ONE PLANET SUMMIT

SOVEREIGN WEALTH FUNDS

Framework **Companion Document** 2021

As the world begins to slowly recover from the Covid-19 pandemic and the social and economic crisis, the One Planet Sovereign Wealth Funds (OPSWF) remain committed to the goals and principles of the initiative and aim to enable a green recovery and transition to an economy that supports the goals of the Paris agreement where people and planet thrive together.

Since last year's OPSWF CEO Summit at the Élysée Palace, sustainable investing strategies globally saw nearly $400 billion of inflows in 2020 and are on track to grow almost twice as quickly this year[1]. Demand for sustainable investment from the global asset owner community, including from members of One Planet Sovereign Wealth Funds, has been instrumental in driving this rapid growth.

Ahead of the 2021 United Nations Climate Change Conference (COP26), we have also seen governments rapidly scaling up climate action: many leading economies have now committed to net zero pathways by the middle of the century, including the European Union, United Kingdom, Japan, New Zealand and South Korea. Asset owners, including the One Planet Sovereign Wealth Funds, proactively signalling their willingness to tackle climate change, working collaboratively with asset managers & private investment firms, and creating investable opportunities have also been instrumental in in supporting this evolution.

The OPSWF initiative has made substantial progress; the number of institutions supporting the OPSWF Framework has expanded rapidly, from 6 founding sovereign wealth funds, the Network has since grown to 43 members, comprising 18 sovereign wealth funds, 17 asset managers, and 8 private investment firms, with over $36 trillion in assets under management and ownership. As highlighted in the report, between 2020-2021, members have shown tangible action. In the last year, members have significantly increased the number and value of investments dedicated to climate and sustainability (particularly around energy solutions); ramped up engagement with corporates and other stakeholders in the ecosystem (OPSWF Framework, Task Force on Climate-related Financial Disclosures - TCFD) and fortified their governance and ESG strategies. However, this is only the first chapter; members are building the capacity to help further lead the systemic shift towards the integration of climate risks and transition investment opportunities. The OPSWF initiative will continue to support members to enhance their investment decision-making and results aligned with the principles of the OPSWF Framework.

[1] Larry Fink, CEO of BlackRock, Venice International Conference on Climate, July 2021

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INTRODUCTION AND CONTEXT

According to overwhelming scientific consensus, greenhouse gases created by human activity have caused much of the observed increase in global temperatures over the past 100 years. Since the industrial revolution began in the late 1800s, global temperatures have risen approximately 1.2°C on average. This warming could lead to a global tipping point, beyond which reversing catastrophic climate change becomes increasingly impossible.

Scientists and global governments have agreed that, to avoid the worst and most irreversible effects of climate change in the future, global average temperature rise should be kept “well below 2°C” and ideally to 1.5°C by the end of the century. To achieve this goal, the world needs to take urgent action. The associated emissions pathway to 1.5°C requires halving carbon dioxide (CO_2) emissions from 2010 levels by 2030 and reaching net zero by 2050, as well as reducing other greenhouse gas emissions. Ahead of the COP26 meeting of global leaders to be hosted by the UK Government in November 2021, governments, companies and financial institutions alike are being encouraged to ratchet up their commitments and action to support these goals.

The core solutions for achieving these goals include:
1/ transition to renewable energy sources,
2/ energy efficiency,
3/ carbon capture through nature-based solutions and new technology.

Global companies drive the world economy to produce goods and services for society. They have a critical role to play in this transition through both their operations and in setting global standards for their industry and supply chains. They can do this through establishing climate-aligned governance, strategies, risk management, metrics and targets. And these are the core pillars of information being requested by the financial industry under the recommendations of the Task Force on Climate-related Financial Disclosures.

Not all industries and companies are moving as fast as we would like. We have observed, however, that disclosures are improving significantly. We are beginning to witness a transformation in the corporate world as more and more companies commit to plans to reach net zero emissions and align with the Paris agreement. But we need to go further and faster. The next step is for investee companies and asset managers to report according to TCFD, develop credible Paris-aligned transition plans that are published; with progress independently assessed to ensure accountability. Reinforcing disclosures, target setting and scenario planning in the private markets would also be critical to avoid public companies simply delisting carbon intensive assets. It is also essential if we are to reduce emissions in a way that is aligned with the Paris Agreement.

As providers of capital to global companies and the wider national and international economic systems, sovereign wealth funds are well placed to invest in those companies leading the solutions and incentivise shifts in corporate strategy to better align with pathways to keep global warming below 1.5 degrees. SWFs can also use enhanced engagement to drive progress in the market; by offering guidance on disclosures in public and private markets as one example. In doing this, SWFs can manage the physical and transitional risks and opportunities associated with climate change, enabling long-term, sustainable value creation for current and future generations.

To better account for these climate-related risks and opportunities, the One Planet Sovereign Wealth Funds (OPSWF) initiative was established at the inaugural One Planet Summit on December 12th, 2017 in Paris, championed by President Emmanuel Macron of France.

The six founding OPSWF members launched a unique framework in July 2018 to support the alignment of large, long-term and diversified asset pools with the goals of the Paris Agreement. Following the drafting of the Framework, members committed to continue to work together to develop and share best practices relating to the implementation of the Framework principles. 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

12 / 2017
Launch at the One Planet Summit, Paris

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

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 Companion Document

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

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

12 / 2020
OPSWF, OPAM, OPPEF Working Group Meetings, 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: "Mighty oaks from little acorns grow: Sovereign wealth funds' progress on climate change"

02 / 2021
OPAM, OPPEF Working Group Meeting, Virtual

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 Secretary of State O. Gregoire

10 / 2021
4th OPSWF Annual CEO Summit, Virtual

THE OPSWF FRAMEWORK: OVERVIEW AND PRIORITIES

On the 6th of July 2018, the six 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.

This represented the first global strategic framework for SWFs on the topic of climate change, and remains a seminal document that underpins the ambition and action of the OPSWF members and the priorities of the initiative going forward. It builds on best practices of the international financial community, and simplifies the complexities of climate change to present a compelling action-oriented framework for SWFs to protect long-run returns and contribute to the smooth green transition.

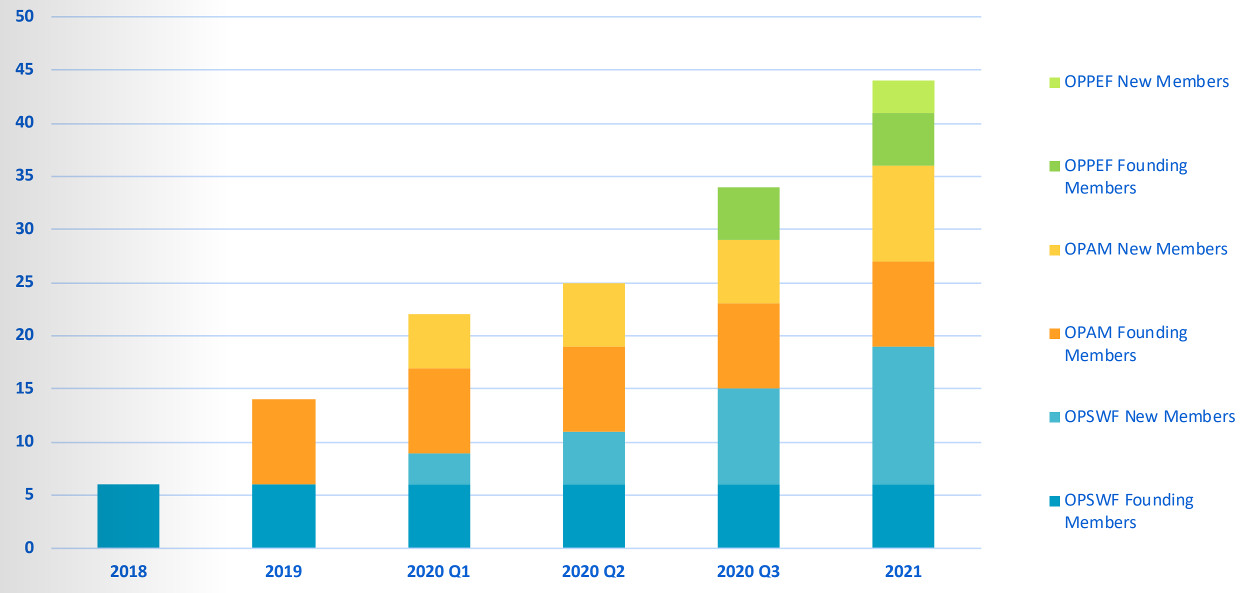
The Framework has been developed to accommodate countries at different levels of economic development and sovereign wealth funds of different sizes and with different investment strategies (nationally and/or internationally). It is implemented subject to domestic provisions, legal and regulatory requirements, and the SWFs' specific mandates.

