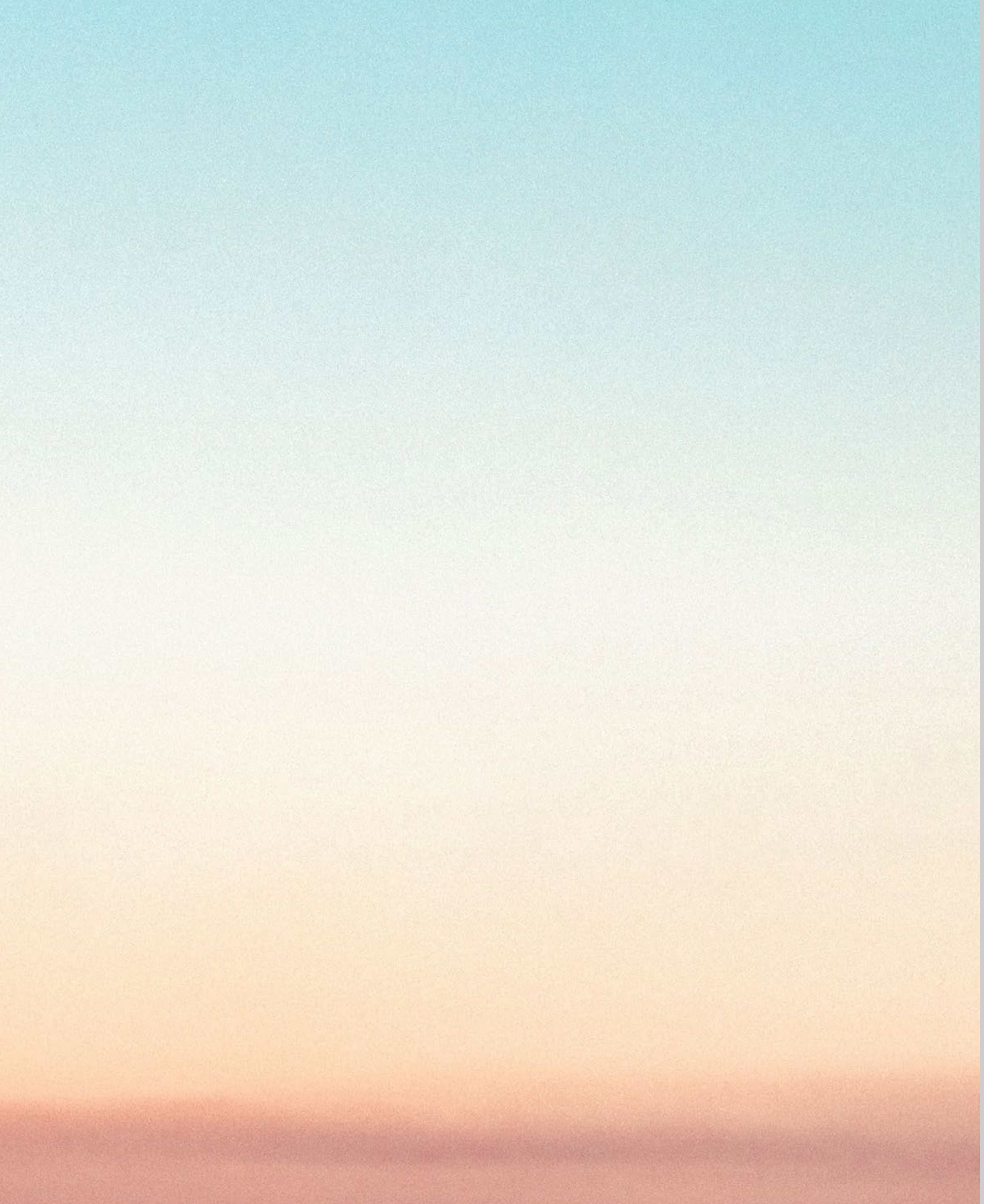
ONE PLANET SWF NETWORK

Framework **Companion Document** 2022



Published by: the One Planet Sovereign Wealth Funds Network | **Publication Editor:** OPSWF Secretariat
Contributors: Our thanks to the members of the One Planet Sovereign Wealth Funds, One Planet Asset Managers, One Planet Private Equity Funds, Dr. Ben Caldecott (Oxford University) and Ms. Sophy Fry (Oxford University student)
Photos: Gustavo Zambelli, Norris Niman, Guilherme Rossi, Ave Calvar-Martinez, D. Valdemaras, Stein Egil-Liland, iStock
Design: Houltonsmets | **Publication Date:** October 2022 | **Contact:** secretariat@opswf.net

TABLE OF CONTENTS

INTRODUCTION AND CONTEXT

Championed by President Emmanuel Macron of France, the One Planet Sovereign Wealth Funds (OPSWF) initiative was launched at the One Planet Summit in December 2017 in Paris to accelerate the integration of climate change analysis into the management of large, long-term, and diversified asset pools with the goals of the Paris Agreement.

Sovereign Wealth Funds (SWF) can make important contributions in helping to solve the climate emergency, as well as the current energy and cost of living crises. These large, long-term, and diversified asset pools have a critical role to play in mobilising the capital required to decarbonize the global energy system quickly. This is necessary to meet the aims of the Paris Agreement and to both reduce the costs and enhance the resilience of the global energy system.

Since OPSWF's inception, President Macron has hosted an annual CEO Summit at the Elysée Palace. This year's Summit is co-hosted by the Abu Dhabi Investment Authority (ADIA) and Mubadala Investment Company (Mubadala); it comes one month before the 27th UNFCCC Conference of the Parties (COP27) hosted by Egypt, and one year before COP28 hosted by the U.A.E.

Initially launched as a working group of six founding sovereign wealth funds with a three-year mandate, the One Planet sovereign wealth funds, asset managers and private equity funds Network (the OPSWF Network) has since grown to 46 members, comprising 18 sovereign wealth funds, 18 asset managers, and 10 private investment firms, with over USD 37 trillion in assets under ownership and management who commit to collaborate actively to implement the principles of the OPSWF Framework, published at the Élysée Palace in 2018.

During the last twelve months, the OPSWF Network has engaged in peer exchanges on critical new technical competencies including carbon foot-printing and the implementation of the Task Force on Climate-related Disclosure (TCFD) recommendations. In June of this year Growthfund, the National Fund of Greece, hosted two days of expert meetings in Athens for Network members.

The OPSWF Companion Document is published annually at the OPSWF CEO Summit and chronicles evidence-based progress with data supported examples made available to the public. These examples are often disclosed by OPSWF Network members for the first time in this publication. This year's addition illustrates over 100 actions to implement the OPSWF Framework taken by members.

The report also highlights the major findings of three member-led workstreams focusing on (1) climate data, (2) clean hydrogen and (3) renewables in emerging and developing economies. These three areas have a high importance to achieving the aims of the Paris Agreement. The overall compilation provides one of the most important sources of information today on the evolution of Sovereign Wealth Funds in their climate journey.

The 5th OPSWF CEO Summit is a milestone: the Network members recognise the accomplishments of the initiative over the last five years and the critical role it plays in to helping realise SWF ambition on climate. It was agreed unanimously by OPSWF members to permanently establish OPSWF as the preeminent SWF forum on climate change or the "C" of the "E" of ESG. OPSWF has put in place a road map to become a membership association based in Paris under French law.

OPSWF CEOs

Within the parameters of the OPSWF Framework, the OPSWF Network will maintain its agenda in 2023. The escalating climate emergency combined now with the current energy security challenges calls for reinforced cooperation across the financial system. During this year's summit, CEOs agreed that complementary solutions to both challenges must be found at the same time to maintain momentum on ambitious climate action. The OPSWF Network will make its specific contribution to this global effort based on the unique role this community of actors has in the global financial system.

BACKGROUND ON ONE PLANET SOVEREIGN WEALTH FUNDS INITIATIVE

The One Planet Sovereign Wealth Funds (OPSWF) initiative was established at the inaugural One Planet Summit in December 2017 in Paris.

The objectives are:

- Helping to mobilise the capital of sovereign wealth funds towards the implementation of the Paris Agreement, including by working to rapidly grow the investable market for climate solutions.
- Accelerating efforts to integrate climate-r elated financial risks and opportunities in the management of large, long-term asset pools.
- Leveraging the scale and benefits of knowledge-sharing, while preserving flexibility and agility.

On the 6th July 2018, the OPSWF founding members published a voluntary framework ('the Framework') outlining principles for SWFs to systematically integrate climate change into their decision-making and how they can collectively support ambitious global climate action.

This Framework includes 12 recommendations based around three guiding principles:

Principle 1: Alignment - Build climate change considerations, which are aligned with the SWFs' investment horizons, into decision-making.

Principle 2: Ownership - Encourage companies to address material climate change issues in their governance, business strategy and planning, risk management and public reporting to promote value creation.

Principle 3: Integration - Integrate the consideration of climate change-related risks and opportunities into investment management to improve the resilience of long-term investment portfolios.

The One Planet Asset Managers (OPAM), the One Planet Private Equity Funds (OPPEF) initiatives and the One Planet Research Forum have also been established to accelerate efforts in supporting the implementation of the Framework, and to support the transition towards more sustainable financial markets.

TIMELINE OF OPSWF ACTIVITIES TO DATE

2017

12 / 2017
Launch at the One Planet Summit, Paris

2018

03 / 2018
OPSWF Working Group Meeting, Paris

07 / 2018
OPSWF 1st Annual Summit, Paris

Publication of the OPSWF Framework

09 / 2018
One Planet Summit, New York

2019

01 / 2019
OPSWF Working Group Meeting, Paris

07 / 2019
OPSWF 2nd Annual Summit, Paris

Press Release for the launch of OPAM and the OPSWF Research Forum

09 / 2019
OPSWF & OPAM Working Group Meetings at UN Climate Week, New York

Publication of the 2019 OPSWF Compa-nion Document

2020

01 / 2020
OPSWF & OPAM Working Group Meetings, Paris

11 / 2020
OPSWF and OPAM Working Group Meetings

11 / 2020
3rd Annual OPSWF Summit. Statements on support of TCFD, Announcements on addition of new members (OPSWF and OPAM),

Announcement on the launch of the OPPEF, Publication of the 2020 OPSWF Companion Document

12 / 2020
OPSWF, OPAM, OPPEF Working Group Meetings, Virtual

12 / 2020
The 40 largest listed companies in France in the CAC 40 index declared support for the recommendations of TCFD following the OPSWF Annual Summit and the Statements on TCFD

2021

01 / 2021
OPSWF Working Group Meeting, Virtual

02 / 2021
OPAM, OPPEF Working Group Meeting, Virtual

02 / 2021
OPSWF, in partnership with The International Forum of Sovereign Wealth Funds (IFSWF) published the first comprehensive survey of sovereign wealth funds' attitudes to climate change

03 / 2021
OPSWF Working Group Meeting, Virtual

05 / 2021
Launching of the OPSWF Peer-Exchange Series

06 / 2021
OPSWF, OPPEF Working Group Meetings, Virtual, Peer-Exchange Carbon Footprinting

07 / 2021
OPAM Working Group Meeting Virtual, OPPEF Working Group meeting Virtual, Peer-Exchange ESG Ratings Fitch

08 / 2021
OPSWF Working Group Meeting, Virtual

09 / 2021
Meeting with French Secretary of State O. Grégoire

10 / 2021
4th OPSWF Annual CEO Summit, Virtual

Statements on support of TCFD by OPPEF, Announce-ments on addition of new members (OPSWF, OPAM, OPPEF), Publication of the 2021 OPSWF Companion Document

11 / 2021
OPSWF, in partnership with The International Forum of Sovereign Wealth Funds (IFSWF) published the second comprehensive survey of sovereign wealth funds' attitudes to climate change

2022

02 / 2022
OPSWF, OPPEF Working Group Meeting, Virtual

03 / 2022
OPAM Working Group Meeting, Virtual

04 / 2022
Launch of the three OPSWF Workstreams on Clean Hydrogen, Renewables in Emerging Markets, Climate Data Harmonization

06 / 2022
OPSWF Network Mid-Term Meeting in Athens, in person

07 / 2022
OPSWF, OPAM Working Group Meeting, Virtual

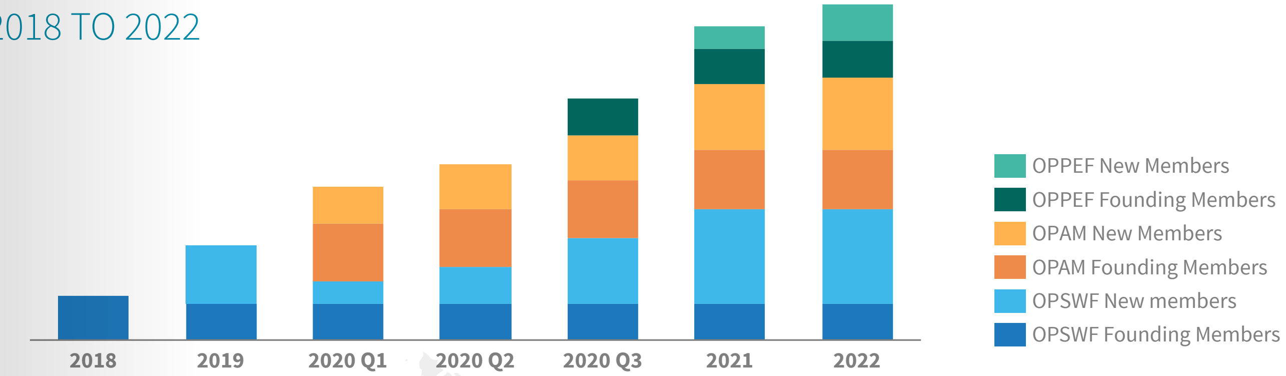
09 / 2022
OPSWF, OPAM, OPPEF Working Group Meeting, Virtual

10 / 2022
5th Annual OPSWF CEO Summit, Abu Dhabi, in person

EXPANDING THE NETWORK

Rapid expansion of the OPSWF Network has occurred in the past years, with the number of financial institutions supporting the goals and principles of the OPSWF Framework growing from 33 institutions (14 SWFs, 14 asset managers and five private equity funds) at the 3rd Annual Summit in 2020 to 46 institutions by the 5th Annual Summit in 2022. The OPSWF Network now includes: 18 OPSWF members, 18 OPAM members and 10 OPPEF members.
This expansion is a result of concerted outreach efforts by the founding members of the initiative, and demonstrates the reputation and relevance of the initiative as providing a unique forum for best practice exchange and accelerated action on the topic of climate change within the finance industry.

NETWORK EVOLUTION OF PUBLIC SUPPORTERS OF THE OPSWF FRAMEWORK 2018 TO 2022



Sovereign Wealth Funds

Asset Managers
- AllianceBernstein
- Allianz Global Investors
- Amundi Asset Management
- Axa Investment Managers
- BlackRock
- BNP Paribas Asset Management
- Federated Hermes Limited
- Fidelity International
- Goldman Sachs Asset Management
- HSBC Asset Management
- Invesco
- Legal & General Investment Management
- Morgan Stanley Investment Management
- Natixis Investment Managers
- Northern Trust Asset Management
- PIMCO
- State Street Global Advisors
- UBS Asset Management

Private Investment Firms
- Ardian
- BeyondNetZero
- The Carlyle Group
- Eurazeo
- Global Infrastructure Partners
- Industry Capital Partners
- Macquarie Asset Management
- SoftBank Investment Advisers
- Tikehau Capital
- TPG

ONE PLANET
ASSET MANAGER
INITIATIVE

NEW ASSET MANAGER MEMBERSHIP

A new member has joined the One Planet Asset Managers (OPAM) Initiative in the past year:

- **AllianceBernstein**

This firm joins the members of the OPAM group in committing to collaborate within the OPSWF Framework and to engage with SWF clients and other key actors to further the objectives of the OPSWF initiative.

Through the addition of this new member, 18 OPAM global actors within the asset management are now collaborating to advance the understanding and integration of the implications of climate-related risks and opportunities within long-term investment portfolios through this initiative.

ONE PLANET
PRIVATE EQUITY
FUNDS

NEW PRIVATE EQUITY FUNDS MEMBERSHIP

The One Planet Private Equity Funds (OPPEF) Initiative has also attracted additional members in the past year. The new members are:

- **BeyondNetZero**
- **Industry Capital Partners**

They join the members of the OPPEF group in committing to collaborate within the OPSWF Framework and to engage with SWF clients and other key actors to further the objectives of the OPSWF initiative.

Through the addition of these new members, 10 OPPEF global actors within the Private Equity market are now collaborating actively within the OPSWF Framework, to share information and to engage with other key actors, including standard setters, regulators and the broader private equity industry to further the objectives set out in the OPSWF Framework.

EXAMPLES OF SOVEREIGN WEALTH FUNDS ALIGNMENT WITH THE OPSWF FRAMEWORK - 2021 TO 2022

ONE PLANET SOVEREIGN WEALTH FUNDS

PRINCIPLE 1 ALIGNMENT

30%
COFIDES's strategic plan adopted a climate finance target of at least 30% of all new financing by COFIDES dedicated to climate action and environmental sustainability by the end of 2024

50%
of QIA's power generation investments are zero emissions

2.71 Million tCO_2
NIIF's renewable energy platform Ayana achieved a total CO_2 emission avoidance of approximately 2.71 million tCO_2

256 companies
ISIF maintains Fossil Fuel and High Carbon Exclusion lists

1st
KIA distributed its first internal ESG Risk Report

$40 Billion
TSFE will co-invest in green hydrogen projects with investments expected to exceed $40bn up to 2030

78%
ADIA has conducted a physical & transitional risk scenario analysis on 78% of its global direct operational Real Estate Portfolio

100%
KIA is in the process of transitioning its portfolio towards 100% ESG compliance with a primary focus on the "E" of ESG

€700 Million
KIC entrusted with the proceeds of the Korean Government's green bond issued in October 2021

60%
PIF improved its Governance, Sustainability and Resilience (GSR) score from 40% to 60% through improved sustainability practices and enhanced transparency and disclosure

70% reduction
PIF is committed to developing 70% of Saudi Arabia's renewable energy target by 2030

Net Zero Emissions Transition Plan
PIF is developing a Net Zero Emissions Transition Plan that is aligned with the Kingdom's net zero commitments

40%
NZSF shifts 40% of portfolio, NZ$25 Billion, to Paris-Aligned Indices in sustainability push

100%
Growthfund has committed to reach EU targets to reduce emissions by 55% by 2030, and achieve the 100% target for net zero by 2050

15%
Growthfund has set a Mega KPI target to achieve by 2024, relating to a 15% reduction of the Decarbonisation Index

25% Mubadala's partnership has led to GlobalFoundries to commit to a 25% reduction in total GHG by 2030

47% and 94% emissions reductions
NZSF reduced portfolio carbon emissions 47% by intensity and 94% for fossil fuel reserves to 30 June 2021

90 Million carbon credits
FGIS has been designated as the exclusive monetizing agent for Gabonese Carbon credits, with 90 million carbon credits to be certified before COP

PRINCIPLE 2 OWNERSHIP

50% climate focused
50% of KIC's engagement activities are related to climate change and environmental issues

300 companies
Bpifrance and Ademe launched "Diag Décarbon'Action" to support 300 companies, mainly SMEs, reduce their carbon footprint

€7-8 Billion
Mubadala-supported CEPSA committed to green hydrogen production by 2030, investing €7-8bn, with more than 60% going towards sustainable businesses

7.5 Million tonnes of CO_2 displaced
Mubadala's Masdar's global operating clean energy portfolio announced in March 2022

85% SDG related
More than 85% of KIC's engagement activities are related to UN SDGs

571,098 tons of waste NIIF as on 31-Dec-2021 through its FoF investments has enabled reduction/avoidance of 6+ million tons of CO_2 equivalent emissions, recycling of 571,098 tons of waste, and conversion of 1.5 million tons of waste to Bio-CNG

$50 Million
NSIA and Vitol have agreed to an initial $50m Green Fund

150,000 tonnes per year
Mubadala's part-owned EGA to build a 150,000 tonnes/year aluminium recycling facility

135
More than 135 of KIA's asset managers continue to monitor and report their implementation of the OPSWF Framework

PRINCIPLE 3 INTEGRATION

€400 Million
ISIF has committed over €400m to climate related projects to date

3.4 Million cubic meters of water / day
TSFE seeks to develop with the private sector desalination stations starting with a capacity of 3.4 million cubic meters of water / day over the next 5 years, rising to 8.8 million cmd by 2050

3.32 Million street lights
PIF's portfolio company Tarshid: National Energy Service Company is leading energy efficiency across Saudi Arabia, including replacing roughly 3,320,000 Street Lights from conventional to LED across Saudi Arabia

1st Hydrogen and Innovation Development Center
PIF's ENOWA, a subsidiary of NEOM, established the region's first Hydrogen and Innovation Development Center

50% ISIF's Global Portfolio is on track to meet its 50% emission reduction target by 2025

>600,000 tons
PIF Company - Ma'aden - aims to reduce carbon emission by over 600,000 tons annually by developing world's largest solar process heat plant

$625 Billion
PIF-owned Gulf International Bank closed a $625 million sustainability-linked syndicated loan

23 GW
Mubadala Masdar's joint venture with Abu National Oil Company creates 23GW renewable energy capacity, targeted to reach 50GWs by 2030

120+ investment deals
KIC has integrated ESG considerations into all its investment decisions and conducted more than 120 assessments

$3.76 Billion
First Riyal-denominated credit facility to receive green financing accreditation, of USD 3.76 billion, awarded to a PIF company

$750 Million
PIF portfolio company, Riyad Bank, closed $750 million Additional Tier 1 Sustainability Sukuk in 2022

€125 Million
NZSF has invested NZD 208 Million (€125 Million) in Copenhagen's Infrastructure Partners' Energy Transition Fund which includes green hydrogen

32% of CO_2 avoided
FONSIS has mandate to invest in Train Express Regional, an electric train expected to contribute to a 32% reduction in transportation CO_2

8,6% decline in indexed equities single pool Carbon Footprint across ADIA indexed portfolios

50% ADIA's indexed equities Climate Change investment mandate has reduced its climate change risk exposure by 50% relative to the benchmark since inception

46% The percentage of renewables in QIA's infrastructure power generation assets has expanded to 46%

SWF ALIGNMENT WITH THE OPSWF FRAMEWORK

The core function of the OPSWF initiative is to support SWF members in the implementation of the Framework and the alignment of portfolios with climate risks and opportunities. This is done in a number of ways:

- **Peer exchange** to foster a shared understanding of key principles, methodologies and indicators related to climate change;
- **Collaborative projects** to support the financial system in identifying and disclosing climate-related risks and opportunities in their investments;
- **Development** of enhanced investment decision-making frameworks to better inform SWF priorities as investors and participants in financial markets.

