York	Denmark Denmark United Kingdom United Kingdom United Kingdom United Kingdom United States United Kingdom United States
PensionDanmark PKA Royal London Mutual Insurance Society RPMI Railpen Scottish Widows, part of Lloyds Banking Group Sierra Club Foundation South Yorkshire Pensions Authority Teacher's Retirement System of the City of New York Tesco Pension Scheme	Denmark Denmark United Kingdom United Kingdom United Kingdom United States United Kingdom United Kingdom United Kingdom United Kingdom United States
PensionDanmark PKA Royal London Mutual Insurance Society RPMI Railpen Scottish Widows, part of Lloyds Banking Group Sierra Club Foundation South Yorkshire Pensions Authority Teacher's Retirement System of the City of New York Tesco Pension Scheme TPT Retirement Solutions	Denmark Denmark United Kingdom United Kingdom United Kingdom United Kingdom United States United Kingdom United Kingdom United Kingdom United Kingdom United Kingdom

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