During the 2019 Annual OPSWF CEO Summit hosted by President Macron in Paris, CEOs of the member SWFs identified key priorities for the year ahead that would further drive alignment with the goals and principles of the Framework. These included outreach to new SWFs to increase adoption of the Framework globally, continuing to drive best practice adoption through peer exchange, contributing to international efforts to improve climate-related financial disclosures, and developing the necessary knowledge and tools to increase investment flows to low-carbon solutions. Significant progress has been made against each of these goals in the last year.

EXPANDING THE NETWORK

Rapid expansion of the OPSWF Network has occurred in the past year, 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 5 private investment firms) at the 3rd Annual Summit in 2020 to 43 institutions by the 4th Annual Summit in 2021. **The OPSWF Network now includes: 18 OPSWF members, 17 OPAM members and 8 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 2021

GLOBAL NETWORK OF OPSWF FRAMEWORK SUPPORTERS

Sovereign Wealth Funds

Asset Managers

- *Amundi Asset Management*
- *Axa Investment Managers*
- *BlackRock*
- *BNP Paribas Asset Management*
- *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*
- *Allianz Global Investors*
- *Federated Hermes (International)*
- *Fidelity International*

Private Investment Firms

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

SOVEREIGN WEALTH FUNDS

NEW SOVEREIGN WEALTH FUNDS MEMBERSHIP

The OPSWF members are pleased to welcome four new SWFs to the initiative in 2021. Each of these Funds has endorsed the OPSWF Framework and will join the OPSWF Working Group. These new sovereign wealth fund members are:

- Hellenic Corporation of Assets and Participants (HCAP), Greece
- Fonds Gabonais d'Investissements Stratégiques (FGIS), Gabon
- Nigeria Sovereign Investment Authority (NSIA), Nigeria
- The Sovereign Fund of Egypt (TSFE), Egypt

The addition of these new members represents a significant milestone in the history of the initiative, expanding both the assets under management and the geographic footprint of the OPSWF initiative.

The enthusiasm of new members to actively participate in the initiative further emphasises the growing awareness of the climate risks and opportunities within the SWF community globally, and demonstrates the Framework's ability to simplify and amplify climate awareness and action among this important group of asset owners. OPSWF continues to partner with the International Forum for Sovereign Wealth Funds (IFSWF) to drive further dialogue and collaboration in this community.

Each sovereign wealth fund is at a different stage of alignment with climate goals, and will bring their own set of experiences, practices and perspectives to the group, contributing to the collective knowledge and capacity of the initiative. The OPSWF initiative will both learn from them and support them as they continue in their journey towards the implementation of the OPSWF Framework and alignment with the goals of the Paris Agreement.

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ASSET MANAGERS INITIATIVE

NEW ASSET MANAGERS MEMBERSHIP

The One Planet Asset Managers (OPAM) Initiative has also attracted additional members in the past year. The new members are:

- Allianz Global Investors
- Federated Hermes (International)
- Fidelity International

These firms join 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 these new members, 17 of the world's largest asset managers 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.

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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:

- Eurazeo
- Tikehau Capital
- TPG

These firms join the members of the OPPEF initiative 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, more than $1 trillion of global assets under management 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.

EURAZEO

TIKEHAU CAPITAL

TPG

EXAMPLES OF SOVEREIGN WEALTH FUNDS ALIGNMENT WITH THE OPSWF FRAMEWORK - 2020 TO 2021

PRINCIPLE 1 **ALIGNMENT**

$320 Billion
PIF plans to contribute $320 Billion to Saudi Arabia's non-oil GDP by 2025

€1 Billion
ISIF targets investing €1 Billion in climate projects over 5 years

Zero Coal
FGIS has committed to no coal investment

1st
KIA is working on their first internal ESG Risk Report, which will be presented to its Stakeholders on a quarterly basis

39 assessments
KIC has integrated ESG considerations into all its investment decisions and conducted more than 39 ESG assessments

€40 Billion
Bpifrance launched a €40 Billion Climate Plan

100%
COFIDES compensated 100% of their emissions through a reforestation project in Spain

246
ISIF maintains Fossil Fuel and High Carbon Exclusion lists

Net Zero Plan
The Net Zero Greece initiative, supported by HCAP will propose a Net Zero Plan for each sector and all major players

15% reduction
15% reduction of CO_2 emissions by HCAP investee companies (2022-2024)

PRINCIPLE 2 **OWNERSHIP**

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

€150 MN Spanish Contribution to the GCF
COFIDES is the accredited institution to mobilize these GCF funding

3,800 companies
NZSF's Climate focused voting and engagement achieved across a portfolio of around 3,800 companies

$500 Million
PIF has committed $500 Million to fund the TPG Rise Climate Fund

25% reduction in GHG emissions
Mubadala Petroleum achieved a 25% reduction in GHG emissions over the last three years

Net Zero
QIA Industrials support its portfolio companies' green transition, to reduce their carbon footprint and contribute to their aim of achieving net zero

PRINCIPLE 3 **INTEGRATION**

$200 Million
NIIF's Aseem Infrastructure funds disbursed approx. $200 Million to solar power assets

€300 Million
ISIF has committed over €300 Million to climate related projects to date

1st Country to produce Aluminium using the power of the sun (United Arab Emirates)

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

€1.25 Billion
Bpifrance issued an inaugural green bond

€6 Billion
CDP Group investments in 2019 and 2020 for Energy Transition and Climate Change

290,000 tCO_2 emission avoidance and 16,000 green jobs created in FY21
GGEF, anchored by NIIF with a targeted fund size of $700 Million, has deployed $210 Million, via 5 platform companies

3/4 FGIS has dedicated 80% of its projects' portfolio to energy transition. 3 out of 4 energy projects are renewable energy

1st FGIS is developing Africa's 1st tall timber building

€100 Billion
Bpifrance will launch a FIEE II fund

50% reduction
HCAP's subsidiary, PPC reduced Lignite generation by almost 50% in 2020 compared to 2019

62 operations
COFIDES has formalised 62 operations on Climate Change mitigation and adaptation during the 2012-2020 period

120 MW
FONSIS now own and manage 4 solar plants in Senegal with a total production capacity of 120 MW, representing more than 50% of the country's solar capacity

€109 Million
FONSIS is setting up a renewable energy and efficiency fund. REEF is targeting €109 Million with a 15-year lifespan

€20 Million
COFIDES formalised the Renewable Energy Program for Sub-Saharan Africa with the EU, whose contribution consists in a €20 Million guarantee

500 Mile Range
PIF is investing in the most efficient EV ever made

40% carbon intensity **80% carbon reserve reduction**
NZSF will reduce carbon intensity of fund by at least 40%, carbon reserves by at least 80%

324 tons
HCAP recovered 324 tons of food safe to consume, from waste, and distributed to the vulnerable

65% lower emissions
QIA has invested in many iconic sustainable building projects, including Canary Wharf which pledged to lower emissions by 65% by 2030

1.6 GW Masdar acquisition in clean-energy portfolio of projects in the United States

89,000 tons
The volume of CO_2 avoided by the two solar plants commissioned in 2021 by FONSIS and its partners

327,948 $MTCO_2E$
KIC reduced greenhouse gas emissions by 327,948 $MTCO_2E$ through its renewable energy portfolio

$500 Million
KIC has been entrusted with the government's 2nd Green and Sustainability Bond

x3 exposure to green and sustainability bonds
ADIA's exposure to labelled bonds, notably green and sustainability bonds, has more than tripled in the past year

650 tons of Carbon-Free Hydrogen
PIF and partners are developing the biggest hydrogen-based ammonia production facility globally, will supply 650 tons per day of Carbon-Free Hydrogen

45% of assets are renewable
The percentage of renewables in QIA's infrastructure power generation assets has expanded to 45%, and 50% are zero emissions

Solar Powering 185,000 Homes
PIF launches 1500 MW solar project capable of powering 185,000 homes as part of PIF's commitment to develop 70% of Saudi Arabia's renewable energy by 2030

Existing 17 GW + future 19 GW of indirect renewable energy capacity investments
ADIA has an indirect interest in assets with an operating renewable energy capacity of approximately 17 GW and a further 19 GW of projects under construction and development

160,000 Homes Mubadala's Masdar invested Al Dhfra Solar Photovoltaic (PV) Independent Power Producer (IPP) Project has capacity of 2 GW to generate enough electricity for approximately 160,000 homes in the UAE

$20 Billion Masdar has invested over $20 billion in Renewable Energy solutions at a small and large scale in 30 different countries; over half of which are in emerging markets

SOVEREIGN WEALTH FUNDS 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 sovereign wealth 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.