The results have been visible over the past year, with individual Funds scaling up their efforts to integrate climate change into their investment processes and institutional practices. Progress has been made across the three principles of the Framework. Each Fund is on a unique journey, with different baselines, capacities and mandates – yet all have stories to tell of how they are implementing the Framework. on climate change or the "C" of the "E" of ESG. OPSWF has put in place a road map to become a membership association based in Paris under French law.

"As a founding member of the One Planet Sovereign Wealth Fund Working Group, ADIA is delighted to co-host with Mubadala the 2022 OPSWF CEO Summit in Abu Dhabi, underscoring our commitment to integrating climate change in the investment strategies of long-term institutional investors. Through both our portfolio of direct investments in renewables, as well as our active engagement with climate change-focused external managers, ADIA recognises the importance of working with the investment community to address the long-term challenges associated with climate change."

H.E. Khalil Foulathi,
Board Member, Advisor to His Highness, the Managing Director
Abu Dhabi Investment Authority

"The process is ongoing with the KIA currently transitioning towards 100% ESG compliance for the entire portfolio while currently focusing on the E part of ESG. KIA's external asset managers are implementing the One Planet Sovereign Wealth Funds Framework whenever and wherever possible. Subject to the discretion of KIA's external asset managers, and keeping within the KIA's investment mandate assigned to each asset manager, investments may also include companies which have recognized and adapted to long term financial risks and opportunities presented by climate change and resource depletion across all sectors where those companies are better prepared for a transition to a low carbon economy."

Mr. Ghanem Al Ghenaiman,
Managing Director of Kuwait Investment Authority

"The time for climate change talk has passed. It's now time for all members of the global investment community to allocate their capital in a way that supports the energy transition and limits global warming. Small fixes won't be enough. The real cost of business activity on the environment and society must be properly accounted for in order for markets to properly allocate capital. It will take systemic change of the world economy to combat the climate crisis and ensure we leave a habitable world for our children"

Mr. Matt Whineray,
CEO of New Zealand Superannuation Fund

"His Royal Highness the Crown Prince of Saudi Arabia announced the Kingdom's aim to achieve net zero emissions by 2060 during the launch of the Saudi Green Initiative in 2021.

For PIF, supporting the Kingdom's net-zero ambition is not just a climate imperative, it's also a business imperative that will further enhance ESG integration across our global portfolio."

His Excellency Yasir Othman Al-Rumayyan,
Governor of the Public Investment Fund of Saudi Arabia

"QIA will continue to seek out investments that align with our mandate to deliver long-term value for future generations through responsible sustainable investments. We are collectively charting a way forward to achieve our ambition of a sustainable future through systematically embedding sustainability considerations into our investment processes. At QIA, we want to have a positive impact. And when we look at the number of companies we work with, and the number of countries we are operating in – our potential to have real, lasting impact, is tremendous".

H.E. Mansoor bin Ebrahim Al-Mahmoud
CEO of Qatar Investment Authority

"Sovereign wealth funds are well suited to be change makers. Our multi-generational investment horizon matches the very long-term sustained effort demanded to tackle global challenges. Mubadala has always been a responsible investor and we recognize the role we can play in bringing together the financial community and partnering to achieve sustainable value creation while helping to contribute to solutions. Partnerships are a part of our DNA, and we believe that together our incremental actions will drive tangible change."

H.E. Khaldoon Khalifa Al Mubarak,
Managing Director and Group CEO of Mubadala Investment Company

Principle 1: Alignment

Members of OPSWF initiatives have developed and enhanced investment policies and processes to identify and manage financial risks and investment opportunities relating to climate change, where appropriate within the scope of domestic laws and regulations, investment mandates and the One Planet Framework.

• Abu Dhabi Investment Authority (ADIA) has conducted physical & transitional risk scenario analysis on 78% of its global direct operational Real Estate portfolio. Data collection, which achieved 65% asset energy / emissions actuals, also captures asset sustainability accreditation and associated asset management initiatives.

• Abu Dhabi Investment Authority (ADIA) is developing an open access dashboard for Real Estate, enabling access to portfolio and asset level data for consideration in hold/ sell analysis and asset management.

• Abu Dhabi Investment Authority (ADIA) hosted virtual INFRA panel debates with portfolio companies focusing on climate change and the Energy Transition. Topics discussed include: hydrogen, changing consumer behaviours, the future of natural gas, energy security vs transition and Net Zero targets.

• Abu Dhabi Investment Authority (ADIA) is developing a framework to process and evaluate climate change investment opportunities more rigorously for Private Equities.

• Abu Dhabi Investment Authority (ADIA) has developed a Fixed income Thematic Investment strategy purely focused on climate. There are few external managers that have created climate focused bond strategy, this can span the public and private credit domain.

• Bpifrance issued, for the second year in a row, a responsible investment report on LAC1, a €5bn fund which is the first fund open to international investors and SWF investing in French listed multinationals. To ensure its investments align with international climate change limitation objectives, the fund committed to engaging with invested companies to reach numerous climate-related objectives.

• Fonds Gabonais d'Investissements Stratégiques (FGIS) has committed to reach carbon neutrality by 2050.

• Growthfund will realize its first investments in the Greek Economy amounting to € 10m during 2022. All investments will take into account climate and overall ESG considerations, as well as business operation and decision-making parameters.

• Growthfund has prepared the first of a series of Expectation Documents covering the topic of Climate Change. These cover Growthfund's expectations from its investees in relation to Climate Change and resilience, with a focus on transparent sustainability reporting and Climate Scenario Analyses.

• Growthfund is exploring potential allocation of investment funds to impact investments in Greece.

• Growthfund is updating its policies to align with OPSWF guidelines and will align the investment plans of State-Owned Enterprises (SOEs) with the green transition in their operations. It will embrace the most current disclosures & reporting practises, as set out in TCFD and PRI. Specific initiatives include:

- Supporting Greece to substantially reduce waste, in particular water & food waste;

- Focusing on Sustainable Assets implemented by Growthfund's subsidiary HRADF and its PPF (Project Preparation Facility). For example, the "Forests' Protection Plan" is implementing fire protection actions such as cleaning up the forest areas, maintenance of forest road network and of fire protection zones, and long-term actions, such as preparation of Fire Protection Plans for 38 critical forestry ecosystems across the country;

- Supporting the Greek Ministry of Energy and Environment "Just Transition Development Plan" (SDAM) for the decarbonisation of the country by 2028. Growthfund is supporting stakeholder dialogue in the areas of the country to ensure fair development transition of the lignite areas of Western Macedonia and Megalopolis, based on three pillars of: employment protection, compensation of the socio-economic impact of the transition, and energy self-sufficiency of lignite areas and the country at large;

- Embracing the most current disclosures & reporting practices, the Taskforce for Climate-Related Financial Disclosures (TCFD) and the Principles for Responsible Investment (PRI).

• Kuwait Investment Authority (KIA's) Managing Director spoke on OPSWF and climate friendly investment policies at the Future Investment Initiative Institute (FII) in October 2021. The Managing Director mentioned KIA's commitment to sustainable initiatives such as OPSWF, highlighting the importance of work starting on these initiatives in order to reach goals for the future.

• The Korea Investment Corporation (KIC) took part in the issuance process for the Korean government's green bond with €700 million in October 2021. It was the first sovereign green bond issued in Euro by Asian countries, and as much as sixfold subscription. KIC has been entrusted with the proceeds of the bond to invest in eligible green projects. KIC continues to discover more green projects that can support the fight against the climate change.

• Mubadala has continued throughout 2022 to evolve and institutionalize its Responsible Investing efforts through the expansion of its Responsible Investing Unit. Established in 2021, the Unit reports to the Chief Strategy & Risk Officer, and acts as the steward of Mubadala's approach to ESG principles and considerations across the Group. Leveraging the Mubadala Responsible Investing Policy, published in 2021, the Unit focused its efforts on building organizational ESG fluency and alignment, and prioritized the continual improvement of Mubadala's internal processes, tools and guidelines to drive the integration of ESG principles into the investment lifecycle.

• Mubadala launched its Responsible Investing Network, through which Mubadala actively partners with its portfolio companies to promote and drive ESG standards and stewardship. By sharing knowledge and experience across the Mubadala's assets, the network aims to support the delivery of decarbonization strategies and other ESG commitments across the various portfolio companies. Examples include:

- GlobalFoundries strategy, 'Journey to Zero Carbon', announced in 2021 and which aims to reduce total greenhouse gas emissions by 25% by 2030.

- Mubadala Petroleum, which achieved a 25% reduction in greenhouse gas emissions over the previous three years on its operated portfolio.

• National Infrastructure Investment Fund (NIIF)'s Strategic Opportunities Fund (NIIF-SOF) invested in Ather Energy in May 2022, an Indian electric vehicle (EV) manufacturer, aligned to NIIF's objectives to invest in businesses that deliver on national priorities and sustainable growth, with a focus on commercial viability. This investment is expected to provide a further boost to India's EV market, increased adoption of EV and thus contribute to India's decarbonization goals. Ather Energy has developed a strong portfolio of performance EV scooters with high level of indigenization and is now expanding manufacturing capabilities to over 400,000 units per annum. It has also installed a comprehensive public charging network with over 360 charging points across India, making it one of the country's largest fast-charging networks for electric scooters.

• New Zealand Superannuation Fund (NZSF) reduced portfolio carbon emissions 47% by intensity and 94% for fossil fuel reserves during the 2021 financial year. This was ahead of its commitment to achieve of 40% and 80% reductions by 2025 relative to its benchmark Reference Portfolio.

• New Zealand Superannuation Fund (NZSF) has shifted circa 40% of its overall investment portfolio to Paris-aligned market indices. The changes apply to the Fund's index-tracking Reference Portfolio benchmark and its corresponding NZ$25billion of passive global equities investments. The move to Paris-aligned indices followed a decision in 2021 to move to a sustainable finance strategy. Chief Investment Officer Stephen Gilmore says: "In addition to alignment with climate goals, we expect these new indices to deliver better environmental, social and governance (ESG) metrics across the portfolio."

• New Zealand Superannuation Fund (NZSF) conducted a two-year review of the fund's responsible investment approach. The review included research into options to improve the ESG performance of the passive portfolio, including a portfolio containing fewer constituent stocks with better ESG characteristics. Paris-aligned indices, both developed and emerging markets, were selected as the preferred option to ensure alignment with the Paris goals., The NZSF's climate change investment strategy, which has been in place since 2016, is incorporated into the sustainable finance strategy.

• New Zealand Superannuation Fund (NZSF) signed up to the Paris Aligned Investment Initiative Net Zero Asset Owner Commitment in October 2021, undertaking to transition its investments to achieve net zero portfolio GHG emissions by 2050 or sooner. The Initiative's framework helps investors on the pathway to net zero, providing support on metrics and methodologies. As part of this commitment, NZSF is developing a climate action plan, which outlines the steps it plans to take to deliver on this commitment. The commitment includes an interim target for 2030 or sooner for reducing emissions and setting a target for increasing investment in climate solutions.

• New Zealand Superannuation Fund (NZSF) has been an early mover and leader on climate change investment, in both a New Zealand and a global context. For more than a decade, it has made it a priority to consider how the fund's investment portfolio, and the companies it invests in, should respond to the risks and opportunities stemming from climate change. NZSF first began reporting against the TCFD recommendations in 2020.

The Sovereign Fund of Egypt (TSFE) joined the International Forum of Sovereign Wealth Funds (IFSWF) as a full member adhering to the Santiago Principles for better disclosures, governance, and transparency

Limiting holdings / investments in fossil fuels

• Bpifrance has excluded non-conventional hydrocarbons activities (oil sands, shale gas, and oil) from all its investments since January 1, 2022.

• The Ireland Strategic Investment Fund (ISIF) maintains a list of 256 companies that derive more than 20% of their revenues from Fossil Fuel exploration, extraction and refinement in which it will not invest, as well as a non-legislative exclusion list of high carbon companies, including coal producers and processors and Oil Sands, in which it does not invest.

Investments in renewables

• The Public Investment Fund (PIF) is responsible for developing 70% of the Kingdom's renewable energy capacity by 2030. This has involved an investment of approximately SAR3.4 billion in the Sudair Solar PV project, capable of producing 1.5 giga watts (GW) of renewable energy, powering 185,000 homes once operational.

• Qatar Investment Authority (QIA)'s CEO highlighted QIA's commitment to continuing its investments in renewable energy at the Qatar Economic Forum June 2022, noting continued investments in the field of renewable energy and energy storage facilities in Africa, US, and India. 50% of QIA's power generation is zero emissions.

• The Sovereign Fund of Egypt (TSFE) signed memorandums of understanding for projects with total investments worth $7.5 billion in green hydrogen investments over the coming two years as part of its sustainable investment strategy. Further green hydrogen investments in the pipeline to 2030 are expected to exceed $40 billion.

Targets for sustainability

• **Compañía Española de Financiación del Desarrollo (COFIDES)** developed its 2022-2024 Strategic Plan that sets out specific targets for new commitments for climate action and environmental sustainability, with at least 30% of all new financing by COFIDES dedicated to climate action and environmental sustainability.

• **Growthfund** has set a Mega KPI target to achieve by 2024, relating to a 15% reduction of the Decarbonisation Index.

• **Kuwait Investment Authority (KIA)**'s Managing Director spoke to Bloomberg in January 2022 regarding KIA's ESG strategy. He highlighted KIA's ongoing work to transition toward 100% ESG compliance for the entire portfolio, focusing on the E of ESG. The Managing Director noted that favourable environmental, social and governance attributes has become a core part of the investment decision-making process at the KIA.

• **The Public Investment Fund (PIF)**'s Governance, Sustainability and Resilience (GSR) score by Global SWF improved from 40% to 60% since 2021.

ESG Strategies

• **Fonds Souverain d'Investissements Stratégiques (FONSIS)** launched its new strategy for 2022-2026, "5-5", outlining the integration of non-financial criteria and highlighting the importance of sustainability end environmental preservation. FONSIS is embedding ESG in 3 key ways: improving its governance around ESG considerations and benchmarking; integrating ESG criteria in its investment process; and developing ESG projects aside from its investments.

• **Fonds Souverain d'Investissements Stratégiques (FONSIS)** published its first ESG & Impacts Report, sharing its vision and achievement on these issues.

• **Growthfund** will drive its Sustainability & ESG strategy through a three-pronged approach:

- Principle Based Strategy: Growthfund has set performance targets and non-financial KPIs, and has agreed ESG targets for each company in its portfolio. The 3-year 2022-2024 ESG roadmap is an integral part of Growthfund's new Strategic plan. Growthfund subsidiaries HPPC and HRADF have been asked to complete their own 3 year sustainability strategies and action plans during 2022.

- SOEs Stewardship: Growthfund, in collaboration with experts, has commenced providing ESG trainings to c-suite executives and board members of its subsidiaries. Moreover, online training courses for sustainability will be made available to all SOEs through a bespoke online platform to facilitate and support the implementation of new Sustainability & ESG initiatives.

- Transparency & Reporting: Growthfund has determined sustainability reporting standards to be requested from its subsidiaries, based on their sector of activity, legal requirements and TCFD recommendations. It is establishing a market focused approach centered around a set of rating agencies that will monitor SOEs' performance and long-term resilience to ESG risks.

• **Growthfund** is finalizing a three-year Sustainability & ESG strategy across all State-Owned Enterprises (SOEs), to be launched by early 2023. Growthfund aims to deliver long-term returns through well governed and sustainable assets, and by adopting appropriate strategies between asset classes, sectors and companies. It aims to implement an ESG "as if listed" mindset throughout all SOEs operations, management processes and investment decisions.

• Kuwait Investment Authority (KIA) has distributed its internal ESG Risk Report, which is being presented to its Stakeholders on a quarterly basis. The report includes a focus on the "E" in ESG by presenting Climate Change/ Conscious Analytics.

• National Investment Corporation of the National Bank of Kazakhstan (NIC NBK) improved its investment process with respect to ESG principles by incorporating an assessment of fund managers' internal policies into the investment due diligence process. NIC NBK is not investing in coal mining and crude oil production projects.

• Nigeria Sovereign Investment Authority (NSIA) will publish its first impact report with ESG considerations and alignment to the UN Sustainable Development Goals in 2022.

• Nigeria Sovereign Investment Authority (NSIA) is working on its first ESG policy and framework, integrating ESG considerations towards carbon neutral operations, sustainability-driven investments, and strategic partnerships.

• The Public Investment Fund (PIF) established the Sustainability and Stewardship Department in 2022 to improve ESG performance and drive ESG integration across its portfolio. The department's mandate combines internal and external ESG activities, to ensure consistency and seamless integration, leveraging connectivity with all relevant teams.

• The Public Investment Fund (PIF) aspires to become one of the leading SWFs in terms of ESG coverage and integration. Achieving such an ambitious target means reaching a sophisticated level of ESG integration with a high degree of coverage of ESG across processes and portfolios, and dedicated disclosure in line with international standards. To achieve this, PIF has identified the following broad initiatives:

- Developing an ESG Performance Management framework to assess existing and future investments and identify value creation opportunities;

- Developing a Net Zero Emissions Transition Plan to support the Kingdom's ambition of achieving net zero by 2060;

- Developing a PIF ESG policy and guidelines for portfolio companies;

- Attracting thematic investments including through the issuance of green bonds;

- Shaping and adopting international reporting and disclosure standards;

- Establishing a voluntary exchange platform for carbon credits.

• Qatar Investment Authority (QIA) is formalizing its overarching Sustainable Investing policy, which articulates its sustainability objectives and how it monitors relevant KPIs. QIA's CEO highlighted the importance of ESG at the World Economic Forum Annual Meeting at Davos in May 2022, noting ongoing work across teams, from infrastructure to technology, to draft policies articulating QIA's aims and monitoring of KPIs.