"Climate change is the defining issue of our time. Given the NZ Super Fund's long-term investment horizon and purpose, we have a strategy that aims to improve the resilience of our portfolio to climate risk over the long term."

"We have met and exceeded our carbon reduction targets, substantially lowering the entire Fund's exposure to investments that are most at risk from climate change."

Matt Whineray,
CEO New Zealand Superannuation Fund, 2021

The Public Investment Fund (PIF)'s Governor and Chairman of FII Institute, His Excellency Yasir Al-Rumayyan, gave a prominent opening address at this year's Future Investment Initiative (FII) "The Neo-Renaissance".

Addressing the economic, social and environmental impact the pandemic has caused, His Excellency Yasir Al-Rumayyan, urged investors to grasp this moment and usher in a new era of impact investing, telling delegates:

"An unprecedented opportunity now exists for fresh thinking. Return to and persist with the old or forge ahead anew, reimagining an economy that better serves humanity and the planet."

"The global investment community have an opportunity to today design strategies that look to reinvent the world economy, building on the acceleration seen in many sectors and industries, including in sustainable investments."

"As resilient business models become more important and more environmental, social and governance (ESG) financial products come online, there has never been a better opportunity for sustainable investing - a new era of impact investments."

Principle 1: Alignment

OPSWF members 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 OPSWF Framework.

- **Bpifrance** and the "Banque des territoires" launched a 2020/2024 Climate Plan of almost €40 billion. As part of the Climate Plan, Bpifrance aims to double its financing and investments in Greentech by 2024 to support its development. Bpifrance and the "Banque des Territoires" will deploy €5 billion to massively finance innovation in greentech and sustainable and resilient networks that will enable technological solutions for the ecological and environmental transition.

- **Compañía Española de Financiación del Desarrollo (COFIDES)** was awarded by the Spanish Ministry of Ecological Transition and Demographic Challenges' Office on Climate Change (OECC) on its 'CALCULO COMPENSO' seal, linked to the calculation of and compensation of the carbon footprint (scope 1 and 2) generated by the company's direct and indirect emissions in 2019. COFIDES also compensated 100% of these emissions through a reforestation project in Spain. Currently, COFIDES is in the process of obtaining this certification for 2020. COFIDES will also implement an emission abatement plan for the following years.

- **Fonds Gabonais d'Investissements Stratégiques (FGIS)** commits to integrating ESG principles in their investment policies and processes. 50% of FGIS's energy investments integrate international ESG tools into decision-making.

- **Hellenic Corporation of Assets and Participants (HCAP)** is finalizing a three-year Sustainability & ESG strategy across all State Owned Enterprises (SOE), to be launched by early 2022. HCAP aims to deliver long-term returns through well governed and sustainable assets, by adopting appropriate strategies between asset classes, sectors and companies, as well as by implementing an ESG "as if listed" mindset throughout all SOEs operations, management processes and investment decisions. HCAP aims to become an active role model to all SOEs, following best practices of privately-held companies in Greece. Sustainability & ESG strategies will be fully aligned with the 2015 Paris Agreement and the EU Green Deal, for SOEs to support mitigating the effects of climate change. HCAP will also update policies to align with OPSWF guidelines and embrace the most current disclosures & reporting practises, TCFD and PRI. HCAP will baseline CO_2 emissions footprint and commit initially to a -15% decrease in its carbon footprint.

- **HCAP** supports the Net Zero Greece initiative to develop Greece's Net Zero Roadmap. HCAP 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 (sectors namely electric power, industry, transportation, buildings/ real estate and waste) in the country. Through this initiative there will be a Net Zero Plan for each sector and, hence, for all major players. The study also supports proposals for business plans per sector for net zero emissions at net zero cost via an opex/capex exercise.

- **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 Korea Investment Corporation (KIC)** has integrated ESG considerations into all its investment decisions since January 2020. **KIC has also conducted more than 39 ESG assessments** when selecting investment managers and during direct/co-investments. In March 2021, the National Assembly of Korea **amended the KIC Act to formalize KIC's consideration of ESG factors** for long-term and stable returns.

- **KIC Chairman & CEO Seoungho Jin recently announced KIC would establish a climate change model to be applied to its investment portfolios** and to serve as an exemplary case for global institutional investors. **KIC has been making progress on this** through measuring Scope 1,2 and 3 greenhouse gas emissions across its portfolios.

- **Kuwait Investment Authority (KIA)**'s Managing Director spoke at the Business Council for International Understanding (BCIU) in December 2020, regarding ESG investing. He highlighted the activities of OPSWF including the endorsement of the Taskforce on Climate-Related Financial Disclosures (TCFD). The Managing Director encouraged the adoption of the TCFD and the implementation of ESG investment principles

- **KIA** is working on their first internal ESG Risk Report, which will be presented to its Stakeholders on a quarterly basis. The report will begin production in Q3 2021

- **Mubadala Investment Company** continued to evolve and institutionalize its Responsible Investing efforts through the establishment of a standalone Responsible Investing Unit reporting to its Chief Strategy & Risk Officer. The unit acts as the steward of Mubadala's approach to environmental, social and governance principles and considerations across the Group. Mubadala published its Responsible Investing Policy, articulating its approach to integrating ESG principles and considerations into its investment and asset management decisions.

- **Mubadala,** The Abu Dhabi National Oil Company (ADNOC), and ADQ, established the Abu Dhabi Hydrogen Alliance (the Alliance). The Alliance aims to establish Abu Dhabi as a trusted leader of low-carbon green and blue hydrogen in emerging international markets. They are working together to build a substantial green hydrogen economy in the UAE. The global market for green hydrogen is expected to grow to 500 million tons by 2050, with annual revenue set to hit $200bn in the same period, according to Dubai-based consultancy Dii and Roland Berger. This is from roughly $130 billion in 2020.

- **National Investment and Infrastructure Fund (NIIF)**, as part of its thought leadership, has established a forum on Green Frontier, which brings together policy makers, regulators, investors, lenders, and companies in the green transition ecosystem to contribute and brainstorm for a sustainable transition to low carbon economy. The forum has two active, diverse, and well-represented working groups looking at shaping financing and policy for transition to clean energy and, defining India's Green Taxonomy, its disclosure standards, and regulatory dispensation.

• New Zealand Superannuation Fund (NZSF): In 2021, the manager of the New Zealand Superannuation Fund ('The Guardians') commenced implementation of a new strategy with the overarching goal of 'incorporating sustainability considerations into investment decision-making and supporting the development of a sustainable financial system'. The Strategy highlights the importance of supporting the development of a sustainable financial system, through global collaborations including OPSWF.

• Following on the success of Public Investment Fund (PIF)'s first Vision Realization Program (VRP) 2018-2020, the Fund in January 2021 launched its next five year strategy for 2021-2025. The Second VRP outlines the roadmap for driving Saudi Arabia's economic diversification and PIF's continued growth as a global investment powerhouse and partner of choice for innovative and transformative businesses worldwide.

▹Fund plans to grow its assets under management to $1.07 trillion by end of 2025 and contribute $320 billion to Saudi Arabia's non-oil GDP.

▹PIF has created 10 new sectors, launched over 30 new companies, and created 331,000 jobs in Saudi Arabia over past four years.

▹The Vision Realization Program outlines the roadmap as PIF drives Saudi Arabia's economic diversification and cements itself as a global investment powerhouse.

▹PIF looks to focus on funding new human futures by: Improving quality of life domestically and internationally, Driving environmental and economic sustainability, Developing new sectors and creating new job opportunities.

Launching the Strategy His Excellency Yasir Al-Rumayyan, Governor of PIF, said; *"…we will continue to drive the economic transformation of Saudi Arabia and enable the private sector. We will also partner with innovative, transformative and disruptive companies around the world to consistently serve as an important catalyst for the development of the industries and opportunities of the future. Core to our strategy is our focus on funding new human futures by improving quality of life, driving environmental and economic sustainability, and developing new sectors and jobs."*

• In 2021, Qatar Investment Authority (QIA) is embedding ESG in four key ways:

▹Building an investment/ESG policy to reflect climate considerations.

▹Reviewing climate-related benchmarks.

▹Developing employee educational campaigns

▹Using climate-related criteria in its investment process.

Limiting holdings / investments in fossil fuels

• FGIS has committed to no coal investment

• ISIF is subject to the Fossil Fuel Divestment Act 2018 and maintains a list of 246 companies that derive more than 20% of their revenues from Fossil Fuel exploration, extraction and refinement in which it will not invest. This also includes a non-legislative exclusion list of high carbon companies, including coal producers and processors and Oil Sands, in which it does not invest.

• National Investment Corporation of the National Bank of Kazakhstan (NIC NBK), Kazakhstan (NIC NBK) has initiated a revision of the investment guidelines for its private equity portfolio, aiming to limit holdings in carbon heavy industries such as coal mining and crude oil production.