• Qatar Investment Authority (QIA) is committed to integrating environmental, social and governance (ESG) criteria in all its activities both locally and internationally. This includes:

- Using cross-functional working teams to develop QIA's differentiated SI Strategy

- Implementing various initiatives across departments to improve sustainability practices in its organization, including reducing GHG emissions, better waste management, and increased recycling

- Taking ESG metrics and considerations into account in decision-making as a crucial element of the success of any long-term investor

- As a shareholder in both local and international companies, QIA will continue to encourage companies to improve disclosure, one of the main focuses of the OPSWF framework

• The Sovereign Fund of Egypt (TSFE) integrates the UN SDGs into its strategy and favours investment opportunities that deliver tangible, measurable, social, governance, or environmental benefits. The Fund's strategy to integrate ESG considerations into its investments, strategy, risk management and operations is aligned with Egypt's 2030 vision and the nation's sustainable development goals.

Transition

• Abu Dhabi Investment Authority (ADIA) continued to engage and research External Asset Managers with a focus on the transition to low carbon economy. This integrates ESG and SDG analyses into the investment process to construct an alpha generating index universe.

• Fonds Gabonais d'Investissements Stratégiques (FGIS) has been designated as the exclusive monetizing agent for Gabonese Carbon credits, with 90 million carbon credits to be certified before COP.

• Growthfund has committed to reach EU targets to reduce emissions by 55% by 2030, and achieve the 100% target for net zero by 2050, with a special focus on its SOEs in energy & water utilities, real estate, transport and food supply sectors.

• Growthfund supports the Net Zero Greece initiative to develop Greece's Net Zero Roadmap. Growthfund activities are in sectors that account for ~65% of Greek CO_2 emissions, and are estimated to have a direct 25% impact in CO_2 emissions in the country (including electric power, industry, transportation, buildings/ real estate and waste). Through this initiative there will be a Net Zero Plan for each sector, as well as proposals for business plans per sector for net zero emissions at net zero cost.

• The Ireland Strategic Investment Fund (ISIF)'s Irish Portfolio Climate Action Strategy is targeting a €1bn investment programme in sustainable infrastructure, new technologies and business models over the next 5 years that will underpin the transition to Net Zero across the economy

• The Ireland Strategic Investment Fund (ISIF) will execute a two-pillar climate strategy: committing in the near term to "Transition-focused" investments in Sustainable infrastructure that will help Ireland achieve its 2030 emissions goal, and investing in the longer-term "NetZero" projects in new, climate resilient, technologies and business models. These investments will support full decarbonisation of the economy and accelerate the path to Net Zero by 2050 or earlier.

• The Public Investment Fund (PIF) is working on developing a Net Zero Emissions Transition Plan, aligned with the Kingdom of Saudi Arabia's Net Zero Emissions Target by 2060.

Principle 2: Ownership

Investors have ownership rights and responsibilities to encourage companies to address material climate change issues in their governance, business strategy and planning, risk management and public reporting to promote value creation. Over the past year, members have significantly increased their engagement with investee companies and asset managers; with members encouraging investees to align to the OPSWF Framework.

• Bpifrance launched “Diag Décarbon’Action” in October 2021, a decarbonization program aiming at quantifying and reducing companies’ carbon footprint. Since its implementation, around 300 companies, mainly SMEs, benefitted from this program. Co-financed with Ademe, the French agency for the ecological transition, the program is accessible at a reduced price to incentivize investees to go green.

• Compañía Española de Financiación del Desarrollo (COFIDES) launched the COFIDES Impact programme in 2022 with funds from the EU’s Next Gen facility to improve the environmental and social performance of the private sector in host countries. This will be achieved by (i) linking sustainability metrics to the pricing of financial instruments and (ii) providing technical assistance to enhance companies’ ESG risk management and profile. The programme provides a wider scope for addressing climate change issues at corporate level.

• Fonds Souverain d’Investissements Stratégiques (FONSIS) elaborated a Partners Charter to promote and share principles related to: deontology, good governance and ethics; promoting the economic empowerment of women; protection of the rights of children; and compliance with ESG principles.

• Growthfund is launching 3 Expectation Documents, addressed towards investee companies aiming to influence how investees respond to critical universal challenges. These are challenges that need to be treated responsibly, with consistency and through a long-term view, by demonstrating exceptional duty of care with regards to minimizing the impact for younger generations. Growthfund’s first Expectation Document deals with Climate Change and was prepared in order to keep up with the growing need to address double materiality in pursuit of a just and green transition. It reports on both the environmental and societal risks posed to and by a business committed to futureproof its operations and behave responsibly.

• Growthfund’s SOE, OKAA, a Food Market & Supply Company, will baseline its Carbon Footprint in order to gradually create its Roadmap to Transition to low carbon operations. It has set up a number of Environmental & Food Waste Initiatives, including:

- Vioxaxopoio Innovative Environmental & “Blue” Initiative, utilizing fish by-products and discards. 23,700 tons of fish by-products and discards will be collected in OKAA fisheries in the next 3 years

- OKAA Waste Management Initiative, recycling up to 80% of its waste

- OKAA Social Plate Initiative, which gave 252,650 kilos of safe to consume food to those in need in 2020 & 2021

- OKAA training for young kids, training 480 kids on healthy eating habits and eliminating food waste.

• The Ireland Strategic Investment Fund (ISIF) published its first-ever annual climate report in November 2021. It contains key metrics on carbon emissions from ISIF investments, building on ISIF’s existing environmental disclosures, as well as details of ISIF’s climate goals. By enhancing its climate-related disclosures, ISIF is committing to disclosing its progress in meeting its climate targets and providing the public with detailed information on the climate impact of its investments. Investing with impact is key to ISIF’s mandate, and it prioritises active ownership focussed on supporting and encouraging changes to corporate behaviours that contribute to sustainable returns through enhanced disclosure and action around climate change.

• The Ireland Strategic Investment Fund (ISIF) prioritises active ownership focussed on supporting and encouraging changes to corporate behaviours that contribute to sustainable returns through enhanced disclosure and action around climate change.

• The Ireland Strategic Investment Fund (ISIF) has implemented voting and engagement services to actively encourage appropriate disclosures and meaningful climate strategies from its Global Portfolio investees. ISIF is a supporter of Climate Action 100+ and signatory to CDP.

• Kuwait Investment Authority (KIA) has continued to engage companies on their climate commitments. This has included direct engagement with several large global industrials on their efforts to develop climate-friendly products, and asking the companies KIA invests in directly to seek out a favourable MSCI environmental rating score.

• Kuwait Investment Authority (KIA) pledged their support for the Taskforce on Climate-Related Financial Disclosures (TCFD) in November 2020. KIA has continued to engage with its asset managers, private equity managers, companies and other sovereign wealth funds to encourage the adoption of TCFD recommendations in their climate reporting.

• The Korea Investment Corporation (KIC) collaborates with a global stewardship service provider to enhance its stewardship activities. KIC and the provider have agreed to focus on climate change and environmental issues. More than 50% of the activities are related to the companies’ strategies or action plans to cope with climate change, including material environmental issues.

• The Korea Investment Corporation (KIC) has considered the UN Sustainable Development Goals (SDGs) in its stewardship activities as a universal owner and global investor. More than 85% of KIC’s engagement has been related to SDGs.

• Mubadala continued to support, as the majority shareholder, Compañia Española de Petróleos (CEPSA), Europe’s largest privately-owned integrated energy company. CEPSA aims to become a leader in green hydrogen and biofuels with its 2030 “Positive Motion” Strategy, and will invest EUR 7-8 billion, with more than 60% going towards sustainable businesses. CESPA aims to lead the energy transition in Spain and Portugal, including by:

- Leading green hydrogen with a production capacity equivalent to 2 GW and biofuels production of 2.5 million tons by 2030, and 0.8 Mt per year of sustainable aviation fuels

- Positioning Energy Parks in Andalusia as European gateways for hydrogen exports

- Reducing Scope 1 and 2 emissions by 55% and Scope 3 by 15-20% by 2030, among the most ambitious targets in the sector

- Reaching net zero by 2050, and ultimately going beyond it to become “Net Negative Emissions”

• **Mubadala**’s joint venture with Investment Corporation of Dubai ⊠ Emirates Global Aluminium (EGA) ⊠ is a leading global aluminium producer. In February 2022 EGA announced plans to build a 150,000 tonnes per year aluminium recycling facility, set to be the largest in the UAE. The facility will process post-consumer aluminium scrap as well as pre-consumer aluminium scrap from extrusion production, into low-carbon, high quality aluminium billets.

• **Mubadala**’s partnership with the Mohamed bin Zayed Species Conservation Fund activated 9 of 10 projects across four countries (Colombia, Guinea, Indonesia and Thailand), where Mubadala portfolio companies, including Minesa, Guinea Alumina Company, and Mubadala Petroleum worked with local communities to raise awareness on species and habitat conservation.

• Mubadala partnered with Emirates Nature – WWF to launch the Leaders of Change Program in June 2021. In line with the UAE’s sustainability agenda and Mubadala’s commitment to responsible investing, its Employee Volunteering Program hosted two outdoor events for employees and their families in partnership with Emirates Nature – WWF.

• **Mubadala**’s Masdar, a global leader in renewable energy and sustainable urban development, revealed in its 2021 Annual Sustainability Report that its clean energy portfolio displaced close to 7.5 million tonnes of CO_2 for the year 2021

• **Nigeria Sovereign Investment Authority (NSIA)** invested in an ERP software, alongside Microsoft dynamics 365, that allows interdepartmental engagements in an eco-friendly manner.

• **Nigeria Sovereign Investment Authority (NSIA)** is collaborating with Vitol to establish a joint venture to invest in a range of high integrity, socially impactful, carbon avoidance and removals projects in Nigeria. This initiative will seek to mobilise voluntary market carbon capital from the partners and potential third parties in a small step toward a more equitable energy transition for Africa.

• **New Zealand Superannuation Fund (NZSF)** is included in the New Zealand Crown Responsible Investment Framework, which was announced in October 2021. It calls on New Zealand sovereign funds to be leaders in the transition to a low carbon economy, seek to invest in climate solutions and use their collective influence as asset owners to engage with companies on climate change and emissions reductions. NZSF is working collaboratively with three other large government-owned investors in New Zealand to engage with New Zealand companies on investor expectations on climate change. The engagement plan is being developed and will be rolled out in 2022/23.

• **New Zealand Superannuation Fund (NZSF)** is asking all of its directly-owned assets to complete a carbon footprint. NZSF has supported investee companies to build their capabilities, understand the process and connect them with relevant service providers. The number of investments that have provided a footprint has increased from 10 to 18.

• **New Zealand Superannuation Fund (NZSF)** continues to support Toitū Tahua Centre for Sustainable Finance, whose purpose is to accelerate progress towards a sustainable and equitable financial system in Aotearoa New Zealand, including developing a Stewardship Code.

• **New Zealand Superannuation Fund (NZSF)** has contributed to a number of initiatives supporting disclosure on climate change in Aotearoa New Zealand. These include the NZX Corporate Governance Code and proposed amendments to the NZX ESG Guidance Note update, and the development of a climate-related disclosure framework for Aotearoa New Zealand by the External Reporting Standards Board (XRB).

• **New Zealand Superannuation Fund (NZSF)** supports several global initiatives to address climate change. These include Climate Action 100+, an investor-led initiative to ensure the world’s largest corporate greenhouse gas emitters take necessary action on climate change, and the 15-strong steering group of the Transition Pathway Initiative (TPI), a global initiative that assesses companies’ preparedness for the transition to a low-carbon economy. In addition, NZSF’s engagement services provider Columbia Threadneedle Investments (CTI) is an active participant in the CDP annual Non-Disclosure Campaign (NDC), and in the 2022 campaign, CTI took the lead on 23 corporate engagements encouraging companies to disclose to CDP and co-signed a further 173 requests.

• **National Infrastructure Investment Fund (NIIF)**’s Master Fund has partnered with DP World with the shared vision and commitment to create world class ports and logistics infrastructure in India. DP World has committed to achieving net zero carbon emissions by 2040, with an intermediate target of a 28% reduction of carbon footprint by 2030. These targets have been aligned with the Science Based Targets Initiative. The DP World SCO team has committed to a global carbon reduction plan of 28% from 69.25 ktCO2 (2019 baseline) to 22.50 ktCO2 by 2030. This strongly aligns with NIIF’s philosophy of responsible growth and reinforces its commitment to partner with organisations that are making significant contribution towards India’s net zero ambition.

• **National Investment and Infrastructure Fund (NIIF)**’s Fund of Funds, along with Foreign Commonwealth and Development Office (FCDO), Govt. of UK, has anchored investment in the Green Growth Equity Fund (GGEF) as a dedicated fund to support climate change mitigation & contribute to sustainable development through low carbon economy, pollution prevention, and resource conservation. The fund is looking at decarbonizing the economy by investing in green and scalable climate positive businesses across the energy and resource efficiency value chain to mitigate and adapt to climate change related risks. Investment from its five platform companies as on 31-Dec-2021 have helped reduce/avoid 1 million tons of CO_2 equivalent emissions, enabled recycling of 571,098 tons of waste, and converted 1.5 million tons of waste to Bio-CNG.

• **National Infrastructure Investment Fund (NIIF)**’s Master Fund has been working with Hindustan Infralog Pvt Ltd (HIPL) and Hindustan Ports Pvt. Ltd to reduce their carbon intensity, in line with NIIF’s vision of creating enduring economic, environmental, and social impact centred around the highest levels of governance. Tracking of emission parameters is undertaken across businesses. In 2022, HIPL and HPPL have committed to reducing carbon intensity with a 3% YoY absolute kgCO2 emissions reduction; 5% YoY reduction in intensity CO_2 (KgCo2/TEU) from

2021 baseline; 3% YoY reduction in total electricity consumption from 2021 baseline; and 3% YoY reduction in total diesel consumption (by self & contractors' equipment) from 2021 baseline.

• **The Public Investment Fund (PIF)** is taking an active stewardship approach to ESG integration by engaging with its portfolio companies to incorporate ESG factors into their long-term strategies, capital allocation decisions, and day-to-day operations. Moreover, PIF has embedded ESG considerations in its Guidelines for 100% owned Portfolio Companies.

• **The Public Investment Fund (PIF)**'s company Lucid Group, an Electrical Vehicle Manufacturer, announced plans to bring automotive manufacturing to Saudi Arabia – a move that will enhance sustainable transportation and reduce emissions in the Kingdom and beyond. Lucid signed agreements in May 2022 to build a production factory in Saudi Arabia with an annual capacity of 155,000 zero-emission electric vehicles.

• **The Public Investment Fund (PIF)**'s portfolio company, GIB Group, issued its first sustainability report for 2021, reporting its metrics and progress on environmental, social and governance achievements and ambitions.

• **The Public Investment Fund (PIF)** signed a memorandum of understanding (MoU) with South Korea's Posco and Samsung C&T to develop a new green hydrogen production project in Saudi Arabia. This partnership enables PIF's goals toward increasing its investments in green hydrogen and other sustainability-linked projects. PIF plays a vital role in realizing the Kingdom's aim to achieve net-zero emissions by 2060 and this partnership is a natural and significant extension to activities already underway.

• **The Public Investment Fund (PIF)**'s portfolio company, STC, has aligned its business practices and operations with the Paris Agreement to reach net zero-carbon emissions before 2050. It is committed to adopting science-based targets and will launch its interim science-based targets (SBT) to 2030 during 2022. In 2030, STC aims to meet its science-based targets to reduce Scope 1, 2 and 3 emissions from 2019 baseline in alignment with ≤ 1.5°C of warming.

• **Qatar Investment Authority (QIA)** continues to direct its capital to sustainable business models spread across the globe and engages with its portfolio companies on environmental issues. Climate considerations continue to be an integral part of QIA's investment decisions, as sustainability continues to be embedded into its portfolio, for example by:

- Engaging with its portfolio companies to support environmental initiatives;

- Supporting portfolio companies in the automotive sector focused on electric cars, such as Volkswagen Group which has made significant achievements in electrification of vehicles;

- Investing £85 million in Rolls-Royce SMR Ltd, to deliver affordable, low carbon, nuclear power; and

- Supporting its long-term investments in renewables such as Iberdola, Enel, Adani, Fluence.

• **Qatar Investment Authority (QIA)** is working on improving its portfolio companies' corporate governance and wider ESG practices through focused reporting and engagement activities. At Bloomberg's Middle East ESG Series "The Future of ESG in Qatar" in March 2022, QIA's Chief Investment Officer highlighted QIA's continued

encouragement of companies improving disclosure, in line with the focuses of OPSWF.

• The Sovereign Fund of Egypt (TSFE) has a robust ESG governance framework across all levels, including Board's oversight of ESG issues to ensure effective integration of ESG practices within TSFE's activities and investments. TSFE will also publish an annual ESG highlights report. Solid governance and social responsibility are also prerequisites for investment committee approvals across the board.

• The Sovereign Fund of Egypt (TSFE) holds its sub-funds accountable for incorporating ESG standards into their investment opportunities and assesses potential investors on their compliance with ESG principles. TSFE aims to use its ESG Framework as an ESG Score Enhancing Tool to motivate partners and stakeholders to enhance their ESG standards by cooperating with TSFE and investing in Egypt.

• The Sovereign Fund of Egypt (TSFE) will establish an Environmental and Social (E&S) monitoring process to ensure the continuous compliance of its assets and portfolio companies with ESG standards. TSFE will engage with investees' management if ESG breaches are found, and will consider divesting those investments if breaches are not resolved.

Engagement with listed equity companies

• The Public Investment Fund (PIF)'s portfolio company, Saudi Stock Exchange (Tadawul), issued in 2021 its first ESG Disclosure Guidelines for publicly listed companies. These guidelines are intended to help companies listed on Saudi Exchange increase ESG awareness and identify, prioritize, and assess ESG factors that are most critical for each business.

• Qatar Investment Authority (QIA) has been engaging with its stakeholders to promote ESG. This includes the Qatar Stock Exchange, a QIA portfolio company, which developed an ESG index designed to identify the top 20 securities within the MSCI Qatar IMI Index that demonstrate the best ESG profile, and is seeking to increase exposure to those companies demonstrating both a robust ESG profile as well as a positive trend in improving that profile.

Engagement with asset managers

• Abu Dhabi Investment Authority (ADIA) continues to evaluate whether external asset manager adequately integrate climate change risk in their credit research processes.

• Kuwait Investment Authority (KIA) continues to engage with its asset managers on climate change to align with the OPSWF Framework. More than 135 asset managers now monitor and report their implementation of the OPSWF Framework, with the Framework integrated into investment manager agreements. The External Fund Managers (EFMs) provide KIA with regular and periodic ESG reports that illustrate their dedication to the OPSWF Framework. Some have incorporated ESG factors into their investment process as a means to ensure the sustainability and longevity of their investment. Other EFMs have taken the initiative to include ESG in their internal management process. The KIA is in a continuous dialogue with their EFMs to improve ESG reporting and opportunities.

• National Investment Corporation of the National Bank of Kazakhstan (NIC NBK) has notified all of its asset managers that is has become a member of the OPSWF Initiative and has pledged support for the recommendations of the Taskforce for Climate-Related Financial Disclosure (TCFD).

• National Investment Corporation of the National Bank of Kazakhstan (NIC NBK) has engaged in dialogues with asset managers who are focused on financing opportunities in climate change mitigation and reduction of carbon emissions and is considering their funds for future investments.

Engagement with subsidiaries / public projects

• Growthfund's SOE Transport for Athens, responsible for the Public Transport in the City of Athens, has completed baselining CO2 emissions and is exploring possible awareness campaigns for citizens of the environmental benefits of public transport.

• National Investment and Infrastructure Fund (NIIF)'s Master Fund backed Ayana Renewable Power Private Limited (Ayana), one of India's fastest growing renewable energy producers, and is set to expand Karnataka's clean energy capacity. The Company has signed an expression of interest (EoI) with the Government of Karnataka to develop wind and solar power projects totalling 2-gigawatt (GW) capacity in Karnataka, with an investment of around INR 120 billion. This capacity addition will be enough to provide clean energy for nearly 2 million households. Ayana has also recently partnered with Norway-based Greenstat ASA's subsidiary Greenstat Hydrogen India to develop green hydrogen projects powered by renewable energy in India.