• In January 2020, QIA announced it would not deploy any new investments in fossil fuels.

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.

Governance

- Fonds Souverain d'Investissements Stratégiques (FONSIS)'s governance is being reinforced to tackle Environmental challenges. The ESG Policy is finalized and an ESG Committee created; a new investment process should be in effect in 2022.

- 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.

- In 2018, NZSF moved their voting in-house with the help of a proxy voting advisor. NZSF can now tailor their voting policy to include positive support for climate and other sustainability goals and let the external voting agency run this customised policy across the full listed portfolio of around 3,800 companies.

Engagement with listed equity companies

- KIA continues to engage companies on their climate commitments. This has included direct engagement with several large global and European 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

- Mubadala and Siemens Energy, one of the world's leading energy technology companies, signed a Memorandum of Understanding (MoU) with the intention of creating a strategic partnership to drive investment and development of advanced technology, manufacture of equipment, and green hydrogen and synthetic fuel production.

- NZSF: During the 2020/21 financial year, Bank of Montreal BMO (NZSF's external engagement specialist) conducted in-depth engagement with 629 companies, in 44 countries, across a broad range of issues and recorded 297 milestones (measures of progress) achieved over that period. Around 20% of these engagements were focused on climate change.

Engagement with private equity companies

- COFIDES is accredited to the Green Climate Fund (GCF), a body of the United Nations Framework Convention on Climate Change that funds climate change mitigation and adaptation projects. The Contribution Agreement signed by Spain comprises the maximum amount of €150 million deposited in accordance with a schedule for the years 2019-2023. COFIDES facilitates access to these resources to private companies to implement their climate projects.

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

- PIF has committed $500 million to fund the TPG Rise Climate Fund. TPG has a strong track record in ESG investing and the launch of the Rise Climate fund is dedicated to financing opportunities in climate change and carbon reduction, with a $3-5Bn fund target. TPG Rise Climate Fund will focus on growth PE that has a positive impact through investing in 5 main sectors: Clean Energy, Enabling Solutions, Agricultural and Natural Solutions, Decarbonized Transportation and Greening Industrials through private equity buyout, growth equity and structured equity.

Engagement with asset managers

- ADIA's Fixed Income Department continued its work to evaluate whether external and internal asset managers adequately integrate climate change risk in their credit research process, and engaged with issuers to identify potential downside risks as well as alpha-generating inflection points.

- 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 cause and specifically 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 its EFMs to improve ESG reporting and opportunities.

• NIC NBK has notified all of its asset managers of becoming a member of the OPSWF Initiative and pledging its support for the recommendations of the Task-Force on Climate-Related Financial Disclosures (TCFD). NIC NBK has encouraged its investees to align with the OPSWF Framework and adopt the international standards for climate-related financial reporting, integrating the use of such data in investment processes. NIC NBK continues to work with asset managers towards integration of opportunities in transition to a low-emissions economy, and address the risks related to climate change across a diverse pool of asset classes.

Engagement with Subsidiaries / Public Projects

• HCAP will set up tailored engagement roadmaps on Climate & Waste and other key ESG issues to enhance how their SOEs manage, improve and disclose ESG performance. HCAP will actively encourage disclosures and support the SOEs through an ESG Handbook (2022). Specific examples that are to be or have been implemented per SOE follow:

▹HCAPs real estate SOE, HRADF is setting up the Project Preparation Facility (PPF) for Next Generation EU funds, which will handle tenders for "Greece 2.0" projects in fields such as energy, the environment, the digital transition and infrastructure with budgets of over €10-20 million each. PPF will prioritize projects with significant social impact.

▹HCAP subsidiary, EYDAP S.A., (Athens Water Supply & Sewage Company S.A.)'s sustainability strategy is moving towards achieving zero carbon water until 2030 by reducing energy consumption by 12% in the next 4 years, reducing water footprint, reducing EYDAP's carbon footprinting and saving up to 800,000 cubic meters of potable water per year.

• Hindustan Infralog Pvt Ltd. (HIPL), NIIF's logistics platform company, has been working on reducing its carbon intensity. Tracking of emission parameters is undertaken across businesses. In 2020, HIPL reduced its carbon intensity by cutting down year-on-year CO_2 emissions by 2% per TEU (twenty-foot equivalent unit of container). In FY22, Y-o-Y reduction of 3% in absolute CO_2 emissions is targeted by HIPL.

• Mubadala engages closely with its subsidiary and investee companies:

▹Mubadala Petroleum published its Sustainability Report in August 2021, highlighting activities and performance throughout the year for its head office in the UAE and their operations facilities in Thailand, Indonesia and Malaysia. Mubadala Petroleum achieved a 25% reduction in GHG emissions over the last three years.

▹Emirates Global Aluminium (EGA) (which is jointly owned by Mubadala and the Investment Corporation of Dubai) published it third annual Sustainability Report in September 2020, and reported 38% lower GHG for smelting and casting compared with the industry average in 2019.

▹GlobalFoundries (wholly owned by Mubadala) saw 18% reduction of normalized GHG emissions and achieved savings in annual GHG emissions of 11,900 metric tons carbon equivalent (MTCE) between 2020-2021.

• QIA is working with its stakeholders to mainstream environmental and social scenarios into their thinking. QIA is holding dialogues on how best to apply ESG across its portfolio of assets. For example, QIA Industrials support its portfolio companies' green transition, to reduce their carbon footprint and contribute to their aim of achieving net zero.

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.

Food production and waste management

• HCAP's Subsidiary, Thessaloniki Central Market S.A. (KATH) set up the "Social Plate" in 2018, a food waste initiative, in order to help combat poverty and social exclusion. Between April 2018 and January 2020, the Social Plate project received 470 tons of produce that was not suitable for sale at the market, but was still safe to eat. Of the food received, 324 tons were recovered and given to those in need. Seventy (70) organisations participated in the redistribution, including NGOs, municipalities, food banks and church kitchens. Training was provided for 30 young NGO employees. HCAP supported the initial phase of the project through a crowdfunding campaign in order to mobilize local stakeholders and raise awareness, as well to cover operational costs. The program was recently (August 2021) granted 310k by the Greek Green Fund as it was recognised as one of top 4 programs among other 100 initiatives for its best practice in Circular Economy in Greece under LIFE-IP CEI-GREECE.

• NZSF owns a portfolio of 34 New Zealand farms which are managed by an investment farm manager. Following an in-house Sustainability Day organized by NZSF in 2021, the investment farm manager has developed a sustainability strategy to ensure that NZSF's 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 has reduced from 190 kg N/ha/year to 136 kg N/ha/year. The manager is also targeting improvements in animal welfare and milk production and reducing the use of external supplement feed to further reduce greenhouse gas emissions. These activities have led to a 5% reduction in emissions per hectare between the 2018/19 and the 2020/21 season for their dairy and beef land. The manager will continue to work towards delivering on New Zealand's Zero Carbon Targets.

• The PIF-owned organisation, SIRC (Saudi Investment Recycling Company), is working to meet and exceed the recycling objectives of the Kingdom's Vision 2030. With the goal of making a more circular economy in Saudi Arabia, the company is working to divert 100% of municipal solid waste, divert 60% construction waste and divert 85% of industrial waste from landfills.

• QIA is helping fund the first ever cultivated meat facility in the MENA region. QIA continues to invest in sustainable food companies to reduce emissions.

▹QIA invested in Eat Just, Inc., which plans to build the first ever cultivated meat facility in the MENA region.

▹QIA also invests in Califia, which is a California-based producer and distributor of natural and plant-based beverages .

▹QIA has also invested in Impossible, a provider of plant-based animal meat alternatives. Compared to a traditional burger, an Impossible burger produces 89% less GHG emissions.

Climate Change mitigation

• COFIDES has formalised 62 operations on climate change mitigation and adaptation during the 2012-2020 period: €248.26 million of formalized funding, more than €7.2 billion of total investment linked to these projects, and 3046 MW installed in formalized projects.

• Bpifrance will launch a "FIEE II" fund (€100 million) to strengthen its support for companies in the Energy and Ecological Transition sector.

• NIIF along with CDC of UK, anchored the Green Growth Equity Fund to support climate change mitigation and contribute to a sustainable environment through low carbon economy promotion, pollution prevention, and resource conservation. The fund is looking at decarbonising 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. GGEF investments are across renewable energy, e-mobility, waste management, circular economy, water and sanitation, etc. Investments from its five platform companies have helped in 290,000 tCO_2 avoidance and generation of 330 mn KWh of renewable power while creating 16,000 green jobs in the past year.

Climate risk valuation and assessment

• ISIF has met 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. ISIF uses an evolving suite of ESG and carbon analytic tools across its portfolio, the purpose of which 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).

• NIC NBK has initiated the process of Impact and Thematic portfolio development aimed at solving environmental issues.

• NIIF as per its E&S Management Policy has integrated ESG Risks and Opportunity across its investment across the life cycle. As part of the pre-investment due diligence the ESG DD focuses not just on traditional aspects of Environment and Social risks and impact, it also focuses on identifying risk of climate change to the asset or investment. NIIF looks at the potential scenarios of physical and transitional climate change risks affecting the quality of the investment and based on any triggers additional in-depth studies are undertaken. This is expected to create a disaster-resilient asset class for NIIF and its platform companies. Apart from risks, NIIF also focuses on opportunities for transitioning to lower carbon processes, as part of climate change adaptation

Example use cases are:

▹NIIF understands that each of the manufacturing set ups have industrial heating and cooling needs. Heating is often achieved by burning of fossil fuels or waste mix or wooden briquettes or bio-coal. Through a consultative process NIIF has been laying time-bound roadmaps for such captive heating processes to transition to a lower carbon future, which could be staggered through cleaner alternatives like biomass or natural gas or solar preheating before completely getting rid of any fuel needs

▹Industrial cooling is often achieved through refrigerant gases which have high GHG potential and contribute to warming of the planet. So NIIF is actively deliberating on having a staggered road map to transition into a lower GHG alternative.

• In 2021, NZSF put a particular emphasis on helping their directly held private portfolio companies complete their carbon footprint, explaining to them the process and connecting them with relevant service providers. The number of companies undertaking their own footprint has more than doubled as a result. With three years of experience in implementing carbon reductions, NZSF now have greater confidence that doing so will improve the Fund's portfolio and believe their more ambitious targets are appropriate. In 2020, the Board set the following carbon reduction targets, aiming to reduce:

▹the carbon emission intensity of the Fund by at least 40%; and

▹the carbon reserves of the Fund by at least 80%.

Sustainable finance products and innovation

• ADIA's exposure to labelled bonds, notably green and sustainability bonds, has more than tripled in the past year. A material component is going towards emerging markets where a greater financing gap exists.

• Bpifrance issued in 2021 an inaugural 7-year green bond that is fully dedicated to financing or refinancing wind and solar projects in France. It was issued through a new Green Bond Framework for an amount of €1.25 billion. It received significant support from investors and is in line with the climate plan that aims at fostering green actors .

• The Korea Investment Corporation (KIC) allocated $500 million in proceeds from the Korean government's green and sustainability bond into green buildings, renewable energy, waste management and healthcare and education projects. The bond, issued in June 2019, is the world's first sovereign-issued green and sustainability bond. KIC continues to discover more green and social projects that can fight against climate change.

• As part of PIF's initiatives and projects aimed at contributing to efforts to combat climate change and reduce greenhouse gases, PIF in collaboration with the Saudi Tadawul Group is looking to establish the Riyadh Voluntary Exchange Platform for offsets and carbon credits within the Middle East and North Africa Region. Providing verified high quality carbon credits to companies and institutes that want to reduce their emissions and climate impact, supporting efforts to combat climate change and contribute to Paris Agreement goals.

Low-carbon infrastructure, transport

• For CDP Equity, providing active support to the Italian energy transition is a fundamental pillar of the 2019-2021 business plan. CDP Equity business plan envisages a direct intervention of the Group via the creation of specific Joint Ventures to address specific themes of the energy transition: renewable energy, energy efficiency and circular economy. It is working with its Partners to ensure its support for the Country to reach the ambitious targets set by the Italian Strategic Energy and Climate Plan. CDP Group mobilized in 2019 and 2020 over €6 billion for Energy Transition and Climate Change.

• Greencell Mobility Private Limited; the portfolio company floated by NIIF anchored Green Growth Equity Fund (GGEF), was incubated to provide e-Mobility as a Service (eMaaS). Greencell focuses on clean transportation, shared mobility, Battery as a Service (BaaS) and e-vehicle (EV) charging Infrastructure. As the first step, Greencell started to offer clean, green and reliable e-buses connecting two cities in North India. It will soon be scaled up to build the largest customer centric pan-India eMaaS business with a fleet of 4,000+ e-buses by 2025. Apart from e-buses, the initiatives will help push overall EV adoption pace in India, and help the country leap frog into a low carbon transport system.

• Several of KIA's 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 that is part of the UK's energy transition. ABP is converting its coal-fired power plants into biomass.

• As part of PIF's International Investment Strategy, the fund is a major investor in leading electric vehicle company, Lucid, which is producing the most efficient electric vehicle ever made. Lucid believes in creating sustainable mobility without compromise, and the Lucid Air will have the longest range and be the fastest charging luxury electric car in the world. Sustainability informs every aspect of Lucid's activities as an automaker, sourcing materials from only the most responsible suppliers with a focus on sustainable standards and the potential for recyclability.

Real Estate

• FGIS is developing a timber building that will be built with tropical Cross Laminated Timber (CLT). This building is to be the first of many with the goal of developing a neighborhood entirely built in wood.

• Mubadala's Masdar announced that it is developing the first sustainable real estate investment trust in the UAE, with the Masdar Green REIT established at Abu Dhabi Global Market (ADGM). The REIT's portfolio currently includes four commercial properties within Masdar City, and Emirates NBD Asset management provided management services.

• QIA has invested in many iconic sustainable building projects, including Canary Wharf which pledged to lower emissions by 65% by 2030.

Renewable energy and energy transition investments

• An ADIA subsidiary was part of an investor group with APG and CalSTERS that supported the combination of Capital Dynamics' U.S. Clean Energy Infrastructure Team Members and Arevon Asset Management, to create Arevon Energy Inc, a standalone clean energy platform of 4.5 GW of operating, under construction, and late-stage development solar and battery storage projects, as well as a 3.0 GW pipeline.

• An ADIA subsidiary acquired a large minority stake in Equis Development, which focuses on the development, construction, ownership and operation of energy, including renewable and hybrid (gas and renewable) systems, bioenergy and waste processing, and waste recovery infrastructure assets in Asia Pacific.

• COFIDES formalised the Renewable Energy Program for Sub-Saharan Africa (an EIP program) with the EU, whose contribution consists in a €20 million guarantee and €2 million in technical assistance funding.

• FGIS's largest projects are dedicated to the renewable energy/energy transition. They are currently developing 4 projects:
▹Kinguele Aval hydroelectric dam (35 MW)
▹Ngoulmendjim hydroelectric dam (85 MW)
▹Dibwangui hydroelectric dam (15 MW)
▹Owendo natural gas thermal power plant (120 MW). These projects are contributing to the Government's energy mix goal: 80% renewable energy, 20% natural gas thermal energy. The *Ngoulmendjim and Dibwangui hydroelectric* dams projects are assessed through IHA ESG tools. The Dibwangui project is the first, in Francophone Africa, to receive the IHA certification.

• FONSIS and its partners announced in May 2021 the commissioning of two photovoltaic power plants in Senegal with a total production capacity of 60 MW - Kahone Solaire SA (35MW) and Kael Solaire SA (25MW). They will contribute directly to the country's ambitious goal of increasing the share of renewable energy in its energy mix to 30% by 2025. FONSIS and its partners now own and manage 4 solar plants in Senegal with a total production capacity of 120 MW, representing more than 50% of the country's solar capacity. The proposed kWh's tariff by the Kael and Kahone Solar plants is among the lowest in sub-Saharan Africa, at less than €4 cents/kWh vs €10 cents for the former solar plants (25 XOF vs. 65 XOF). Social-economic projects have been implemented to mitigate the impacts of the Kael and Kahone Solar plants with regards to land availability for the population. Those measures include the establishment of a credit cooperative in favour of the local population.

• FONSIS is setting up a renewable energy and efficiency fund. REEF is targeting €109 million with a 15-year lifespan, targeting investments in Renewable Energy ("RE") and Energy Efficiency ("EE") in Senegal and other WAEMU countries. REEF should contribute to the creation of at least 280MW of new energy capacity, leveraging all regionally relevant technologies (Solar PV, Hydro, Wind incl. C&I storage).

• ISIF has committed over €300M to projects in Ireland in the renewable energy and forestry space, as of July 2021. Additionally, ISIF's non-climate strategy investments demonstrate strong climate credentials in many cases and includes consideration of climate impact in all investments made .

• KIC invested in two renewable energy infrastructure portfolios across South America and Africa and reduced emissions by an equivalent to 327,948 tons of carbon dioxide.

• NIIF's portfolio company, Aseem Infrastructure Finance Limited (AIFL), an NBFC – IFC (Infrastructure Finance Company), was established with the aim of playing a transformative role in growth of Indian infrastructure debt financing. As of August 2021, 67% of its portfolio (~USD 200 million) were disbursed to solar power assets.