• The Public Investment Fund (PIF)'s portfolio company, Saudi National Bank (SNB), became the first in the Kingdom to create a Sustainable Finance Framework, consisting of four main pillars: promoting sustainability financing; preserving the environment; empowering individuals and communities; and promoting principles of ethical governance.

Principle 3: Integration

Members are increasingly integrating the consideration of climate change-related risks and opportunities into investment decisions to improve the resilience of long-term investment portfolios. Taking action to address climate change can support investment objectives, with the economic and financial impacts of climate change already affecting markets and regions in complex and varied ways.

- Fonds Gabonais d'Investissements Stratégiques (FGIS) has identified and measured its carbon footprint across owned emissions and emissions from its investment portfolio using reported and estimated data. FGIS has defined a decarbonization strategy comprising of near-term, medium-term and long-term actions.

- New Zealand Superannuation Fund (NZSF) has had a Climate Change Investment Strategy in place since 2016. This is based on integrating climate change risk into investment decision-making. The strategy, which has now been integrated into the fund's sustainable finance approach, has four key elements: reduce carbon exposure in the portfolio; Analyse and integrate climate change considerations into its assessment of potential new investments and the review of its existing holdings; engage with the companies to encourage them to mitigate and improve resilience to climate related risks; and search to find companies that will thrive during the low-carbon transition.

- New Zealand Superannuation Fund (NZSF) has begun using MSCI's Real Estate Climate Value at Risk tool as part of our due diligence process for real estate investments. NZSF has developed its own Climate Change Investment Framework and has applied it to both new and existing investments.

- New Zealand Superannuation Fund (NZSF) developed a new sustainable transition opportunity, focused on investments which will benefit from the ongoing transition to a more sustainable economy. This builds on the search element of the fund's Climate Change Investment Strategy. The new sustainable transition opportunity is about finding companies that will thrive during the low-carbon transition. The goal is to invest on a commercial basis at the growth equity stage of companies focused on sustainability impacts, with an initial focus on solutions for the energy transition. These include new opportunities in areas such as alternative energy, energy efficiency and transformational infrastructure. NZSF has made a number of investments specifically focused on sustainability including a USD98 million investment into a sustainable solutions fund and a USD100 million into Fifth Wall's Climate Technology Fund.

- New Zealand Superannuation Fund (NZSF) committed up to €125 million (NZD208 million) into Copenhagen Infrastructure Partners' (CIP) Energy Transition Fund in October 2021. The energy transition fund is focused on developing industrial-scale sustainable energy infrastructure, predominantly on Power-to-X projects covering renewable generation, electrolyser and ammonia infrastructure, storage and other energy transition infrastructure such as biofuels, carbon capture and storage. In March 2022 NZSF and Copenhagen Infrastructure Partners (CIP) also announced a joint venture to explore the potential for large-scale offshore wind energy in the South Taranaki Bight in Aotearoa New Zealand, which could represent 11% of New Zealand's current operational electricity generation capacity.

- New Zealand Superannuation Fund (NZSF) owns a portfolio of 36 NZ farms which are managed by an investment farm manager. Following an in-house Sustainability Day organised by NZSF in 2021, the investment farm manager has developed a sustainability strategy to ensure that the assets are well positioned to respond to climate change as well as broader sustainability issues. The dual goals of improving water quality and reducing greenhouse gas emissions are driving improvements to on-farm practices to reduce fertiliser inputs and nitrogen loss. The average nitrogen fertiliser for their dairy and beef land has reduced from 190 kg N/ha/year in the 2018/19 season to 135 kg N/ha/year for the 2021/22 season. The manager is also targeting improvements in animal welfare and animal performance, and reducing the use of external supplement feed to further reduce GHG emissions. These activities have led to a 11% reduction in total emissions per hectare between the 2018/19 season and the 2021/22 season for their dairy and beef land.

- The Public Investment Fund (PIF)'s Giga project, NEOM, has launched its very own regreening initiative in collaboration with the National Center for Vegetation Cover and Combating Desertification. As part of its program to rehabilitate at least 1.5 million hectares of land, NEOM's initiative will see the return of 100 million native trees, shrubs and grasses by 2030 to aid the restoration of degraded land and repair of wildlife habitats. NEOM subsidiary company ENOWA which will lead the development of NEOM's world-class, sustainable energy and water systems. Work to develop these utilities has begun to provide the critical infrastructure for NEOM's key projects: THE LINE, its revolutionary urban development; OXAGON, its reimagined industrial city; and TROJENA, its sustainable mountain tourism destination.

- The Public Investment Fund (PIF)'s Giga project, The Red Sea Development Company (TRSDC), the developer behind the world's most ambitious regenerative tourism project, has achieved financial close on its SAR 14.120 billion (USD 3.76 billion) term loan facility and revolving credit facility with four leading Saudi banks. The financing is the first Riyal-denominated credit facility to receive Green Financing accreditation and the project is the first major project in the Kingdom to successfully access the capital markets.

Food production and waste management

• Nigeria Sovereign Investment Authority (NSIA) has invested in Babban Gona, a high impact, financially sustainable and highly scalable agri-tech social enterprise that is part-owned by small-scale farmers. In 2021, Babban Gona focused resources on developing an Environmental and Social Management System to ensure the optimised use of agricultural inputs to reduce runoff and carbon emissions.

• The Public Investment Fund (PIF) announced the launch of the Saudi Coffee Company to enable Saudi Arabia's coffee bean to be a global product in the future, and will play a vital role in developing sustainable coffee production in the southern Jazan region. The company will have a strong focus on achieving sustainability across the production, distribution, and marketing aspects of the coffee supply chain, implementing the highest standards and global best practices.

Climate change mitigation

• The Ireland Strategic Investment Fund (ISIF) has exceeded its target of reducing the carbon intensity of the Global Equity Portfolio and is on target to reduce carbon intensity of the Global Bond Portfolio by 50% by 2025.

• The Korea Investment Corporation (KIC) has integrated ESG considerations into all its investment decisions since January 2020. In line with the ESG integration scheme, KIC has conducted more than 120 assessments when selecting investment managers for direct/co-investments. KIC's ESG assessment covers the target assets' potential ESG risks as well as the investment managers' ESG practice.

• The Korea Investment Corporation (KIC) has adopted several strategies to mitigate climate risks, such as ESG dedicated funds, ESG quant strategy, and exclusion. Through these efforts, KIC's equity portfolio records considerably lower carbon footprint compared to its benchmark, which is currently MSCI ACWI ex Korea.

• The Public Investment Fund (PIF) announced five leading Saudi businesses have signed a separate non-binding memorandum of understanding to become the first anchor partners of its MENA-based Voluntary Carbon Market ("VCM"). The VCM, the first based in MENA, will facilitate climate action through the supply, purchase and trading of carbon credits in the region. It will also help PIF and other companies reduce their carbon footprint.

• Qatar Investment Authority (QIA) will continue to seek out investments that align with its mandate to deliver long-term value for future generations through responsible sustainable investments, and is committed to integrating ESG criteria in its investment process both locally and internationally. At the World Economic Forum Annual Meeting in Davos in May 2022, QIA's Chief Investment Officer highlighted the importance of long term investors taking the ESG matrix into account in making decisions, as ESG is crucial for the success of any long-term investor.

• The Sovereign Fund of Egypt (TSFE) incorporates ESG eligibility criteria in all its investment valuations and excludes investments that do not meet its ESG standards as per its E&S exclusion list. TSFE has undertaken a preliminary ESG materiality assessment in alignment with international benchmarks to determine and prioritize the ESG factors that are most relevant to the activities and industries of its sub-funds.

Climate risk valuation and assessment

• Bpifrance and PwC conducted a deepened analysis of its mid-cap portfolio to assess risks, opportunities and general challenges induced by climate change. It has been presented to Bpifrance's mid-cap team as part of a general strategy to improve investment management and knowledge regarding ESG and climate-related issues.

• Compañía Española de Financiación del Desarrollo (COFIDES) is measuring and tracking GHG emissions and its carbon footprint, at the project level for its total investment portfolio to identify risks and opportunities, improve risk management and increase the resilience of its investments.

• The Ireland Strategic Investment Fund (ISIF) uses an evolving suite of ESG and carbon analytic tools across its portfolio. The purpose of this is to better understand climate risk and to reduce that risk exposure over time. ISIF measures Carbon Intensity, Absolute Emissions and Attributed Emissions, where relevant, across the portfolio. All potential Irish Portfolio transactions are assessed relative to their potential impact on the Portfolio's Weighted Average Carbon Intensity (WACI).

• Mubadala considers climate risks and opportunities for new investments alongside other ESG and investment risks as part of due-diligence and deal evaluation and typically includes the following considerations:

- Materiality of climate to the sector and target company

- Climate strategies, targets and transition plans

- Other readily available information on climate performance and risk

• Mubadala are rolling out an annual climate risk assessment for its existing portfolio. This exercise aims to provide insight into the climate performance of its portfolio companies, the risks and opportunities that it presents to the performance of Mubadala investments and how these are managed. Key considerations will include climate strategies, targets and transition plans; climate risks and opportunities; and the governance and management approach to climate risks. This assessment helps to inform monitoring and evaluating of the climate-related performance of Mubadala's portfolio and steer portfolio strategy and asset management activities. Based on the findings of the risk assessment, companies for engagement on climate issues are prioritised, with the aim of increasing resilience to protect and create value.

• National Investment and Infrastructure Fund Limited (NIIFL), the investment manager, has integrated ESG Risks and Opportunity across its investment life cycle. As part of the pre-investment due diligence, the E&S due diligence focuses not only on traditional aspects of Environment and Social risks and impact, but also on identifying risk of climate change on the asset or investment. NIIFL looks at the potential scenarios of physical and transitional climate change risks affecting the quality of the investment; and based on the triggers additional in-depth studies are undertaken. This is expected to create a disaster resilient asset class for NIIF and its platform companies. NIIF also focuses on opportunities for transitioning to lower carbon processes, as part of climate change adaptation.

• The Sovereign Fund of Egypt (TSFE) performs Environmental and Social Due Diligence (ESDD) to assess the efficacy of an asset's E&S risks and impacts, allowing TSFE to make a fully informed decision about a specific asset. TSFE engages with the developers of its assets to assess their

commitment and effectiveness in managing E&S issues relevant to those assets.

Sustainable finance products and innovation

• **Abu Dhabi Investment Authority (ADIA)** has increased its contribution to sustainability bonds, directly contributing to finance corporate and sovereign issuers addressing climate change adaption. Green bonds exposure across Fixed Income Portfolio has increased 30% YoY as of July 2022.

• **Abu Dhabi Investment Authority (ADIA)**'s indexed portfolio continued to measure its indexed equities single pool Carbon Footprint. The data shows an 8.6% decline in carbon footprint across its portfolios.

• **Abu Dhabi Investment Authority (ADIA)**'s fixed income portfolio has integrated ESG in corporate and sovereign credit research by assessing climate risks in the issuer fundamental value, ability to pay, business, technical demand for bonds duration to index membership.

• **Abu Dhabi Investment Authority (ADIA)** launched an indexed equities Climate Change investment mandate, based on a framework that systematically integrates opportunities and risks associated with the transition to a low carbon economy. Since inception, the mandate has effectively reduced its climate change risk exposure by 50% relative to the benchmark.

• **Abu Dhabi Investment Authority (ADIA)** is actively engaging with climate change focused asset managers with a meaningful recent commitment to a dedicated climate change focused fund.

• **The Public Investment Fund (PIF)** has developed a Green Finance Framework under which it can raise capital to support the financing and refinancing of activities of an environmental nature. This framework will be used as the basis to issue Green Bonds, Sukuk, Loans and other debt instruments. The Green Financing Instruments will fund eligible green projects that conform to the International Capital Market Association Green Bond Principles 2021, and the Loan Market Association Green Loan Principles 2021. PIF will allocate an amount at least equivalent to the net proceeds of the Green Financing Instruments issued under this Framework to finance, refinance and or/ invest in whole or in part in new or existing projects under development and/or projects in operation from any Eligible Green Project categories.

• **The Public Investment Fund (PIF)** affirmed that each Green Financing Instrument included in its Green Finance Framework will explicitly exclude funding towards any expenditures or projects associated with:

- Coal or gas fired power generation and distribution assets;

- Landfill operations and any incineration of any unsorted waste assets;

- Exploration and development of new oil and gas fields;

- Coal mining and transportation;

- Fossil fuel related activities including refining and transportation of fossil fuel as well as underlying investments in research and development;

- Heat or power facilities with emissions intensity above 100gco2e/kwh;

- Nuclear power generation and distribution assets;
- Military activities; and

- Industrial agriculture and livestock practices.

• **The Public Investment Fund (PIF)**-owned Bahrain-based Gulf International Bank (GIB) closed a $625 million sustainability-linked syndicated loan, which incorporates key environmental, social and governance matrices.

• **The Public Investment Fund (PIF)**'s portfolio company, SNB, has executed its first ESG 'Use of Proceeds' repurchase agreement transaction ("Repo") with Standard Chartered Bank where the proceeds were allocated towards ESG assets. In 2022, SNB sold $750 million in debut sustainable sukuk after demand topped $3.2 billion.

• **The Public Investment Fund (PIF)**'s portfolio company, Riyad Bank, closed $750 million Additional Tier 1 Sustainability Sukuk in 2022.

Low carbon infrastructure, transport

• **Fonds Souverain d'Investissements Stratégiques (FONSIS)** is taking a new step in green investments, receiving a mandate to invest in SETER, charged with managing Train Express Regional (TER). TER's electric train will transport 115,000 passengers per day, contributing to a 32% reduction in CO2 due to transportation as well as being cheaper and faster than a taxi.

• **Fonds Souverain d'Investissements Stratégiques (FONSIS)** is investing in the Bus Rapid Transport (BRT), an electric bus project with ambitions to transform the transportation system of Dakar. It will half the travel time from the suburbs to the city centre, and support Dakar's C40 Zero Net Cities agreement.

• **Kuwait Investment Authority (KIA)** sustainable infrastructure investments include GPG, Thames Water and Associated British Ports.

- GPG: provides clean or low carbon power generation in Central/South American and Australia.

- Thames Water: largest water and Wastewater Company in the UK.

- Associated British Ports (ABP): the UK's leading port operator is part of the UK's energy transition, and is converting its coal-fired power plants into biomass.

• **Mubadala**, together with BDT Capital Partners, acquired a majority interest in Culligan International in May 2021. Culligan's focus on providing clean and safe water with an emphasis on sustainability was displayed during the Dubai Expo 2020. They provided zip hydrotaps that delivered filtered hot, chilled, and sparkling water and reusable glass carafes to the Australian pavilion. This achieved a zero single-use plastics goal over the Expo's 6-month duration.

• **National Investment and Infrastructure Fund (NIIF)**'s Master Fund acquired two strategic road assets in the Union Territory of Jammu and Kashmir, providing an essential link between Jammu and Srinagar and enabling seamless movement of traffic and goods. The acquired road assets will cater to the needs of the local people who are adversely affected during climate induced natural disasters such as landslides, erosions, flash floods. Vulnerable communities are the most affected at such times, hampering access to economic opportunities, education, and healthcare. NIIF's contribution in operating resilient transportation in such areas is critical to ensuring equitable economic development across the country.

• **The Sovereign Fund of Egypt (TSFE)** partners and co-invests with private investors to build a strong pipeline of green investments. These include:

- Water desalination and treatment stations: TSFE seeks to develop desalination stations starting with a capacity of 3.4 million cubic meters of water / day (cmd), over the next five years, rising to 8.8 million cmd by 2050.

- Wind energy: developing wind farms for electricity generation with a total number of 991 wind turbines and production capacity of 1125 MW. The project contributes to achieving Egypt's 2030 target of generating 42% of its power from renewable energy sources.

- Green buildings and adaptive reuse: TSFE's recent experience in offering the iconic historical Tahrir building for renovation and adaptive reuse is a showcase of the Fund's commitment to sustainable development and reducing climate risks.

- Green Hydrogen: producing hydrogen using renewable energy to be used in the production of other products of higher value for export

Renewable energy and energy transition investments

• **Abu Dhabi Investment Authority (ADIA)**'s infrastructure portfolio has invested in renewable energy projects, including:

- **Energy Impact Partners (EIP)**, a purpose-built manager specializing in ESG and the energy transition, seeking investments in the key building blocks of the energy transition ready to scale, as well as earlier stage key disruptive technologies

- **Sempra Infrastructure (Sempra IP),** helping to advance the global energy transition through electrification and decarbonization in markets including California, Texas, Mexico and the LNG export market. Sempra IP had 1,699 MW of clean power generation capacity in 2021, and is advancing new opportunities in renewable energy, carbon capture and sequestration and hydrogen

- Getlink, providing mobility transport and infrastructure solutions that are among the more environmentally friendly – such as rail freight, for which carbon emissions generated are 99 times lower than those of air transport and 8 times lower than those of ferries

- VTG, a European rail car leasing company, which can support the road-to-rail shift and contribute to reducing carbon emissions in the transport sector

• **The Ireland Strategic Investment Fund (ISIF)** has committed over €400m to investments in the renewable energy, climate tech and forestry spaces, with €134m of those investments closing over 2021. Additionally, ISIF's non-climate strategy investments demonstrate strong climate credentials in many cases and include consideration of climate impact in all investments made.

• **Mubadala**'s Masdar entered a joint venture with Abu National Oil Company (ADNOC) and TAQA in June 2021 to create a global clean energy powerhouse supporting the UAE's goal of achieving carbon neutrality by 2050, with the objective of becoming a global leader in green hydrogen. The partnership creates a combined current and committed capacity of over 23 gigawatts (GWs) of renewable energy, with the aim to reach 50GWs by 2030.

• **Mubadala**'s Masdar signed a strategic framework with Abu Dhabi National Oil Company (ADNOC) and BP in September 2021 to expand upon the UAE and UK's longstanding track record of bilateral partnership in sustainability, including the potential development of clean hydrogen hubs in both the UK and UAE at a scale of at least 2 gigawatts (GW).

• **Mubadala**, alongside its investment partners BlackRock and Goldman Sachs, acquired Calisen through a take-private transaction in March 2021, valuing the business at circa £2 billion. Calisen is a leading owner and manager of essential energy infrastructure assets in the United Kingdom, whose purpose is to accelerate the development of a smarter, cleaner, more efficient and sustainable energy segment.

• **Nigeria Sovereign Investment Authority (NSIA)** expects to complete its Kano Solar Project in 2022. This 10 MW solar power plant in the Challawa Industrial Area in Kumbotso Local Government Area of Kano State will serve as a demonstration pilot project to stimulate investment in the Nigerian power sector. It is expected to produce 415(GWh) within the 25-year lifespan of the Project.

• **National Investment Corporation of the National Bank of Kazakhstan (NIC NBK)**, jointly with the world's largest producer of natural uranium, Kazatomprom, has founded the physical uranium fund ANU Energy. ANU Energy will provide direct access to physical uranium for commodity funds, sovereign wealth funds, state-owned enterprises, and various categories of investors from emerging markets, especially those focused on environmental, social responsibility and corporate governance issues (ESG), and clean energy investment.

• **The Public Investment Fund (PIF)**'s ENOWA, the energy, water and hydrogen subsidiary of NEOM, has established the region's first Hydrogen and Innovation Development Center (HIDC). Located in NEOM's advanced manufacturing and innovation city, the new facility aims to accelerate lab to market solutions and business development across the spectrum of hydrogen, green fuel production, utilization and transport. HIDC will be a testing ground for new technologies in the clean energy industry and a collaborative learning community for research institutions focused on hydrogen and the circular carbon economy (CCE).

• **The Public Investment Fund (PIF)**'s portfolio company Tarshid: National Energy Service Company has been leading energy efficiency across Saudi Arabia. The company redesigned more than 8,000 government buildings to be more energy efficient and replaced roughly 3,320,000 street lights from conventional to LED across Saudi Arabia.