• Mubadala's Masdar alongside Abu Dhabi National Energy Company (TAQA) and partners EDF and JinkoPower announced the successful closing of the Al Dhfra Solar Photovoltaic (PV) Independent Power Producer (IPP) Project – set to be the largest single-site solar power plant in the world. The plant has capacity of 2 GW to generate enough electricity for approximately 160,000 homes in the UAE.

• Mubadala's Masdar and EDF Renewables North America announced that they agreed to partner in eight renewable energy projects, including three utility-scale wind projects in Nebraska and Texas and five photovoltaic (PV) solar projects in California. This represents Masdar's second investment in the US, the second-largest market for renewables worldwide.

• Masdar has invested over $20 billion in Renewable Energy solutions at a small and large scale in 30 different countries; over half of which are in emerging markets.

• **Mubadala**-backed Emirates Global Aluminium (EGA), Dubai Electricity and Water Authority (DEWA) signed an agreement placing the United Arab Emirates as the first country in the world to produce aluminium using solar power. BMW became the first customer for EGA's 'green aluminium'. The global auto giant signed an agreement with EGA for the supply of 43,000 tons of CelestiAL aluminium every year.

• **PIF**'s giga-project, NEOM, ACWA Power and Air Products signed an $5bn agreement for the world's biggest hydrogen-based ammonia production facility, powered by renewable energy. The 4GW green hydrogen project, will be located in NEOM, a new model for sustainable living, and will produce green ammonia for export to global markets. Air Products will be the exclusive off-taker of the green ammonia and will transport it around the world to produce green hydrogen for the transportation market.
The Green Hydrogen Project will supply 650 tons per day of Carbon-Free Hydrogen for transportation globally and save three million tons per year of CO_2.

• In April 2021, **PIF** launched the Sudair solar power project as a PIF-backed consortium signed a power purchase agreement with the Saudi Power Procurement Company for 25 years. The Sudair Solar PV project is set to become one of the world's largest Solar PV plants by capacity and Saudi Arabia's largest. The project is considered a key achievement towards PIF's commitment to develop 70% of Saudi Arabia's renewable energy by 2030. With an investment value of approximately SAR 3.4 billion, the 1500MW Sudair Solar PV project will be capable of powering 185,000 homes and offsetting nearly 2.9 million tons of emissions per year. The project has also recorded the second lowest cost globally for Solar PV electricity production – USD 1.239 cents/kwh. In August 2021, ACWA Power announced that the project had reached financial close.

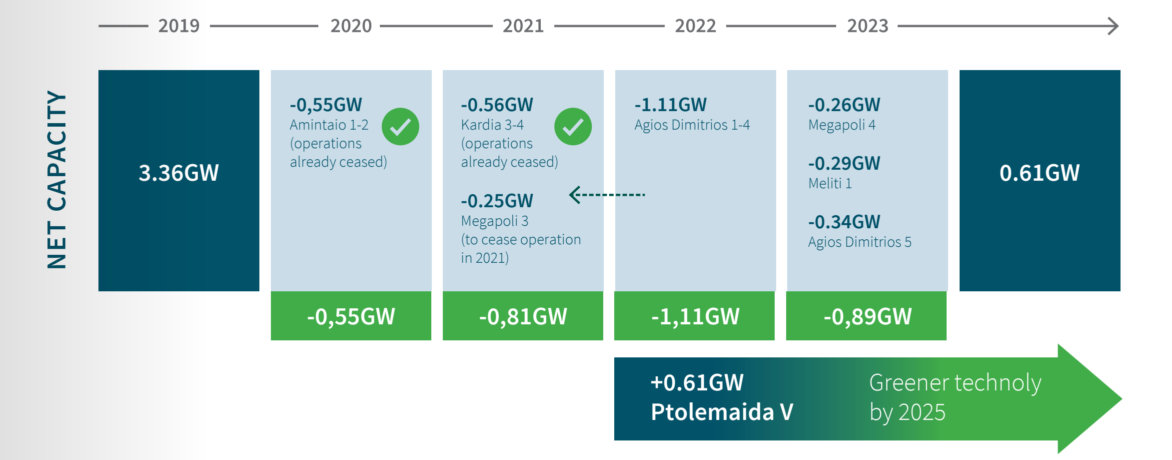
• **QIA** is investing across the value chain in companies and technologies focused on the transition to a clean-tech low-carbon emission future. For example, the percentage of renewables in QIA's infrastructure power generation assets has expanded to 45%, and 50% are zero emissions.

• In 2021, **QIA** partnered with Italy's Enel in a joint venture to develop and grow a leading renewable energy platform in Sub-Saharan Africa. QIA has also invested in energy-storage company Fluence which provides storage solutions for energy produced by renewable sources.

HCAP'S ENERGY TRANSITION & GENERATION PLAN

HCAP's subsidiary, PPC, is the leading power generation and supply company in Greece engaged in the generation, distribution and sale of electricity to consumers. PPC is currently **focusing on green energy generation** with an accelerated decommissioning plan of its legacy lignite generation fleet and supporting mines (the fastest in Europe) and the ramp-up of RES as the new dominant generation technology. This plan was formally announced in Q4-2019 and has already achieved the following milestones:

As part of its broader strategy, PPC is proceeding to the **decommissioning of all existing lignite capacity by 2023** as shown in the graph below. No other country in the EU has set such ambitious targets:

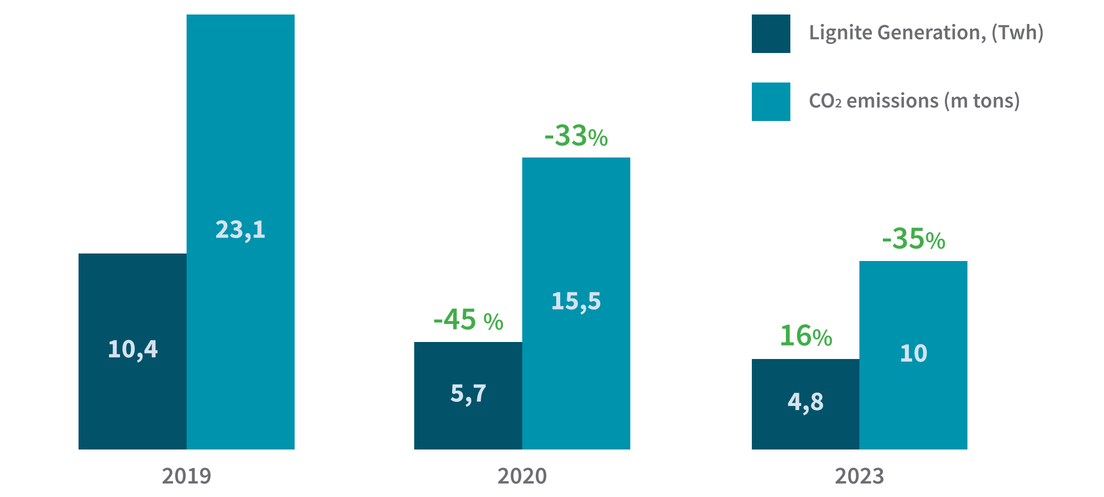


Phase out of existing lignite plants by 2023, total phase out by 2025

Up until today, 1.1GW net capacity has been already decommissioned. Another 0.25GW of capacity will cease in 2H-2021, representing 40% of the lignite assets to be decommissioned.

Furthermore, PPC has a RES pipeline exceeding 7GW, providing strong conviction to reach at least 1.5GW capacity of RES in 2023, with 1GW already secured; RES growth is not reliant on subsidies, but it is driven by economics and capitalising on PPC's excellent geographic locations and access to intra-group PPAs.

The significant progress in its lignite phase-out efforts have consequently led to significant reductions of its carbon footprint:



Reduction of annual CO_2 emissions to 10m tons in 2023

Specifically:

• Lignite generation was reduced by almost 50% in 2020 compared to 2019, representing below 30% of its total electricity generation .

• CO_2 emissions were reduced by 33% mainly driven by lower lignite-fired generation and a further reduction by 35% is projected by 2023
The shift of its strategy and the progress achieved also led to an improvement in its financial position and business profile, leading to upgrades of its credit rating by S&P and an inaugural rating from Fitch of BB-.

On the back of a revised strategy focused on carbon reduction and green transition, PPC re-entered the European HY debt capital markets in March 2021, being the first ever issuer in the HY market to have a Sustainability-Linked KPI. Specifically, the KPI was linked to a reduction of direct CO_2 emissions, where the Company committed to reducing CO_2 emissions by 40% by December 2022 with 2019 as a base year. In this manner, PPC directly linked PPC's overall sustainability strategy with debt financing, showing the market that this commitment was a real undertaking that would be monitored, tracked and audited with external advisors. Very strong investor appetite allowed PPC to not only upsize the 5-year bond to €650m from €500m, but strong performance led to a retap one week after, raising an additional €125m at an improved coupon.