• **The Public Investment Fund (PIF)**'s portfolio company, Saudi Arabian Mining Company (Ma'aden), and GlassPoint, the leader in industrial solar steam, have entered into a Memorandum of Understanding (MoU) to develop the world's largest solar process heat plant at Ma'aden's Alumina refinery. When complete, the 1,500 MW solar steam facility will help Ma'aden achieve sustainability goals by reducing carbon emissions by over 600,000 tons annually. This represents more than 50% reduction of carbon footprint in Ma'aden's Alumina refinery and 4% of Ma'aden's overall carbon footprint. The company has announced its aim to become carbon neutral by 2050.

• **The Public Investment Fund (PIF)**'s portfolio company, ACWA Power, is driving the implementation of ESG considerations across its operations. Key initiatives include:

- Announcing ambitions to achieve net zero-emissions by 2050;

- Investing in energy transition projects such as solar plants and hydrogen plants, including investing in one of the largest green hydrogen projects in NEOM, one of PIF's Giga projects, marking a significant move by ACWA Power towards sustainability and energy transition;

- Enhancing transparency and ESG disclosures through publishing ESG/sustainability reports annually since 2014, highlighting key accomplishments and future ambitions

• **Qatar Investment Authority (QIA)** continues to take sustainability considerations into account in all its investment decisions. The percentage of renewables in QIA's infrastructure power generation assets has expanded to 46%, and 50% are zero emissions. In December 2021, QIA invested GBP 85 million in Rolls-Royce SMR Limited, who is building a new technology solution to deliver affordable, low carbon, nuclear power. A single power station will occupy around one tenth of the size of a conventional nuclear generation site and power approximately one million homes.

GROWTHFUND, THE NATIONAL FUND OF GREECE: THE ZERO CARBON WATER STRATEGY OF EYDAP

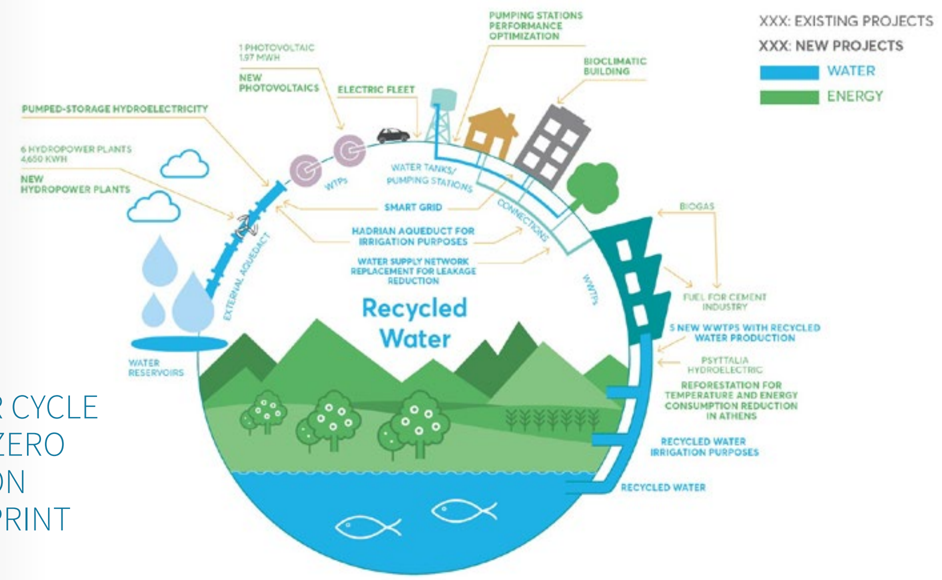
Growhtfund's portfolio company, EYDAP S.A. (Athens Water Supply & Sewerage Company S.A.), is the largest water supply and sewerage company in Greece. EYDAP has developed a zero-carbon water strategy in order to meet the 2050 long-term strategy of the EU, which targets to help keep the global temperature increase to well below 2°C and pursue efforts to keep it to 1.5°C.

Towards this direction, EYDAP is utilizing new technologies for the reuse of treated wastewater for irrigation and suburban use; this includes examples such as the sewerage network and WWTP projects of Eastern Attica, operation of Hadrian Aqueduct for irrigation use, the concept of Sewer Mining.

As part of its broader strategy, EYDAP implements sustainable management of water resources, with the parallel development of leakage reduction programs in the water supply network and the use of new technologies for the optimal management of the network (smart grid). The company also undertakes works and operational adjustments/options aimed at the maximization of production and use of self-generated energy sources (biogas), as well as the reduction of dependence on imported energy sources. Furthermore, EYDAP implements strict observance of regulations and environmental standards with regards to the design of water supply and sewerage projects with reserves and safeguards against environmental accidents, i.e., accidents causing pollution.

It is significant to note that the company selects materials and machinery with modern environmental standards, while also implementing energy upgrades in buildings and facilities. EYDAP implements studies for the protection of new infrastructures from extreme phenomena, such as floods, as a result of the increase of the average temperature of the atmosphere.

Aside from the above, EYDAP is also proceeding with the gradual replacement of part of the fleet with electric vehicles aimed at switching to low greenhouse gas emission systems. The significant progress described has consequently led to a reduction of 2.5% in the 2021 emissions in comparison to 2020, when total CO2 emissions were 211,658 metric tones). It is also worth to highlight that EYDAP's green transition projects reach approx. 1 bn euros within a time horizon until 2030.



WATER CYCLE WITH ZERO CARBON FOOTPRINT

EXAMPLES OF ASSET MANAGERS ALIGNMENT WITH THE OPSWF FRAMEWORK - 2021 TO 2022

ONE PLANET ASSET MANAGERS

PRINCIPLE 1 ALIGNMENT

100%
of Amundi's actively managed open-ended funds integrate ESG criteria

€600 Million
The European Investment Bank and AllianzGI launched the Emerging Markets Climate Action Funds with target size of €600M

£290 Billion
LGIM manages £290 billion in responsible investment strategies as at 31 December 2021

€79 Billion
Amundi has €79 billion in ESG passive management

$195 Billion
Invesco has committed $195bn in AUM to be managed in line with Net Zero

70%
LGIM aims for 70% of eligible AUM to be net zero aligned by 2030

$1 Tillion
Morgan Stanley has committed to mobilizing $1 trillion by 2030 towards sustainability solutions

65% of AXA IM's AUM in line to be NZ by 2050

300
As of the end of June 2022, BlackRock managed approximately $470 billion of client assets in more than 300 dedicated sustainable investment strategies across index, active and alternative asset classes

2030
Goldman Sachs is targeting Net Zero Carbon by 2030 across its global operations and supply chain

$27 Billion
HSBC AM reached $27bn of Sustainable AUM

28
LGIM announced 28 new responsible investment strategies in 2021

$24 Billion
AllianceBernstein manages $24 billion AUM in ESG-focused strategies

69%
Northern Trust Corporation has reduced its carbon emissions by over 69% and its energy consumption by over 46% compared to 2015 levels

165
AllianzGI invested in 165 renewable energy projects

$500 Billion
PIMCO manages approximately $500 billion in ESG, thematic, and SRI portfolios

PRINCIPLE 2 OWNERSHIP

570 companies
Amundi engaged with 547 companies on transition to a low carbon economy in 2021

10,190 shareholder meetings
AllianzGI participated in 10,190 shareholder meetings, with 100% of climate related resolutions proposed by management supported

91,581 proposals
In 2021, AllianceBernstein voted on 91,581 total management and shareholder proposals

86% climate-related resolutions
Amundi voted in favour of 86% of climate-related shareholder resolutions in 2021

173,000
BlackRock Investment Stewardship (BIS) voted on more than 173,000 management and shareholder proposals across 70 voting markets between 1 July 2021 and 30 June 2022

35% fewer companies subjected to voting sanctions
The number of companies sanctioned for not meeting LGIM's minimum expectations under LGIM's Climate Impact Pledge decreased by over 35% since 2021

99% Carbon footprint calculated for 99% of Federated Hermes Limited's listed equities investments, and 81% of its credit investments

4 CA 100+ engagements
AllianceBernstein co-leads four Climate Action 100+ engagements

2,060
BlackRock Investment Stewardship team undertook 2,060 engagements on climate & natural capital between 1 July 2021 and 30 June 2022

213 issuers
AllianceBernstein engaged with 213 issuers on climate risks, goals and disclosures in its 2021 engagement campaign

80% UBS AM supported 80% of environment-focused shareholder resolutions

80 companies
LGIM announced that during the 2022 proxy season, 80 companies (out of the larger universe of 1,000) were subject to voting sanctions for not meeting minimum climate change standards

25%
State Street Corporation has achieved emissions reduction of 25% in 2021

844 UBS AM voted on 844 ESG-focused shareholder resolutions in 2021

3,000+ engagements
Invesco conducted more than 3,000 engagements in 2021 where ESG was raised.

1,500+ issuers
PIMCO proactively engaged with 1,585 corporate bond issuers in 2021 on focus themes including net zero alignment, methane emissions reductions, and biodiversity loss

95% AUM
Invesco's investment teams responsible for managing 95% of AUM have attained the ESG integration level defined as baseline integration

1,800
ESG issues were raised in HSBC engagements with over 1,800 companies and other issuers in 73 markets during 2021

PRINCIPLE 3 INTEGRATION

€847 Billion
Amundi has €847 billion ESG AUM as of December 2021

€329 Billion
Natixis IM' sustainable and impact investing assets represented €329bn at Q2; its ambition is to reach more than 50% of AUM in sustainable or impact assets by end 2024

50%
AXA IM is targeting at least 50% of direct real estate AUM aligned with 1.5° trajectory by 2025

$10 Billion
Federated Hermes Limited intends to contribute towards the goal of mobilising more than $10bn in aggregate by the end of 2022 to support natural capital investment

160,000 tons of CO_2
UBS AM saved 160,000 tons of CO2 in its real estate portfolio over 5 years

$300 Billion
UBS AM saved 160,000 tons of CO_2 in its real estate portfolio over 5 years

6 investment solutions
As of June 2022, AllianceBernstein manages six climate-conscious investment solutions

1000 investors
More than 1000 investors have taken the AllianceBernstein and Columbia Climate Change and Investment Academy curriculum

13,000 issuers
Amundi rates over 13 000 issuers in its proprietary ESG rating as of December 2021

€35 Billion
AXA IM's investments in green assets represent circa €35 billion

Net Zero
Federated Hermes Limited has committed to reach net zero carbon in its real estate portfolio by 2035 for its managed assets

$172 Billion
UBS AM's sustainability-focused assets reached $172 billion in 2021

€303 Billion
AllianzGI manages over €303 bn in ESG and sustainability focused strategies

$303 Billion
Goldman Sachs Asset Management has $303bn AUM in strategies where ESG or sustainability factors are an important component, as of December 2021

$6.4 Billion
AllianceBernstein has allocated $6.4 billion to its green bond holdings

70%
BNPP AM analysed the biodiversity footprint of 70% [over 1,800 companies] of its corporate AUM

ASSET MANAGERS ALIGNMENT WITH THE OPSWF FRAMEWORK

The One Planet Asset Managers Initiative was launched at the 2nd Annual Summit at the Élysée Palace, Paris, on July 10th, 2019. Since then, the eight founding members have been joined by ten additional asset management firms to support the alignment of large asset pools with the goals of the Paris Agreement. In particular, they have: supported their SWF clients in the implementation of the OPSWF Framework, engaged in peer exchange, participated in outreach to the wider investment community, and collaborated on projects to shift markets towards a more sustainable financial system. Each fund has also undertaken efforts to scale up its internal capacity, products and services that can align with the OPSWF Framework Principles.

Below, we highlight some of these efforts.

Principle 1: Alignment

Members of OPAM have developed and enhanced investment policies and processes to align with the goals of the OPSWF Framework and the Paris Agreement. These vary in their institutional and environmental scope but will ultimately support the transition towards a low carbon future for the firms and their clients.

- **AllianceBernstein** manages $24 billion assets under management (AUM) in its suite of ESG-focused strategies, Portfolios with Purpose.

- **Allianz Global Investors (AllianzGI)** expanded its offering in 2021 by building up dedicated sustainable advisory capabilities within risklab – AllianzGI's unit offering customised analysis and investment solutions – with a focus on asset allocation, risk management and private markets implementation. The offering focuses on three pillars:

- Sustainability transparency to help investors understand the sustainability quality of their investment and best practices.
- Actionable advice focusing on establishing sustainability goals and implementing those goals through asset allocation changes, while keeping in mind the impact on risk and return characteristics of the portfolio.

- Customised solutions allowing for a collaboration between the client, risklab and AllianzGI with the goal of developing investment strategies that meet specific client sustainability needs.

- **Allianz Global Investors (AllianzGI)**'s aims to take a leading presence in delivering innovative sustainable solutions for clients. This year this was demonstrated with the endorsement by the G7 of the Emerging Market Climate Action Fund (EMCAF). The fund is an example of a concrete market-led approach to mobilise private investments for climate relevant infrastructure and to enhance multilateral finance and collaboration. The fund has a target size of EUR 600mn to invest in climate-focused investment funds and projects in emerging and developing markets.

• **Amundi** has since 2016 implemented a sector policy to thermal coal, which excludes certain companies and issuers. Every year, Amundi strengthens its exclusion policies in terms of scope and/or thresholds. This year, Amundi broadened the scope of application of its thermal coal exclusion policy and has included phase out plan from thermal coal from its investments: by 2030 in OECD countries and in 2040 in non-OECD countries.

• **AXA IM** supports and participates to a number of initiatives to reflect on the evolution of practices, establish standards, support companies to address global challenges and/or provide solutions. Amongst many commitments, AXA IM is Co-chair of the Finance for Biodiversity (FfB) Foundation, as well as the policy steergroup of the Institutional Investors Group on Climate Change (IIGCC).

• **BlackRock** continues to support global financial institutions, including Sovereign Funds, on strategic transformation, risk and investment management frameworks, analytics and stress testing, external reporting and net zero strategies through its advisory service.

• **BlackRock** is committed to evolving its business to embed the management of climate-related risks and opportunities across its strategy and operations. In 2022, it continues to:

- advocate for sustainability as part of its fiduciary duty to clients

- report in line with the Task Force on Climate-related Financial Disclosures (TCFD);

- build and deliver net zero transition tools, analytics and portfolio advice to help investors to invest amidst high uncertainty about the pace of change in policy and the real economy;

- establish a new capability to bring together BlackRock's efforts focused on transition investing and incubate new transition-focused investment strategies ;

- expand the option for certain institutional clients, including pension funds, to participate in the proxy voting process and have a say in how proxy votes are cast .

• **Federated Hermes Limited** has been as a member of the UK Climate Financial Risk Forum (CFRF) over the past three years. Federated Hermes Limited's work in the Forum has included chairing the Disclosures Working Group for two years, which produced practical guidance published in June 2020 on how financial institutions can best disclose climate-related financial risk; and further guidance in 2021 on recommended metrics for disclosure.

• **Goldman Sachs** is the founding US bank member of OS-Climate, a cross-industry coalition and open-source platform for climate data and analytical tools that will be critical for clients to achieve their net zero ambitions. The collaborative non-profit platform will develop open-data and open-source analytics for climate risk management and climate-aligned finance and investing. Goldman Sachs will contribute its expertise in climate risk, product development and financial reporting to support better tools to help companies, asset managers, and investors more consistently and effectively evaluate progress against decarbonisation goals.

• **HSBC AM** reached $27bn of Sustainable AUM in June 2022.

• **HSBC AM** launched 2 climate funds and a Biodiversity ETF in 2022: HSBC MSCI AC ASIA PACIFIC EX JAPAN CLIMATE PARIS ALIGNED UCITS ETF; HSBC MSCI EMERGING MARKETS CLIMATE PARIS ALIGNED UCITS ETF; and HSBC World ESG Biodiversity Screened Equity UCITS ETF.

• **HSBC AM** launched 18 new sustainable funds in 2021.

• **Invesco** made an initial commitment in 2022 for $195 billion of its assets under management to be managed in line with Net Zero. This will be meaningfully increased every 5 years.

• **Legal & General Investment Management (LGIM)** launched 28 new responsible investment strategies in 2021, including the L&G ESG Paris-Aligned World Equity Index Fund which offers broad ESG exposure to developed market equities, while also integrating Paris-aligned reductions in carbon emissions and UN Sustainable Development Goal principles.

• **Legal & General Investment Management (LGIM)** has a dedicated Index Solutions team that works closely with its portfolio managers in the design of climate solutions to help clients meet their own obligations and climate goals. In 2021, LGIM worked in partnership with investment consultant LCP on the design of its Low Carbon Transition Range, spanning both a broad range of advisors and client types. The climate-tilted index equity strategy seeks to provide clients with core equity market exposure, while aiming to reduce carbon exposure, aligning clients with ambitions to be net zero by 2050.

• **Morgan Stanley** supports the UN Sustainable Development Goals (SDGs), which increasingly informs its firm-wide approach to sustainability. In 2021, it committed to mobilize a total of $1 trillion by 2030 toward sustainable solutions in line with the SDGs, including $750 billion for low-carbon solutions. Since 2018, Morgan Stanley has mobilized over $450 billion toward its low-carbon solutions financing goal and $600Bn+ overall.

• **State Street Corporation** has achieved an 86% waste recycling rate, exceeding the goal of 80% by 2025, and a 45% reduction in water consumption, against a goal of 25% in 2030.

• **State Street Corporation** has global ISO 14001 certification for 18 of State Street's largest facilities – of these, three are also ISO 50001 certified.

ESG roadmaps

• **AllianceBernstein** manages six climate-conscious investment solutions, across its Responsible + and Sustainable product range as of June 30, 2022.

• **Amundi** achieved in 2021 the objectives it had set forth in its three-year ESG action plan launched in 2018:

- 100% of actively managed open-ended funds integrate ESG criteria, with the objective of having an ESG rating higher than that of its investment universe;

- €79 billion in ESG passive management (from €19 billion in 2018);

- €31 billion thematic initiatives developed in climate and social solutions towards the energy transition and social cohesion (from €10 billion in 2018);

- €403 million investments in the Amundi

Finance et Solidarité fund promoting social and solidarity economy (from €200 million in 2018);

- 13,000 issuers rated with an ESG rating, an analysis coverage increased from 5500 issuers in 2018;

- Systematic integration of ESG criteria in voting practices.

• **Amundi** launched its "Ambition 2025" plan in December 2021. This new plan includes ten concrete objectives to accelerate Amundi's ESG transformation and pave the way towards carbon neutrality in 2050 in its investments and saving solutions, engagements and dialogues with companies, and by acting responsibly as a corporate.

• **Amundi** is a founding signatory of Finance for Tomorrow's "Investors for a Just Transition" coalition, a global investor engagement coalition on just transition, with the aim of promoting a socially acceptable transition to a low-carbon economy.

• **AXA IM** publishes a yearly TCFD report presenting AXA IM's Sustainability journey. AXA IM's carbon footprint of investments has decreased -15.5% between 2019 and 2021, and AXA IM has committed its plans to exit from all coal investments by 2030 in the OECD countries and 2040 for the rest of the world.

• **BlackRock**, as of the end of June 2022, managed approximately $470 billion of client assets in more than 300 dedicated sustainable investment strategies across index, active and alternative asset classes. These strategies also include one of the world's largest dedicated renewable power platforms, with $9+ billion in client assets under management .

• **BNP Paribas Asset Management (BNPP AM)** partnered with Danish fintech Matter to launch 'SDG Fundamentals'- an innovative data solution enabling investors to analyse the extent to which company revenues are aligned – or misaligned – with the targets of the 17 United Nations Sustainable Development Goals ('SDGs'). SDG Fundamentals data covers more than 50,000 issuers, providing unparalleled insights into their alignment and misalignment with the SDGs through an analysis of their products and services. It can assist investors in enriching their approach to sustainability analysis.

• **Fidelity International**'s Systematic Investment team works with institutional investors to integrate climate awareness and Paris-alignment in portfolios. The team manages $2.7bn of assets with specific climate objectives in portfolio risk budgets, and in Q4 2022 the Systematic Fixed Income team will launch strategies with Paris-aligned benchmarks. Fidelity International monitors the carbon footprints of its investment strategies and this analysis forms part of internal quarterly performance reviews as well as external reporting.

• **Goldman Sachs** has prioritised climate transition in commercial efforts with clients, leveraging insights from experience managing climate for their own business and developing a comprehensive commercial offering that supports low-carbon transition efforts.

• **HSBC AM** launched a Climate Venture Tech strategy in 2021 that focuses on companies providing software solutions to support the transition of hard-to-abate sectors. HSBC is already leading the way in real economy emerging market green bonds, as well as Paris aligned ETFs and sustainable liquidity solutions.

• **HSBC AM** established a Climate Technology (Climatech) team in 2021 as part of its strategy to expand direct investment capabilities in alternatives.

- **PIMCO** manages ~$500 billion in socially responsible and ESG assets, including SRI (i.e. negatively screened) portfolios, ESG optimized solutions, as well as thematic strategies. PIMCO also manages significant assets on behalf of 34 of the 71 asset owners who have committed to transition their portfolios to net zero GHG emissions by 2050. Through its partnership with these forward-thinking investors, it has developed proprietary tools and capabilities to help clients achieve their climate-related objectives, including decarbonization and net zero.

Emissions reductions

- **Allianz Global Investors (AllianzGI)** invested in 165 renewable energy projects. The wind and solar parks generate energy to supply over 1.9 million households

- **Legal & General Investment Management (LGIM)** has committed to work in partnership with its clients to reach net zero greenhouse gas emissions by 2050 or sooner across all assets under management. In line with this, LGIM set a target for 70% of eligible AUM to be managed in line with this net zero ambition by 2030. LGIM has also set out its key requirements for any investment portfolio to be considered net zero aligned in its LGIM Net Zero framework, including setting targets, adopting a decarbonisation pathway, engaging for change, excluding misaligned companies, and growing green opportunities.

- **Northern Trust Corporation** plans to switch to 100% renewable energy consumption in all locations, install renewable energy technologies such as PV and wind turbines, upgrade to electronically commutated (EC) fans in data centres, electrify its own shuttle fleet and eliminate single-use plastics. The Corporation has set up a Risk Climate Caucus, a cross-disciplinary group to monitor and react to developments in climate risk.

- **PIMCO** continues to participate in several collaborative engagement initiatives such as Climate Action 100+, an investor-led initiative to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change.

- **State Street Corporation** has achieved emissions reduction of 25 percent in 2021, and is well-positioned to reach its goal of 27.5 percent carbon reduction tCO2e (metric tons of carbon dioxide equivalent) in Scope 1 and Scope 2 emissions by 2030, set with a 2019 baseline. This goal is set using the guidance of the Science Based Target initiative's Well-Below 2oC scenario.

Net Zero Asset Managers initiative

- **AllianceBernstein** joined the Net Zero Asset Managers Initiative (NZAMI) as a member.

- **AXA IM** has committed to support the goal of net zero greenhouse gas (GHG) emissions by 2050 as a member of the Net Zero Asset Managers Initiative (NZAMI). 65% of AXA IM's total assets under management (AUM) are managed in line with Net Zero, representing c.€580 billion as of the end of 2021. Interim carbon intensity reduction targets applicable to corporate assets have been set with a view to achieve -25% for 2025 and -50% for 2030, vs a 2019 baseline. AXA IM has committed to have its full corporate assets portfolio Net Zero or aligning by 2040, and has reaffirmed its intention to grow the proportion of Net Zero aligned AUM over time.

- **BlackRock** published its 2030 Net Zero Statement in April 2022, in line with its commitment to the Net Zero Asset Managers initiative.

- **Northern Trust Corporation** has reduced its carbon emissions by over 69% and its energy consumption by over 46% compared to 2015 levels. Northern Trust Asset Management (NTAM) is signatory to the Net Zero Asset Managers Initiative, while Northern Trust Corporation has committed to net zero carbon in its operations by 2050.

- **State Steet Global Advisors (SSGA)** has, as a signatory of the Net Zero Asset Managers initiative, set three targets for in-scope assets, based on the IIGCC Paris Aligned Investment Initiative's Net Zero Investment Framework.

- Portfolio Coverage: 100%. Seek to increase AUM invested in assets in material sectors (carbon-intensive sectors) that are (i) achieving net zero or (ii) aligned to net zero to 100% by 2040.

- Engagement: 90%+. Seek to achieve that 70% of financed emissions in material sectors are net zero, aligned with a net zero pathway, or the subject of direct or collective engagement and stewardship actions and increase this ratio to at least 90% by 2030.

- Scope 1+2 Emissions Reduction: 50%. Seek to reduce financed Scope 1+2 carbon emissions intensity by 50% by 2030 relative to 2019 baseline at portfolio level.

Principle 2: Ownership

Asset managers engage on behalf of their clients to encourage greater accountability and action on material climate change issues in corporate governance, business strategy and planning, risk management and public reporting to promote value creation. Over the past year, members have enhanced their engagement on climate issues. Many members now use the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD) as a tool for engagement, as well as adopting the TCFD framework in their own institutions' reporting structures.

- Federated Hermes Limited has seen aggregate carbon footprint decline by circa 45% (from a peak at the end of 2018 to 2022) within public investments – listed equities and fixed income – following the introduction of its carbon tool which is helping investment managers integrate, respond to and manage transition risk within their portfolios.

- Northern Trust Asset Management (NTAM) co-led climate-focused pooled investor engagements in 2021 with Czech utility CEZ AS, Anglo-Swiss commodity trader Glencore, UK utility National Grid and US refiner Valero Energy. It acted as supporting investors for over a dozen other groups including engagement with US agro-commodity trader Bunge.

Governance, voting and engagement with investees

- AllianceBernstein voted on 91,581 total management and shareholder proposals, across 8,797 companies, in 2021.

- AllianceBernstein engaged with 213 issuers on climate risks, goals and disclosures in its second annual engagement campaign in 2021.

- AllianceBernstein co-leads four Climate Action 100+ engagements as of July 2022—Eskom, Petrobras, Sasol and PPL corp.

- Allianz Global Investors (AllianzGI) participated in 10,190 shareholder meetings in 2021. 100% of climate related resolutions proposed by management and almost 80% of proposals requesting improved reporting on climate change and sustainability have been supported.

- Allianz Global Investors (AllianzGI) engaged 238 companies in 2021. 22% of engagements focused on environmental strategy, risks and performance.

- Amundi engaged with 547 companies in 2021 on transition towards a low-carbon economy and with 165 companies on natural capital preservation, a sharp increase over the year before.

- Amundi voted in favour of 86% of climate-related shareholder resolutions in 2021, and ranked among the top 5 performing asset managers (out of 65) in terms of proxy voting in ShareAction's "Voting Matters 2021" report. In Majority Action's "Fulfilling the Promise" 2022 report, Amundi was identified as an exemplary member of the Climate Action 100+ collaborative initiative, because of how its proxy voting policies hold lagging corporate boards accountable for their climate performance.

- AXA IM introduced a strengthened voting policy in 2022, with additional ESG requirements added to AXA IM's Corporate Governance and Voting policy to further integrate ESG issues into corporate governance, with dialogue and engagement remaining a key priority.

- AXA IM reinforced its stewardship policy with a view to divest from climate laggards ('three strikes and you're out' policy) from 2022. This policy aims to define clear areas of improvement for those companies, tailored to their activities, and communicated to their management at the beginning of the engagement with clear and short timeframe for progress – with a risk of divestment if they don't.

- AXA IM extended its oil and gas policy for investee companies. This included engagement asks for the sector, with clear objectives and a specific timeframe, with the objective of ensuring they develop credible transition plans consistent with the goals of the Paris Agreement and are on track in their delivery, but also that their current operational practices aim to mitigate negative impacts on the environment.

- AXA IM engaged with 245 entities in 2021; 33% of engagements related to climate change and 14% related to resources and ecosystems. Climate, biodiversity and social issues will remain key priorities for engagement with companies in 2022.

- BlackRock Investment Stewardship (BIS) voted on more than 173,000 management and shareholder proposals across 70 voting markets between 1 July 2021 and 30 June 2022. BIS advocates for sound corporate governance and sustainable business models that can help drive the long-term financial returns that enable clients to meet their investing goals. The BlackRock Investment Stewardship team undertook 2,060 engagements on climate & natural capital between 1 July 2021 and 30 June 2022.

- BlackRock Investment Stewardship (BIS) identified a list of more than 1,000 carbon-intensive public companies that represent nearly 90% of the global scope 1 and 2 greenhouse gas (GHG) emissions of our clients' public equity holdings .

- BNPP AM focused heavily on encouraging companies to address material climate change issues in their governance. BNPP AM initiated the filing of four resolutions at US companies, requiring their climate lobbying activities to be aligned with the objectives of the Paris Agreement. Collaborative dialogue resulted in the withdrawal of three resolutions ahead of the AGMs following the companies' commitments to comply with the request for the publication of a report. Of 34 'Say on Climate' resolutions on which BNPP AM voted, it supported 24%, compared to 71% last year. This significant drop in support resulted from the implementation of an analysis grid, clarifying and strengthening BNPP AM's requirements.

- Fidelity International announced its Climate Investing Policy in 2021, targeting a phase-out of thermal coal in OECD markets from portfolios by 2030 and globally by 2040. To achieve this, Fidelity International sent letters to 1,300 companies outlining the new Climate Investing Policy, voted against management on 58% of climate-related shareholder proposals, and had 528 engagements with companies promoting decarbonisation standards aligned with the Paris Agreement goals and TCFD-aligned reporting. Fidelity International participated or co-led five Climate Action 100+ engagements as part of collaborative engagement with peers.

- EOS at Federated Hermes, one of the largest stewardship resources in the world, engages companies on strategic and material ESG concerns to promote investors' long-term performance and fiduciary interests. Approximately $1.5tn of AUA (as of 30 June 2022) is invested in over 10,000 companies worldwide, working collectively in support of shared goals. This pooling of assets increases the influence EOS has with companies, which means it can have a more meaningful impact on the issues of most collective importance to clients

- Goldman Sachs Asset Management's stewardship team promotes best practices in ESG and corporate governance at portfolio companies through proxy voting, direct engagement and industry collaboration. In 2022, the proxy voting policy was updated to vote against directors not disclosing greenhouse gas emissions considered material to their business.

- HSBC AM raised ESG issues in engagements with over 1,800 companies and other issuers in 73 markets during 2021. ESG issues arose in equity team meetings with 627 companies (roughly 50% of equity meetings with companies). For fixed income teams, ESG issues arose with 955 issuers (almost 80% of engagements). Its stewardship team engaged with 478 companies and other issuers seeking improvements in ESG practices and reporting.

- HSBC AM took action in its engagement with a large oil & gas company, including:

- Challenging how the company plans to support net zero transition for the company and the State as it continues to expand oil production

- Questioning if the company's unique decarbonisation strategy that is different from the IOCs and how that has caused challenges from investors

- Encouraging the company to be explicit about its just transition strategy that focuses on emerging markets technology transfer and community impact

- These actions led to the company publishing its first sustainable report in June 2022, since IPO in 2019; and the Head of Strategy stating that the 2035 medium term target mix is 50:50 gas and renewables.

- HSBC AM took action in its engagement with a large utilities company, including:

- Challenging its current strategy to maintain coal power generation by relying on CCUS and ammonia co-firing

- Pressing for shorter-term science-based targets and business plan to achieve these targets

- Explaining its plan to submit shareholder proposals for AGM in June, should the company fail to commit by the end of March to deliver these requests

- Co-filing shareholder proposals in April 2022, following inadequate response from the company

- HSBC AM took actions in its engagement with an electricity and gas distributor, including:

- Engaging with ESG team regarding the possible reopening of coal plants

- Discussing targets and ventures that are integral to the just transition (Xway, Geothermal, Lithium)

- Updating on use of AI in billing and measuring retail energy use

- Discussing measuring or incentivising suppliers regarding their transitions

- These actions led to the company intending to close all coal plants by 2025, planning to increase their EV charging network to 1.2 million by 2024 and 5 million by 2030; and investing 6 billion Euros in Lithium by 2030 through a mix of cash and debt.

- Invesco conducted more than 3,000 engagements in 2021 where ESG was raised.

- Legal & General Investment Management (LGIM) announced the latest results under its Climate Impact Pledge engagement programme, where 80 companies out of the larger universe of 1,000 are currently subject to voting sanctions and 14 companies have been divested from select funds for not meeting minimum climate change standards. Following successful engagement, one company has even been reinstated.

- Legal & General Investment Management's (LGIM) Investment Stewardship team engaged with 571 companies and voted at 180,200 resolutions worldwide in 2021. LGIM continued to hold directors to account for their management of climate risk and continues to take action against companies under our Climate Impact Pledge.

- PIMCO analysts proactively engaged with 1,585 corporate bond issuers in 2021 globally across a range of industries. In 2021, PIMCO engaged with more than 20 global banks sharing recommendations on topics such as firm's commitment to net zero and setting time-bound expectations in lending policy in line with the Paris Agreement. PIMCO also extensively engaged with more than 50 energy companies on measuring and setting reduction targets on methane emissions. Being a significant debt holder in sovereign fixed income, PIMCO has also engaged with a variety of sovereign management teams on ESG topics related to climate issues such as energy transitions, physical risks from climate change, and green financing frameworks.

- State Street Global Advisors (SSGA) conducted 254 climate-focused engagements with investee companies, a 72% increase compared to the previous year (148 in 2020), reflecting its increased focus on climate change. Its engagements centered on how companies are both managing climate risk in their operations and addressing climate as an investment opportunity, and have been successful in driving improvement in both disclosure and long-term climate strategy.

- UBS AM voted in favour of 80% of shareholder resolutions focused on environmental issues during 2021.

- UBS AM voted on 844 shareholder resolutions in 2021 which were focused on ESG issues, which represented a 26% increase from 2020.

Data disclosures and TCFD

- BlackRock supports the drive towards better disclosures, including through requesting comprehensive disclosures from companies on their long-term strategy, including milestone, governance, and operational processes. Alongside robust financial disclosures, BlackRock also requests companies provide data and narrative to help investors understand how they approach material, business relevant sustainability risks and opportunities. BlackRock supports international efforts toward a single, globally consistent set of baseline standards on which different jurisdictions can build .

- Goldman Sachs Asset Management has identified companies across their portfolio that have not yet disclosed a target to reduce emissions and they seek to engage with those

companies to set and disclose targets to reduce greenhouse gas emissions.

• **HSBC AM** continued to engage with NGOs such as CDP and the Science Based Targets Initiative, on the development of their reporting requirements and guidance for the sector in setting meaningful science-based targets. HSCB has also engaged and provided a view to stakeholders in the development of IFRS 2, Climate Change Requirements being developed by the International Sustainability Standards Board, submitting views to the Hong Kong Green Finance Association, ASIFMA, and the Asian Corporate Governance Association (ACGA).

Sustainability Strategy

• **Amundi** published its 2021 Climate and Sustainability Report, which reported on the group's sustainable investment strategy and objectives, and on the implementation of this strategy (the governance and the operational system put in place for its deployment, the means and actions deployed, and the associated results).

• Federated Hermes Limited has been developing its corporate Net Zero Strategy, with new targets and metrics to help manage climate-related risks and opportunities. This includes

- For listed equities and fixed income, measuring portfolio-level carbon footprint for since 2015, with coverage now at 99% for listed equities and 81% for credit securities that are in scope for ESG data

- For real estate investments, measuring the physical risk exposure and the carbon footprint based on energy usage of its direct investments since 2006 and publishing performance against carbon reduction targets annually. Coverage is 100% of all landlord-controlled areas.

- For infrastructure, engaging with 100% of its underlying assets, collecting data on climate risk and opportunities and transition strategies as well as the carbon footprint. Data coverage is 97% of the infrastructure portfolio

- For real estate debt, we have measured the carbon emissions of 100% of total real estate debt AUM

Principle 3: Integration

Asset managers play a key role in the global financial system in allocating capital to companies and projects. OPAM members are increasingly integrating climate change-related risks and opportunities into investment management through the development of new tools, analytics and investment vehicles.

• **AllianceBernstein** co-developed the Columbia Climate Change and Investments Academy curriculum, taken by more than 1000 investors. It is a founding member of the Columbia Corporate Affiliate Program, which brings together commercial enterprises and Columbia's pioneering climate and sustainability research.

• **AllianceBernstein** wrote 3 comment letters to policy makers as of June 30, 2022. In the United States, it responded to the Department of Labor on the topic of retirement savings and climate-related financial risks. It also responded to the Securities and Exchange Commission on climate disclosures and the pay versus performance proposal.

• **Amundi** rates over 13000 issuers in its proprietary ESG rating as of December 2021.

• **AXA IM**'s enhanced Ecosystem Protection & Deforestation policy addresses more drivers of deforestation and natural ecosystem conversion. In Q4 2021 it launched a specific engagement program targeting companies that have activities related to key raw materials associated with the risk of deforestation and ecosystem protection. AXA IM has reinforced its commitment to the forestry and the natural capital asset class, achieving a record level of investment and growing the underlying portfolio by over 30% in 2021. In addition, it has delivered 100% certification of all forest assets under either PEFC or FSC certification in 2021, with all Irish forests certified by the end of 2021.

• **BNPP AM** published the first results of its research to determine the biodiversity footprint of its investments in collaboration with Iceberg Data Lab and I Care & Consult. The analysis covered 70% of its corporate AUM, covering more than 1,800 companies. BNPP AM's biodiversity footprint is estimated to be around -8,000 MSA. km2, meaning that its investments potentially maintain a fully degraded area equivalent to five times the size of London each year.

• **Fidelity International** released its second TCFD report, setting ambitious 2024 targets to achieve the goal of net zero emissions by 2030. It used the firm's fundamental research capabilities to rate companies on their Environmental, Social, and Governance performance, and to assess alignment with sustainable development goals. Fidelity International has also developed proprietary climate ratings to assess companies' progress on the road to net zero.

• **Goldman Sachs** invested in Phononic, a global leader in solid-state cooling technology. The company seeks to reform cooling using unique semiconductor technology to improve energy efficiency and reduce carbon emissions relative to traditional mechanical compression incumbents. Through its technology platform, Phononic's innovations could support the transformation of the ways data is communicated; automobiles "see"; grocers merchandise and deliver food; vaccines and drugs are stored and protected; and residential houses and office buildings are cooled. Goldman Sachs believes that Phononic furthers their broader sustainability commitments, and their solid-state technology is delivering solutions that have not historically been available through legacy thermoelectric or compressor incumbents.

- **HSBC AM** established virtual sector teams (VSTs) in 2021 to capture ESG sector specific knowledge across asset classes and geographies. These teams bring together RI specialists, and credit and equity analysts stationed in different regions, and are responsible for conducting sector research, overseeing ESG checklists, deriving ESG scores and aligning engagement activities with risk issues.

- **State Street Global Advisors (SSGA)** has a broad range of investment strategies that incorporate climate considerations, spanning equities and bonds (including high yield), which are available in both index and active strategies. Also, it has collaborated with MSCI to launch a range of Paris Aligned Index solutions for multiple equity exposures.

- **UBS AM** achieved savings of ~160,000 tons of CO2 (GHG) in its real estate portfolio over a five-year period.

Portfolio reorientation towards ESG

- **AllianceBernstein** has allocated $ 6.4 billion to its green bond holdings as of December 2021

- **Allianz Global Investors (AllianzGI)** manages over EUR 303 bn in ESG and sustainability focused strategies at the end of 2021. In 2021 sustainability focused strategies AuM increased by 47% and >100 mutual funds have been converted to SFDR 8 or 9.

- **Amundi** has €847 billion ESG AuM as of December 2021, including Lyxor.

- **AXA IM** has continued its investments in green assets (sustainable bonds, green listed equity, private markets and green real assets). These assets represent circa €35 billion.

- **AXA IM** is targeting at least 50% of direct real estate AUM aligned with 1.5° trajectory by 2025 using CRREM (Carbon Risk Real Estate Monitor) target pathways.

- **Federated Hermes Limited** has committed to reach net zero carbon in its real estate portfolio by 2035 for its managed assets across the whole portfolio. To ensure this, its Real Estate team signed up to the Better Building Partnership (BBP) Climate Change Commitment and issued the Net-Zero Pathway document which sets out both the targets and approach to reaching net zero emissions across the managed assets included within its £6.1bn (as at 31 Dec 2020) UK real estate portfolio.

- **Goldman Sachs** has achieved approximately $300bn in activity as part of its commitment to deploy $750bn towards sustainable finance, advisory and investment activities by 2030. This includes $167 billion in the climate transition, $50bn in inclusive growth, and the remainder in multiple themes.