Further leveraging on this successful transaction and on its sustainable strategy embedded in its Business Plan and continued strong trading performance made it possible for PPC to issue €500m with a 7-year tenor.

Aside from diversifying its generation into greener energy, PPC is also focusing on greener consumption through e-mobility. PPC is currently at the forefront of this ambitious project with a mid-term target to have established more than 10,000 charging stations across the country. It has already installed more than 300 charging stations through "PPC blue"- its dedicated brand for e-mobility, the largest and fastest growing network of public charging stations in Greece.

EXAMPLES OF ASSET MANAGERS ALIGNMENT WITH THE OPSWF FRAMEWORK - 2020 TO 2021

PRINCIPLE 1 **ALIGNMENT**

>$340 Billion
Natixis Investment Managers measures the carbon footprint or temperature for more than €340 Billion AUMs (end 2020)

>$400 Billion
BlackRock manages over $400 billion AUM in dedicated sustainable strategies (as of June 2021)

Net Zero
As of 2021, Allianz GI, Amundi, AXA IM, BlackRock, Federated Hermes (International), Fidelity International, HSBC Asset Management, Invesco, LGIM, State Street and UBS are all members of the Net Zero Asset Managers Initiative

62%
Northern Trust's reduction in corporate GHG emissions from the 2015 baseline goals

70,000 tons
70,000 tons avoided emissions in tCO_2e attributed to PIMCO's Climate Bond Strategy

€ 31 Billion
Amundi has € 31 Billion in environmental solutions, as of end of Q2 2021

$750 Billion
Goldman Sachs committed to deploy $750bn to accelerate climate transition and advance inclusive growth

$750 Billion
Morgan Stanley has set a financing target of $750Bn low-carbon solutions by 2030

90%
90% of AXA IM's assets are classified as Article 8 and Article 9 under SFDR

PRINCIPLE 2 **OWNERSHIP**

165,000
BlackRock Investment Stewardship voted on more than 165,000 management and shareholder proposals (July 2020-June 2021)

1,000+
Issuers Engaged
PIMCO engaged 1,586 corporate bond issuers in 2020 across industries regions and ESG topics, representing 80%+ of firm wide corporate holdings

65,000
shareholder proposals
Morgan Stanley Investment Management voted on 65,000 shareholder proposals in 2020

472
Amundi engaged with 472 companies on energy transition and climate change in 2020.

2,000
Invesco carried out 2,000 company engagement meetings where ESG was raised

100%
Goldman Sachs Asset Management support for climate lobbying proposals

319 companies
AXA IM engaged with 319 companies in 2020, with 27% of those engagements related to climate change

PRINCIPLE 3 **INTEGRATION**

15%
AUM are sustainable
15% of Natixis Investment Managers' AUMs are in sustainable investments, with a goal to reach 50% in 2024 (end 2020)

$3 Trillion
BlackRock is 100% ESG integrated in active and advisory strategies covering $3trillion in assets

80% Billion
At Q2 2021, over 80% of assets in BNPP AM's open ended funds are classified as either Article 8 or 9 according to SFDR

$137 Billion
In Firmwide ESG AUM at the end of 2020 (Goldman Sachs)

$474 Million
HSBC Asset Management raised $474m of new financing for climate-risk mitigation investments through their REGIO bond fund

£1.4 Billion
Invested by Legal & General in renewable energy infrastructure across the UK

€13 Billion
AXA IM reached €13bn in green, social and sustainability bonds in May 2021

386%
Morgan Stanley Investment Management's AUM with a sustainability focus or objective, including climate goals, has grown by 386% from Jan 2020 to June 2021

€798 Billion
Amundi AUM in responsible investment (June 2021)

€358 Billion
At Q2 2021, €358bn of BNPP AM's AuM integrate ESG criteria (vs €331.2bn at the end of 2020)

65%
UBS AM's sustainability-focused assets increased by 65% since last year

>4,600 issuers
Fidelity International's global network of research analysts rates over 4,600 issuers according to sustainability criteria through its proprietary ESG rating system alongside fundamental analysis

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 nine 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. This year, many OPAM members have made commitments to net zero through collaborative initiatives.

- AXA Investment Managers (AXA IM) will reduce its own carbon emissions by at least 25% by 2025. AXA IM reported that 90% of their assets in equity, fixed income and multi-asset platforms are classified as Article 8 and Article 9 under the Sustainable Finance Disclosure Regulation (SFDR) (as of the end of 2020)

- Amundi: launched an ambitious action plan in October 2018 to mainstream ESG integration across all its value chain by the end 2021. This action plan explicitly included, among other objectives, the doubling of the amount raised to finance energy transition. This target has been exceeded, with Amundi managing €31bn in ESG environmental themed investing (at end of June 2021)

- BlackRock manages over $400 billion AUM in dedicated sustainable assets as of end of June 2021. The firm also manages an additional $681 billion of assets across BlackRock's broader platform that utilize environmental, social or governance screens

• **BNP Paribas Asset Management (BNPP AM)**: In 2020, BNPP AM aligned all of its open-ended funds with the EU's Sustainable Finance Disclosure Regulation (SFDR). To date, over 80% of assets in their open ended funds are classified as either promoting ESG characteristics (Article 8) or having a sustainable investment objective (Article 9), the highest sustainable levels achieved under the new regulation

• **Fidelity International** monitors the carbon footprints of its investment strategies and this analysis forms part of the Quarterly Performance Review each portfolio manager has with the relevant Chief Investment Officer. As a founding investor signatory to the Institutional Investors Group on Climate Change (IIGCC) Net Zero Asset Manager Initiative, Fidelity International has brought forward its goal of achieving net-zero greenhouse gas emissions in its own operations by 2030, 20 years ahead of the 2050 timeline set by the U.N. climate science panel to comply with the Paris Agreement

• **Goldman Sachs Asset Management (Goldman Sachs)**: In 2020, Goldman Sachs announced they would deploy $750bn in financing, investing, and advisory activity by 2030 to accelerate climate transition and advance inclusive growth. Goldman Sachs also saw a 25% reduction vs benchmark of Blended Emissions Intensity, a measure of current emissions, and Embedded Emissions Intensity, a measure of future emissions in all Quant Equity Alpha portfolios

• **HSBC Asset Management (HSBC)** raised $474m of new financing for climate-risk mitigation investments through their Real Economy Green Investment Opportunity (REGIO) bond fund. The REGIO fund is designed to attract investments into emerging market economies, enabling their energy transition and helping them limit the effects of climate change.

• The carbon intensity of the **Legal & General's** entire £95bn proprietary investment portfolio will be reduced by 50% by 2030. This programme will be supported by the adoption of science-based targets to align with the Paris trajectory of 1.5°C and continuing to grow its £1.4bn portfolio of renewable energy investments

• **Morgan Stanley** announced an updated commitment to mobilize $750 billion to support low-carbon solutions by 2030, following its initial commitment of $250 billion announced in 2018, representing a three-fold increase. This commitment is part of a larger goal to mobilize a total of $1 trillion towards sustainability solutions in support of the United Nations' Sustainable Development Goals (SDGs) by 2030

• As of December 31, 2020, **Northern Trust** had exceeded their goal reducing their emissions by more than 62 percent since the 2015 baseline and their energy consumption by over 44 percent. They supplied over 12 percent of their corporate real estate portfolio with a renewable energy electricity supply, with further plans to expand this

• In 2020, **PIMCO**'s Climate Bond Strategy held green and sustainable bonds that were linked to projects supporting nearly 70,000 tons of avoided emissions in tCO_2e (tons of carbon dioxide equivalent). This equates to attributing 645 tCO_2e avoided emissions to every $1 million invested in the strategy

• **State Street Global Advisors** has become carbon neutral for all of their global Scope 1 and Scope 2 carbon emissions as of the end of 2020. State Street have also reached a 31 percent CO_2 emissions reduction in 2019, compared to the 2015 baseline, which helped surpass the 30 percent goal six years ahead of their 2025 target. Looking at the future, State Street are committed to reducing their global carbon output by 27.5% by 2030 (against a 2019 baseline), based on the Science-Based Targets Initiative's "well-below 2°C" methodology

Coal Exclusion

• **AXA IM** further strengthened its coal exclusion policy in 2021 with two new criteria, aiming at avoiding investments in companies which continue to develop coal assets:
▹A new ban on power generation companies with more than 10GW of installed coal-based power production
▹Development of coal capacities with a more stringent threshold resulting in the exclusion of companies with coal power expansion plans of over 300MW (vs 3000MW previously)
▹In addition, mining companies developing new coal mining and coal industry partners developing significant new coal assets are now excluded. This rules out investments in most new coal projects around the world.