- **Invesco**'s investment teams responsible for managing 95% of Invesco's AUM have, as of June 2022, attained the ESG integration level defined as baseline integration.

- **Natixis Investment Managers**' sustainable and impact investing assets represent more than 1/3 of its AUM and at Q2 results amounted to €329bn. Natixis Investment Managers aims for these assets to reach more than 50% by end of 2024

- **UBS AM** reached $172 billions of sustainability-focus and impact investments in 2021, a 221% increase on 2020

Market offerings

- **Amundi** kept prioritizing initiatives that stimulate both supply and demand as well as contribute to building a dynamic marketplace for responsible investment instruments. Examples include:

  - The Build-Back-Better Emerging Markets Sustainable Transaction ("BEST") initiative, a new $2 billion strategy co-developed by the International Finance Corporation (IFC) and Amundi. It aims to support a green, resilient and inclusive recovery from the Covid-19 pandemic and build pandemic and shock resilience in Emerging Markets.

  - ESG Improvers investment range, targeting future ESG champions, has been expanded to six funds.

  - Transformation of passive range: confirming its commitment to facilitate investors' sustainability shift by transitioning flagship passive funds into ESG equivalents.

- **AXA IM** has been an active investor in green bonds, green buildings and green infrastructure and is playing a key role in implementing the objective of €26bn Green Investment by 2023 announced by the AXA Group.

- **BNPP AM** continued to expand its thematic funds range with several strategic launches on sustainable themes, such as environment, energy transition and inclusive growth totalling € 40 bn assets under management. These include:

  - BNPP Ecosystem Restoration, a fund that provides exposure to companies engaged in restoring and preserving aquatic, terrestrial and urban ecosystems through their products, services or processes;

  - BNPP Sustainable Asian Cities, the first sustainable thematic Asian fixed income fund, contributing to the promotion of sustainable Asian cities to meet the challenges of increased urbanisation, physical impacts of climate change and inclusive growth; and

  - BNPP Easy ECPI Global ESG Hydrogen Economy, an ETF fund designed to offer investors exposure to the 40 most active companies in the sustainable green hydrogen economy.

- **Federated Hermes Limited** joined the Natural Capital Investment Alliance, created by His Royal Highness the Prince of Wales under his Sustainable Markets Initiative. Federated Hermes Limited intends to contribute towards the aim of the Alliance, which is to accelerate the development of Natural Capital as a mainstream investment theme, towards a goal mobilising more than $10bn in aggregate by the end of 2022. In affiliation with the Natural History Museum, Federated Hermes Limited launched its pioneering Biodiversity Fund earlier this year targeting a concentrated portfolio of global companies helping to preserve and restore biodiversity.

- **Fidelity International** continues to expand its offering of sustainable investment strategies, and the Sustainable Funds Family spans active and passive strategies across equities, fixed income, multi asset and real estate. The Sustainable Global Climate Solutions strategy explicitly focuses on the rich opportunity set of equity investments aligned to decarbonisation efforts, while the Real Estate Impact strategy seeks to make positive climate impact through the renovation of legacy European real-estate stock.

- **Invesco** has launched its firsts net zero labelled fixed income strategies, as well as a suite of Paris-aligned ETFs.

• **Legal & General Investment Management (LGIM)** launched the L&G Net Zero Global Corporate Bond Fund in 2022, which is the first fund aligned to its LGIM Net Zero Framework. LGIM has since amended another fund, now called the L&G Future World Global Credit Fund UK, which now also aligns to the Net Zero framework. Additional Net Zero launches are in the pipeline for 2022 and beyond.

• **Northern Trust Asset Management (NTAM)** designed a customized index which tracks an EU Paris Aligned Benchmark and further tilts towards companies tackling nature degradation by offering products for pollution prevention, sustainable agriculture and resource efficiency.

• **Northern Trust Asset Management (NTAM)**'s FlexShares® climate-focused ESG Exchange Traded Funds launched in EMEA and the US.

• **UBS AM** signed a Letter of Intent with the Qatar Financial Centre to partner on the establishment of a sustainable private markets initiative that, it is envisaged, will initially make investments in the energy storage, eco-transport, food security and environmentally sustainable technology venture capital sectors. This will involve an initial seed investment of up to $500 million in the first stage.

Tools & Frameworks

• **Allianz Global Investors (AllianzGI)** developed the Sustainability Insights Engine tool, SusIE to provide a range of ESG data via state-of-the-art technology. This will enable AllianzGI to leverage its expertise, enable portfolio managers to invest sustainable and deliver value add for its clients.

• **AXA IM** has developed a proprietary Green, Social and Sustainability bonds assessment framework, notably inspired by Green and Social Bonds Principles (GSBP) and the Climate Bonds Initiative (CBI).

• **Federated Hermes Limited**'s Real Estate Team integrates nature related risk management throughout its investment decision making and asset management processes, with select projects aiming to achieve a Biodiversity Net Gain score of 85% . For example, St Mary Le Port, a proposed redevelopment of 1.15 hectares site in Bristol City Centre, has carried out a Natural Capital Assessment to assess the impacts of the proposals on natural assets and its potential Environmental Net Gain. The scheme is expected to achieve a Biodiversity Net Gain score of 85%.

• **Goldman Sachs Asset Management** launched a Paris-Aligned investment strategy that seeks to align with the goals of the Paris Climate Agreement to combat climate change and its effects. The purpose of the Paris-Aligned investment approach is to decarbonise public equity investment portfolios and increase investment in climate solutions in a way that is consistent with a 1.5C net zero emissions future, in line with the stated goals of the Paris Agreement. The strategy supports many investors' growing desire to reduce carbon emissions and more deliberately manage the transition to a low-carbon economy through a rules-based and transparent approach.

• **Northern Trust Asset Management (NTAM)** developed a framework to evaluate issuers of developed and emerging sovereign obligors to help to measure a country's capacity to address environmental and social risks through financial, judicial, and political systems. These metrics are taken into account alongside climate considerations within the portfolio construction process.

• **PIMCO** has developed robust proprietary tools to assess, manage, and help mitigate climate-related risks in its ESG clients' portfolios. For example, PIMCO has developed a climate risk scoring methodology that evaluates sectors' exposure to climate risk over cyclical, secular and super-secular time horizons. It has also built climate scenario and stress-test models, to quantify the potential impact of different transition scenarios on various financial indicators.

• **State Street Global Advisors (SSGA)** further enhanced its climate data platform through a significant investment to acquire comprehensive climate data sets from two additional vendors, which will improve its ability to serve clients with respect to climate analytics, reporting, and portfolio construction.

• **State Street Corporation** launched State Street Total ESG, which provides a multi-vendor suite of ESG data to meet institutional investors' investment and reporting needs across asset classes; offers transparent, streamlined and customizable ESG analytics and reporting; helps institutional investors navigate the non-traditional financial data landscape, while allowing integration and calculation of proprietary client ESG scoring methodologies and frameworks; enables investors to view portfolios through the lens of industry-leading ESG data sets that aligns with their goals; and leverages State Street infrastructure and connectivity to centralize fund and portfolio data.

EXAMPLES OF PRIVATE EQUITY FUNDS ALIGNMENT WITH THE OPSWF FRAMEWORK - 2021 TO 2022

ONE PLANET PRIVATE EQUITY FUNDS

PRINCIPLE 1 ALIGNMENT

€1.8 Million
The Clean H2 Infra Fund, managed by Hy24, a joint venture between Ardian and FiveT Hydrogen, has a €1.8bn target size

89% of Eurazeo's funds
being raised or in the investment phase are classified as Article 8 or Article 9 under SFDR (Sustainable Finance Disclosure Regulation) as of June 2022

43% of Macquarie
Asset Management's total AUM managed in line with NZAM's net zero criteria, including 100% of its infrastructure, renewables and agriculture portfolio

Carbon neutrality
SoftBank Group announced a 2030 Carbon Neutral target

40%
of GIP's equity invested has been in renewables and climate solutions since its inception

<1% of AUM
<1% of TPG's AUM is currently invested in fossil fuel companies

Carbon net neutrality
As part of its ambitious target of carbon net neutrality by 2040 at the latest, Eurazeo set ambitious carbon reduction targets validated by the Science Based Targets Initiative (SBTi).

28%
of GIP's equity invested has been in renewables since its inception

250 Portfolio companies
TPG analysed climate change physical and transition risk and greenhouse gas emissions for over 250 portfolio companies

€1.5 Billion
Tikehau Capital has over €1.5 bn AuM dedicated to climate change by end 2021

PRINCIPLE 2 OWNERSHIP

87%
of GIP's companies track Scope 1&2 GHG emissions

72%
of Ardian Buyout portfolio companies source at least part of their energy from certified renewable energy

150+
Macquarie Asset Management is collecting ESG data on a quarterly basis from 150+ portfolio companies

137
GPs have signed onto the ESG Data Convergence Initiative - co-founded by Carlyle - agreeing to report on greenhouse gas data for a combined 2,000+ underlying private companies in a standardized format

100%
Eurazeo undertakes to ensure that 100% of its eligible Private Equity portfolio have decarbonization pathways validated by SBTi by 2030

65%
of TPG's evaluated portfolio companies took actions in 2021 to reduce their carbon footprint

100%
Tikehau Capital is committed to have 100% of the companies in private equity portfolios covered with a carbon footprint (Scope 1, 2 & 3)

PRINCIPLE 3 INTEGRATION

$18 Billion
$18bn invested by GIP into renewable energy investments

~$9.4 Billion
GIP has deployed ~$9.4bn of green financing in the last three years

100% assets
100% of assets in the Ardian Real Estate Portfolio as of Q2 2022 have a decarbonization trajectory

$4.62 Billion
Softbank Investment Advisers has invested $4.62 Bn in companies helping to reduce the risks of climate change through the SoftBank Vision Funds

35.5 TWh
35.5TWh generated by GIP's portfolio companies in 2021, with 26.4m metric tons of CO_2 avoided

100%
Eurazeo fully integrates ESG at all stages of its investment process

€1 Billion
Ardian launched the Ardian Clean Energy Evergreen Fund ($1bn target size), a platform dedicated to financing clean energy

$7.3 Billion
TPG's Rise Climate fund closed at $7.3 billion

$1.3 Billion
TPG's Rise Funds invested $1.3 billion in climate sectors

24 GWh
Green Investment Group joined Macquarie Asset Management in April 2022, bringing total green energy capacity under management to over 24GWh

>$810 Million
Together with General Atlantic, BeyondNetZero invested more than $810 million in companies that are helping the world to reduce greenhouse case emissions

>$100 Million
Carlyle commits over $100M in battery storage and electric vehicle infrastructure technologies to accelerate the energy transition

85
Macquarie Asset Management portfolio companies participated in GRESB assessments in 2021

€1 Billion
Tikehau Capital launched a €1bn target size fund dedicated to make the transition to regenerative agriculture happen at scale

PRIVATE EQUITY FUNDS ALIGNMENT WITH THE OPSWF FRAMEWORK

In 2020, five global private investment firms founded the One Planet Private Equity Funds (OPPEF) initiative to support the members of the OPSWF in their implementation of the Framework. Since the launch of the initiative five new private investment firms have joined the initiative.

In particular, they have: engaged in peer exchange, participated in outreach to the wider investment community, and collaborated on projects to accelerate the understanding and integration of the implications of climate-related risks and opportunities within long-term investment portfolios. Each fund has also undertaken efforts to scale up its internal capacity, products and services that can align with the OPSWF Framework Principles.

At the 4th Annual OPSWF Summit, OPPEF members issued a statement of support of the TCFD recommendations, in line with OPSWF and OPAM statements, therefore sending a clear signal to the private investment market that climate-related financial disclosures are the next step ahead for the sector.

Below, we highlight some of these efforts.

Principle 1: Alignment

Members of OPPEF have developed and enhanced investment policies and processes to align with the goals of the OPSWF Framework and the Paris Agreement. These vary in their institutional and environmental scope but will ultimately support the transition towards a low carbon future for the firms and their clients.

- Eurazeo's Sustainable Maritime Infrastructure (ESMI), classified Article 9 under SFDR, aims to support and accelerate the ecological and energy transition of the shipping industry, in line with the objectives of the International Maritime Organization (IMO) and the European Green Deal. It was launched with the support of the European Investment Fund.

- Macquarie Asset Management (MAM) joined the Net Zero Asset Managers (NZAM)'s initiative committing to manage its portfolio in line with NZAM criteria.

- Tikehau Capital is a signatory of the Race to Zero and has set the objective to manage a platform dedicated to climate and impact investing. With six thematic funds across the

Group's asset classes and more than $1.5 billion AuM dedicated to financing the Energy and Ecological Transition, Tikehau Capital is already contributing to the fight against the climate emergency.

- **Tikehau Capital** has set the target to manage over €5 billion AuM dedicated to climate and biodiversity with the aim at reinforcing its climate and impact investing platform. This target is already materializing with the launch of innovative sustainable finance products between 2021-2022. Such products include the Tikehau Green Assets fund, investing in distributed 'green assets' or equipment to decrease the carbon footprint of end-users, and the new Regenerative Agriculture fund, aiming at making the transition to regenerative agriculture happen at scale.

Renewable energy

- Ardian is co-leading a workstream as part of the OPSWF initiative to identify enablers to scale clean-hydrogen investments and production.

- Ardian founded Hy24, the world's largest clean hydrogen investment platform, combining financial and industrial investors, as a joint venture with FiveT Hydrogen. To date, the Clean H2 Infra Fund (€1.8bn target size) managed by Hy24 has financed projects including:
o H2 MOBILITY Deutschland, to support a leading operator of hydrogen refuelling stations further expand its network;

- Enagás Renovable, to accelerate the development of a leading renewable- to-gas platform; and

- Hy2gen AG, with capital to be used to construct facilities producing green hydrogen-based fuels for transportation and industrial applications

- **Global Infrastructure Partners (GIP)** has invested or committed approximately $18 billion in renewable energy platforms globally since its inception. 28% of the total equity invested into GIP's Flagship Funds has been in renewables. GIP invests in traditional renewable energy companies such as wind, solar and battery storage, but also considers newer renewable energy businesses and emerging technologies such as carbon capture, hydrogen power and bio-fuels.

- **Global Infrastructure Partners (GIP)**'s Flagship Funds have seen 40% of the equity invested been in renewables and climate solutions.

ESG assessments and risks

- **Global Infrastructure Partners (GIP)** conducted a thorough climate scenario analysis on its existing assets and on prospective investments, to understand the financial risks and opportunities of investments in various sectors, geographies, structures; develop appropriate mitigation plans against climate risks across its portfolio companies; and inform its future investment decisions with an enhanced insight.

- **Global Infrastructure Partners (GIP)** includes a full ESG materiality-based assessment as part of the Investment Committee review and memo, with the ESG Director present at each Investment Committee meeting to provide detailed ESG impact information for the Committee's consideration before making an investment decision.

- **TPG** analysed the greenhouse gas emissions of 296 portfolio companies in 2021, in accordance with the Partnership for Carbon Accounting Financials (PCAF) standard and the Greenhouse Gas Protocol (GHGP) and 252 portfolio companies for physical and transition risk, aligned with TCFD principles. Climate change physical and transition risk and greenhouse gas emissions are among the material factors TPG evaluates every pre-investment ESG diligence assessment.

Decarbonisation & exclusion

- **Eurazeo** has aligned its decarbonization pathway with a scenario limiting global warming to 1.5°C and set an ambitious target of carbon net neutrality by 2040 at the latest. Eurazeo was the first Private Equity player in Europe to commit, as of 2020, to defining a decarbonization pathway in accordance with scientific recommendations to achieve the Paris Agreement objective. The carbon reduction targets of Eurazeo and its portfolio companies were validated by the Science Based Targets Initiative (SBTi).

- **Eurazeo**'s funds are mostly classified as Article 8 by design, as ESG has been fully integrated into the investment process for almost 15 years now. Eurazeo implements the Exclusion Policy, conducts ESG due diligence prior to investing and measures ESG impacts of underlying assets. Eurazeo has three funds classified as Article 9.

- **TPG** has less than 1% of global AUM currently directly invested in fossil fuel companies.

Principle 2: Ownership

OPPEF engages with their portfolio companies to encourage greater accountability and action on material climate change issues in corporate governance, business strategy and planning, risk management and public reporting to promote value creation. Over the past year, members have enhanced their engagement on climate issues, however. OPPEF has observed that private markets have not yet coalesced around a common disclosure standard. During the 4th Annual OPSWF CEO Summit, OPPEF joined OPSWF and OPAM and publicly announce their support of the TCFD.

Data & Reporting

- BeyondNetZero requires all of its portfolio companies to set a Science-Based Target. These provide a pathway for companies to follow in order to reduce their greenhouse gas emissions in a way that meets the goals of the Paris Agreement. BeyondNetZero requires its portfolio companies to set such a target, and works with them as they seek to reduce their emissions.

- Global Infrastructure Partners (GIP) gathers ESG data, including key climate change information, from its portfolio companies annually. Through this data gathering and analysis, GIP is able to determine that :

- 87% of its Flagship Fund companies track Scope 1 & 2 GHG emissions, and 42% of companies track Scope 3 emissions (where material). GIP encourages its portfolio companies to track their emissions, set reduction targets and aim for continuous improvement even during periods of growth.

- 80% of its Flagship Fund companies set GHG emission reduction targets, and 53% have net zero targets (at least Scope 1 and 2 emissions). GIP works with the portfolio companies to support these efforts with a focus on science-based targets and reduction strategies even in times of growth.

- 60% of its portfolio companies report on ESG in a manner that is aligned with TCFD. GIP encourages its portfolio companies to be transparent in their reporting of climate risks with a focus on aligning with TCFD reporting.

- Macquarie Asset Management (MAM) collects ESG data on a quarterly basis from more than 150 infrastructure portfolio companies, encompassing GHG emissions, energy consumption and WHS data.

- SoftBank Investment Advisers (SBIA)'s parent company, SoftBank Group, delivered in June 2022 its first report in line with recommendations from the Task Force on Climate-related Financial Disclosures (TCFD). SoftBank Group announced a 2030 Carbon Neutral target and several major subsidiaries have set their own targets. The Group is actively using renewable electricity and promoting power- and energy-saving measures at head offices and data centers. The robust goals detailed in SoftBank's "Carbon Neutral 2030 Declaration" were certified as Science Based Targets (SBT).

Decarbonisation & Net Zero

- Ardian organized a workshop on carbon footprint assessment in 2022 to support portfolio companies in conducting their own assessments. The workshop – hosted under the banner of Ardian Circle, a peer-to-peer community that brings together leaders from its portfolio companies to build relationships and collaborate on practical solutions to shared challenges – was attended by 42 participants from Europe and North America.

- Ardian set climate action targets in 2021 to have a majority of Ardian Buyout and Expansion portfolio companies sourcing all or part of their energy from certified renewable sources. As of

Ardian's most recent portfolio review, 72% of companies from the Ardian Buyout portfolio and 53% of companies from the Ardian Expansion portfolio source at least part of their energy from certified renewable energy.

- **Carlyle** recently announced its ambition to achieve net zero greenhouse gas emissions by 2050 or sooner across investments. It established several near-term goals across Carlyle's majority-owned corporate private equity, power and energy portfolio companies, including:

- 75% of Carlyle's portfolio companies' Scopes 1 and 2 emissions to be covered by Paris-aligned climate goals by 2025; and

- After 2025, all new majority-owned portfolio companies to set Paris-aligned climate goals within two years of ownership.

- **Carlyle** is among the first major global private equity firms to join the call to accelerate the transition to a net zero economy with the establishment of both short- and long-term climate goals. This ambition is not driven just by portfolio allocation decisions, but rather grounded in driving real emissions reductions within its portfolio companies. In order to create decarbonization pathways across its portfolios, Carlyle will continue to partner with companies to drive better data collection and clear progress on reducing greenhouse gas emissions.
- **Eurazeo** undertakes to ensure that 100% of its Private Equity portfolio that is eligible in terms of invested capital have decarbonization pathways validated by SBTi by 2030; and undertakes to reduce by 60% the greenhouse gas emissions of its Real Estate investment portfolio, reduction per square meter by 2030 (base year: 2021).

- **Tikehau Capital** engages with all companies in the T2 Energy Transition Fund and is committed to conducting climate related assessments, including on the generated and avoided CO2 emissions of its portfolio companies. As of June 2021, 100% of the portfolio companies in the T2 Energy Transition fund were covered by a carbon footprint assessment and the first guidelines for a decarbonization plan. In 2021, the Group signed the Sciences-Based Targets initiative and is currently defining a target for its private equity activity. At the T2 Energy Transition fund level, the Asset Manager encourages its portfolio companies to define a decarbonization plan in the 24 months following the investment.

- **Tikehau Capital**'s climate and impact investing platform aims at deploying a robust impact approach. While intentionality is the key driver for the investment strategy, impact measurement is essential to demonstrate the outcomes related to the environmental objectives. For example, the T2 Energy Transition fund has the double intention to deliver at-market financial returns while contributing to the decarbonization of the economic system; to measure its outcomes, the portfolio companies contribute to the assessment of avoided emissions related to their business proposition. In 2021, the environmental expert ERM estimated that six of the portfolio companies contributed to avoid more than 260,000 tonnes of CO2e thanks to the deployment of green energy, energy efficiency and low carbon solutions.

- TPG evaluated its portfolio in 2021 to gain current insights across Environmental, Social, and Governance themes, and found that 65% of the companies evaluated took some action to reduce their greenhouse gas emissions, including installation of renewable energy, optimization of transportation and other business processes, carbon capture and storage, among other strategies.

Principle 3: Integration

Private investment firms play a key role in the global financial system investing to companies and projects. OPPEF members are increasingly integrating climate change-related risks and opportunities into investment management through the development of new tools, analytics and investment vehicles.

- **Ardian Real Estate** has developed detailed decarbonization pathways for 100% of properties in its portfolio as of Q2 2022 in line with the Carbon Risk Real Estate Methodology (CRREM). Individual plans plot GHG emissions trajectories for each asset over the decades until 2050, showing how individual modifications such as upgrading heating and ventilation systems, installing lighting sensors, improving insulation and airtightness, and adding solar panels contribute towards the overall reduction target.

- **Macquarie Asset Management (MAM)** completed GRESB assessments across each of its 28 infrastructure funds and MAM-branded real estate funds, with 85 portfolio companies participating in 2021.

Renewable energy

- **Ardian** launched the Ardian Clean Energy Evergreen Fund (ACEEF - €1bn target size) in 2022, a pewrmanent, long-term investment platform dedicated to financing clean energy.

- **Carlyle** announced complementary growth investments in community-scale clean energy developer NineDot Energy and electric vehicle (EV) charging and services company Fermata Energy, representing a more than $100 million commitment to technological disruptions advancing the energy transition.

- NineDot Energy is a New York City-based clean-tech developer that designs and deploys community-scale energy generation and battery storage projects. Carlyle's investment will enable NineDot to develop, build, and operate over 1,600 megawatt hours (MWh) of clean energy systems by 2026 that strengthen local power grid infrastructure and provide clean, reliable, and resilient power to tens of thousands of New York households and businesses.

- Fermata Energy is an EV charging and services company targeting the growing bi-directional EV charging market. Fermata Energy designs, supplies, and operates the technologies required to integrate EVs into the home, buildings, and electric grid.

- **Global Infrastructure Partners (GIP)** has honed its focus on the energy sector with approximately $18bn of equity invested / committed in renewable energy. GIP has current ownership interests in c.18 GW of operating renewable assets, royalty interests in c.20 GW of operating projects and c.175 GW under construction or development. GIP is exploring investments in traditional renewable energy businesses such as wind and solar, and is also assessing opportunities in innovative renewable energy sectors such as carbon capture, hydrogen power and bio-fuels.

- **Global Infrastructure Partners (GIP)** Flagship Fund companies generated 35.5 TWh of renewable energy (11% more than 2020) and avoided 26.4m metric tonnes of CO2 through renewable energy (19% better than 2020).

• **Macquarie Asset Management (MAM)** announced the integration of the Green Investment Group, strengthening its green energy transition with over 24GWh green generation capacity under management.

• **SB Energy**, a subsidiary of SoftBank Group, operates 50 solar photovoltaic and wind power plants in Japan and Mongolia, with a generating capacity of around 773 MW, enough to meet the annual power consumption of around 270,000 ordinary Japanese households. In addition, SB Energy Global Holdings and its subsidiaries own and operate four solar photovoltaic power plants in the U.S., with a total generating capacity of around 1,300 MW.

Green financing

• **BeyondNetZero** invested, alongside General Atlantic, more than $810 million in companies that are helping the world to reduce greenhouse gas emissions.

• **Carlyle** announced that its Global Credit platform has launched a decarbonization-linked financing program, providing an incentive for borrowers to reduce greenhouse gas (GHG) emissions or achieve other climate-related targets. The initiative is among the first decarbonization-linked financing programs available in the US private credit market.

• **Global Infrastructure Partners (GIP)** is focused on increasing the use of green financing across its portfolio, a consideration during initial investment as well as ownership. Over the last three years, four GIP portfolio companies have raised a total of ~$9.4bn in green financing, including non-renewable portfolio companies, and GIP continues with further green financing in 2022. GIP believes green financing increases returns, underlines the sustainability credentials of the businesses and enhances value at exit.

• **SoftBank Investment Advisers (SBIA)** is investing in companies working to solve environmental issues through the SoftBank Vision Funds. To date it has invested $4.62 Bn in companies helping to reduce the risks of climate change

• **TPG** has $15 billion AUM dedicated to advancing social and environmental impact through its Rise Funds, including TPG Rise Climate, which concluded capital formation in 2021 with a total of $7.3 billion dedicated to investments that enable carbon aversion.

• **TPG**'s Rise Funds invested $1.3 billion between inception and year end 2021 in energy transition, carbon solutions, carbon markets, low carbon fuels, and sustainable materials and products sector.

• **Tikehau Capital** announced in 2022 the launch of a new impact strategy dedicated to regenerative agriculture, with the aim of reinforcing the response to climate and biodiversity challenges. The Regenerative Agriculture fund is a private equity fund launched in partnership with Unilever and Axa Climate and has a target size of €1 billion. The Fund will focus on four core areas to make the transition to regenerative agriculture happen at scale: i) soil restoration; ii) change of practices; iii) regenerative ingredients; and iv) technological solutions. Leveraging the international network of AXA, Unilever and Tikehau Capital, the fund is expected to be global. Impact objectives and measurement will be central to the way it operates and fully embedded in its investment strategy.

ESG Data & Due Diligence

• **Carlyle** co-founded the ESG Data Convergence Initiative, the industry's first-ever general partner (GP) and limited partner (LP) partnership to standardize ESG reporting including for climate-related metrics. Launched in September 2021, the group recently reached the milestone of 200+ participating GPs and LPs representing $22 trillion in AUM. The objective of the group is to streamline the private market's historically fragmented approach to collecting and reporting ESG data in order to create a critical mass of meaningful, performance-based, comparable ESG and climate-related data from private companies. This allows GPs and portfolio companies to benchmark their current position and generate progress toward ESG and climate improvements, while enabling greater transparency and more comparable portfolio information for LPs.

• **Eurazeo** aligns 100% of its acquisitions with its exclusion policy and carries out, during the identification phase, ESG due diligence on 100% of prospective acquisitions undergoing advanced review to enrich the analysis of the sector and the target company, and to obtain an in-depth understanding of the various risks and opportunities (including climate related risk and opportunities)

• **Eurazeo** has developed an ESG progress plan to enable financed companies to incorporate ESG into their business model and gradually make progress, whatever their size or maturity in terms of ESG. This plan includes 20 "O+ essentials" that help to elaborate a balanced, efficient and comprehensive ESG approach. The companies' progress is measured across four levels – bronze, silver, gold and platinum – according to the number of criteria adopted. Carbon footprint measurement, climate and energy actions definition or carbon net neutrality trajectory implementation are part of the environmental section of the ESG progress plan

ECOSYSTEM ACCELERATION: OPSWF NETWORK MEMBERS WORKSTREAM STATEMENTS

OPSWF Network Climate Disclosure Guidance for Private Markets

Thursday, October 6th, 2022, Abu Dhabi, United Arab Emirates – the One Planet Sovereign Wealth Funds Network, in consultation with the One Planet Asset Managers and One Planet Private Equity Funds, comprised of 46 CEO members representing the world's leading sovereign wealth funds, asset managers and private investment firms releases the "One Planet Climate Disclosure Guidance for Private Markets".

As the effects of climate change continue to become increasingly apparent, we unite to reaffirm our endorsement of the One Planet Sovereign Wealth Fund Framework and our collective support for the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD).

We believe that by having both size and long-term investment horizons, sovereign wealth funds are in a unique position to promote long-term value creation and sustainable market outcomes.

A fundamental barrier exists in measuring, managing, and mitigating our portfolios' climate impact due to the struggle to access reliable data, most evident in private markets, on which to base our strategies.

As part of our aim to bridge the gap in improving the quality of climate and environment-related financial information available not only to ourselves but across the financial system, OPSWF, in consultation with OPPEF and OPAM, has developed the One Planet Climate Disclosure Guidance for Private Markets (Disclosure Guidance), which was released in an executive brief today.
The Disclosure Guidance provides clear and actionable articulation of increasing levels of climate data disclosure from private market participants. Its purpose is to offer guidance on disclosures to help implement TCFD recommendations. Level One of the Disclosure Guidance has been specifically designed as a first step that is achievable by all direct private market asset managers today.

Accordingly, in alignment with our objective to offer guidance on disclosures and to use engagement to drive progress on TCFD implementation, we strongly encourage private markets asset managers to meet the expectations of Level One of the Disclosure Guidance, including estimating carbon footprint, by year end 2023.

With more accurate and standardised data on climate issues, global financial markets participants can make more informed decisions. This will help not only to reduce risk for individual investments and portfolios, but also reduce systemic risks facing the financial system.

Enabling Mass Scale-up of Investment in Clean Hydrogen to Deliver on Global Climate Goals

Thursday, October 6th, 2022, Abu Dhabi, United Arab Emirates – One Planet Sovereign Wealth Funds' and its companion asset manager and private equity fund initiative members' (Network) 46 CEO members representing the world's leading sovereign wealth funds, asset managers and private investment firms signal their readiness to step-up global efforts to finance and accelerate the mass scale-up of clean hydrogen solutions both in terms of new investments and transition assets.

Clean hydrogen, produced with no or low-carbon footprint, is a key lever to achieving the goals of the Paris Agreement. In line with the One Planet Sovereign Wealth Funds (OPSWF) Framework, investing in clean hydrogen can help solve the energy trilemma of sustainable, secure, and affordable energy and help decarbonize global economies, contributing especially to the hard-to-abate industries. Hydrogen also fosters new and innovative sectors and technologies, driving growth and providing socio-economic benefits.

Alongside industry and governments, many investors have demonstrated an early interest in financing clean hydrogen projects and solutions across the value chain globally. Investment in clean hydrogen can be significantly accelerated over the coming five years, provided the appropriate enablers are in place.

In an executive briefing released today, Network members highlight three such priority enablers: (1) demand-side stimuli such as incentives and other measures to spur demand or public-private partnerships, (2) measures to facilitate international trade in clean hydrogen and (3) in its nascency and where such pricing policies exist, public institutions and development banks to establish sectoral contracts-for-difference in clean hydrogen and its derivatives, to stimulate demand, offset price differentials and make projects bankable. In addition, establishing a global industry standard on the definition of clean hydrogen to qualify hydrogen as a commodity and specific asset class will be critical to accelerating investment by overcoming regional differences.

Members of OPSWF collectively have the capital and ambition to invest at scale into clean hydrogen solutions. Successfully addressing the priority enablers would open up further investment opportunities to OPSWF members.

In this context, Network members anticipate that sharing their insights and recommendations will help transform clean hydrogen into a viable asset class, in the same way this was done with renewable energy sources such as wind or solar. OPSWF will therefore continue their contributions to the scaling of clean hydrogen efforts and the group's members stand ready to further strengthen their dialogue with key stakeholders including at the upcoming COP27 in Egypt and COP28 in the United Arab Emirates.

Enabling Investments at Scale – Renewables in Emerging & Developing Markets

Thursday, October 6th, 2022, Abu Dhabi, United Arab Emirates –One Planet Sovereign Wealth Fund's and its companion asset manager and private equity fund initiative 46 CEO members representing the world's leading sovereign wealth funds, asset managers and private markets investment identify solutions to scale private sector financing of Renewable Energy projects in emerging and developing economies.

Investing in renewable energy in emerging and developing economies (EMDEs) constitutes a massive investment opportunity from the triple perspective of impact, risk and return. Reducing carbon emissions in these countries while meeting rising energy demand will require significantly scaling-up private sector engagement and is critical to align with the goals of the Paris Agreement.

Accessing these markets is often challenging for investors due to individual projects in many jurisdictions often being small, the regulatory environment being complex or non-standardized with insufficient repeat deal flow, and local markets often lacking conditions supportive of foreign direct investment.

Many OPSWF Network members are today already providing large amounts of private sector financing to renewables in EMDEs; many more billions of dollars in private investments towards low-carbon and climate adaptation strategies could be channeled if the appropriate enablers are put in place.
In an executive brief released today, Network members highlight four such priority enablers: (1) transparent, repeat tendering programs, (2) improved conditions for international investors to participate, (3) better structured public private partnerships to mitigate risk where possible and (4) SWFs increased use of specialised investment teams that can facilitate the aggregation of deals. Additionally, advancing international standards for renewable projects and other sustainable infrastructure in EMDEs will reduce investment cost and contribute to a further acceleration of investments in this segment.

Members of significant scale across the OPSWF Network collectively have the ambition to increase their investments in renewables in EMDEs if the right policies and incentives are in place. Successfully addressing the priority enablers would not only open up further opportunities for Network members, but crowd-in increasing flows of other private sector financing.

LIST OF MEMBERS
OF THE OPSWF NETWORK 2022

ONE PLANET SOVEREIGN WEALTH FUNDS

- Abu Dhabi Investment Authority (ADIA), Abu Dhabi, United Arab Emirates*
- Bpifrance, France
- Cassa Depositi e Prestiti (CDP Equity), Italy
- Compañía Española de Financiación del Desarrollo (COFIDES), S.A., S.M.E, Spain
- Fonds Gabonais d'Investissements Stratégiques (FGIS), Gabon
- Fonds Souverain d'Investissements Stratégiques (FONSIS), Senegal
- Growthfund, the National Fund of Greece (HCAP SA), Greece
- Ireland Strategic Investment Fund (ISIF), Republic of Ireland
- Korea Investment Corporation (KIC), Republic of Korea
- Kuwait Investment Authority (KIA), Kuwait*
- Mubadala Investment Company, Abu Dhabi, United Arab Emirates
- National Investment and Infrastructure Fund (NIIF), India
- National Investment Corporation of the National Bank of Kazakhstan (NIC NBK), Kazakhstan
- New Zealand Superannuation Fund (NZSF), New Zealand*
- Nigeria Sovereign Investment Authority (NSIA), Nigeria
- Public Investment Fund (PIF), Kingdom of Saudi Arabia*
- Qatar Investment Authority (QIA), Qatar*
- The Sovereign Fund of Egypt (TSFE), Egypt

*denotes founding member

LIST OF MEMBERS OF THE OPSWF NETWORK 2022

ONE PLANET ASSET MANAGERS

- AllianceBernstein
- Allianz Global Investors
- Amundi Asset Management*
- AXA Investment Managers
- BlackRock*
- BNP Paribas Asset Management*
- Federated Hermes Limited
- Fidelity International
- Goldman Sachs Asset Management*
- HSBC Asset Management*
- Invesco
- Legal & General Investment Management
- Morgan Stanley Investment Management
- Natixis Investment Managers*
- Northern Trust Asset Management
- PIMCO
- State Street Global Advisors*
- UBS Asset Management

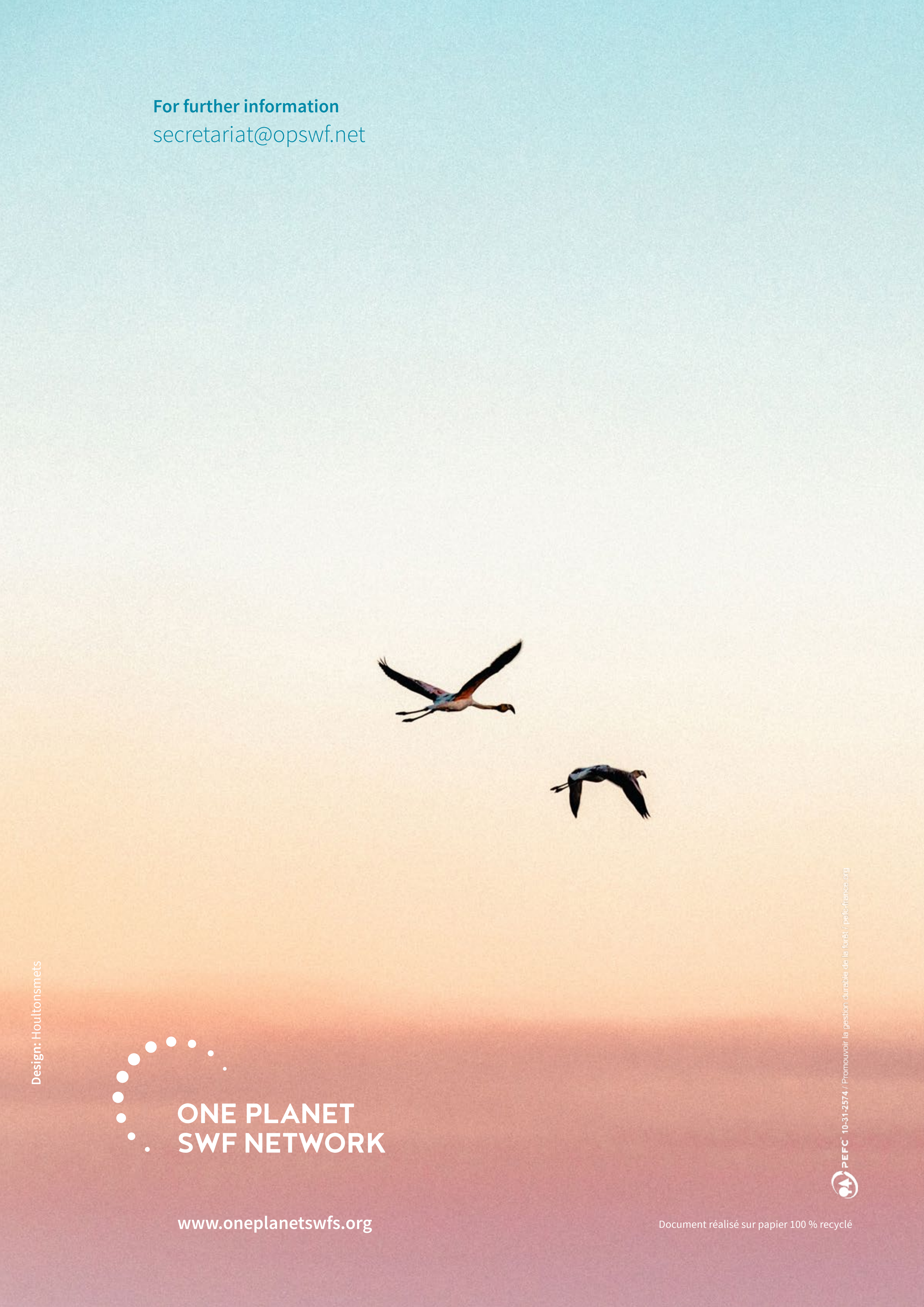
**denotes founding member*

LIST OF MEMBERS OF THE OPSWF NETWORK 2022

ONE PLANET PRIVATE EQUITY FUNDS

- Ardian*
- BeyondNetZero
- The Carlyle Group*
- Eurazeo
- Global Infrastructure Partners*
- Industry Capital Partners
- Macquarie Asset Management*
- SoftBank Investment Advisers*
- Tikehau Capital
- TPG

**denotes founding member*



For further information
secretariat@opswf.net

Design: Houltonsmets

ONE PLANET
SWF NETWORK

www.oneplanetswfs.org

PEFC 10-31-2574 / Promouvoir la gestion durable de la forêt / pefc-france.org

Document réalisé sur papier 100 % recyclé