• Since 2016, **Amundi** has applied a sector-specific policy to thermal coal, which excludes certain companies and issuers. Every year, Amundi strengthens its exclusion policies in terms of scope and/or thresholds (based on the exposure of income to coal mining or coal-fired electricity generation). At the end of 2020, Amundi broadened its coal exclusion policy, which now excludes any company that develops or plans to develop new thermal coal operating capacities

• **BNPP AM** further expanded its coal policy, which now excludes around 1,000 issuers worldwide. The policy is fully aligned with the Paris Agreement. It applies to all open-ended funds it actively manages, and has become the standard for dedicated mandates as well
▹As of 2020, BNPP AM no longer invests in companies generating more than 10% of their revenue from thermal coal operations and/or extracting more than 10 million metric tons of coal per year
▹Electricity producers with a carbon intensity exceeding the global average of 2019 (463 gCO_2e/kWh) and/or planning to expand their installed capacity are also excluded
▹Moreover, BNPP AM aims for the carbon footprints of the firm's portfolios to be lower than the carbon footprint of the associated benchmark index (where applicable) – as per the firm's ESG Integration Guidelines

Net Zero Asset Managers Initiative

• As of 2021, **Allianz GI, Amundi, AXA IM, BlackRock, Fidelity International, Federated Hermes (International), HSBC Asset Management, Invesco, LGIM, State Street and UBS** are members of the Net Zero Asset Managers Initiative. Members will align their portfolio and activities with a 'Net Zero by 2050' goal, in order to limit global warming to 1.5°C. Members actively take action to accelerate investing aligned with net zero emissions by 2050 or sooner

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.

Governance and voting

- BlackRock: Between July 1, 2020 and June 30, 2021, BlackRock Investment Stewardship voted on more than 165,000 management and shareholder proposals across 71 voting markets and made 2,330 engagements on Climate and Natural Capital issues as one of their engagement priorities

- During 2021 AGM season, BNPP AM initiated the filing of resolutions with two companies, requesting detailed reports on how their direct and indirect lobbying activities (i.e through professional associations) align with the goals of the Paris Agreement. BNPP AM's resolutions attracted record support at the AGMs of Exxon Mobil and Delta Airlines, gaining 64% and 63% approval respectively

- In 2021, LGIM announced the results under its expanded Climate Impact Pledge engagement programme, including public ratings of circa 1,000 global companies, with sanctions for poor performers and incentives for companies to step up on sustainability. Over 130 companies have been subject to voting sanctions under LGIM's Climate Impact Pledge engagement programme during 2021

- Morgan Stanley Investment Management has conducted 702 engagements on sustainability issues, including decarbonization and climate risk, in 2020. MSIM voted on 65,000 shareholder proposals in 2020, and voted in support for 61% of climate-related proposals in 2020

- In 2020, Northern Trust Asset Management supported 79% of climate shareholder resolutions

- During 2020, UBS Asset Management discussed environmental management and climate change at about one-third of its engagement meetings; it voted on almost 700 ESG-focused shareholder resolutions and supported 88% of the environmental ones

Data Disclosures and Taskforce on Climate-related Financial Disclosures (TCFD)

- AXA IM has published a yearly TCFD report since 2019, where they present their ESG and Climate strategies, as well as key metrics, such as the Carbon Footprint of their investments which decreased by -8% between 2018 and 2020. AXA IM engaged with 319 companies in 2020, with 27% of those engagements related to climate change and 18% related to resources and ecosystems.

- In 2020, Amundi engaged with **472 companies on the transition towards a low carbon economy,** of which; 253 companies in various sectors to invite them to commit or upgrade their Science Based Targets (SBTs); 183 on their energy consumption and CO_2 emissions; 36 on their Coal Policy

- BlackRock asks companies to provide comprehensive disclosures on their long-term strategy; including key milestones and governance / operational processes. BlackRock asks companies to provide the data and relevant information that 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. Until such a global set of standards is established, BlackRock will, in their engagements with companies and the broader stewardship ecosystem, continue to advocate for corporate sustainability reporting that aligns with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), supplemented by industry-specific metrics such as those identified by the Sustainability Accounting Standards Board (SASB)

- In 2021 **HSBC Asset Management** wrote to the Chairpersons of 205 companies asking to reply to the questionnaire on climate change. As of the beginning of September, with 30 days remaining to submit responses, 22% of the companies they contacted replied to the questionnaire; for many of them it was the first time they replied to the CDP questionnaire and a first attempt to implement the TCFD recommendation in the way they present their climate-related information

- **Invesco** will work directly with the Principles for Responsible Investment (PRI), the Institutional Investors Group on Climate Change (IIGCC), CDP (the global environmental disclosure system for investors, companies, cities, states and regions) and other organisations alongside asset managers to develop net-zero methodologies for asset classes and foster industry standards

- **PIMCO** engaged 1,586 corporate bond issuers in 2020 across industries regions and ESG topics, representing 80%+ of firm wide corporate holdings. In their engagement, PIMCO support the development of enhanced climate risk disclosures, encourages commitment to Science-Based targets and progress towards substantive net zero strategies

- **PIMCO**: supports the development of enhanced corporate disclosure regarding advancement of the Paris Agreement and the Sustainable Development Goals (SDGs), notably ambitious targets linked to climate action, water, biodiversity, and forests – through a variety of industry partnerships with groups such as the United Nations, the International Capital Market Association (ICMA) and the Bank of England, among others. On the topic of nature and Net Zero, PIMCO is member of the Task Force on Nature-related Financial Disclosure's (TNFD's) informal working group

- In 2020, **State Street** wrote to companies to inform them of their intentions to take voting action against the bottom 10% of R-Factor scores, subsequently voting against 14 of those companies. They also shared scores with 698 companies, and conducted 851 engagements with companies on their R-Factor scores

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.

- **AXA IM** reached €13bn milestone in green, social and sustainability bonds in May 2021 and unveiled a strengthened framework to assess such investments aligned with market best practices.

- **Amundi** prioritized initiatives that stimulate both supply and demand as well as contribute to building a dynamic marketplace for responsible investment instruments:
▹**Launch of the "Just Transition for Climate" fund**, designed to finance a socially acceptable energy transition (January 2021)
▹**Launch of AIIB** (AIIB: Asian Infrastructure Investment Bank) - **Amundi Climate Change Investment Framework**, the first holistic approach for building portfolios resistant to climate risks and based on the three key objectives of the Paris Agreement (September 2020)
▹Amundi selected by a group of 12 French institutional investors to manage an **equity index fund aligned with the Paris Agreement** (June 2020).

- **BlackRock**: launched Aladdin Climate, which helps to quantify and integrate climate-related risks, providing enterprise level climate-risk oversight, climate-based portfolio modelling and security selection and scenario analysis, combining physical and transition climate risks to investors.

- **Fidelity International**'s global network of research analysts rates over 4,600 issuers according to sustainability criteria through its proprietary ESG rating system alongside fundamental analysis. Fidelity International continues to expand its Sustainable Funds Family which comprises 23 funds spanning active and passive strategies across equities, fixed income, and multi asset. The range includes a dedicated Climate Solutions equity strategy, designed to achieve long-term capital growth by investing in companies that enable global decarbonisation efforts

- **Goldman Sachs** developed an innovative investment strategy in partnership with Apple and Conservation International that will help Apple offset unavoidable emissions in its carbon footprint by investing in climatesmart forestry projects

- **Invesco**: has evolved their climate scenario analysis by extending the calculation of temperature alignment to Scope 2 and Scope 3 emissions and by adopting the more widely used Network of Central Banks and Supervisors for Greening the Financial System (NGFS) scenarios for the forward-looking assessment of physical and transition risks. They have also expanded the scope to include all of their corporate bonds as well as listed equities.

- In March 2021, **LGIM** launched the Low Carbon Transition fund range, which seeks to significantly reduce its exposure to carbon emissions in alignment with 2050 net zero goals. This climate-tilted fund will reduce initial exposure to carbon-emitting assets by 70% compared to the market capitalisation benchmark. LGIM's recent launch of a Paris-aligned fund, which uses a Paris-aligned benchmark (PAB) to provide exposure to a portfolio that, based on ISS ESG climate analysis, is in line with a 2°C scenario through 2050

- **Morgan Stanley Investment Management** has grown to \$18.3Bn AUM with a sustainability focus or objective, including climate goals, as of June 2021. Morgan Stanley's AUM with a sustainability focus or objective, including climate goals, has grown by 386% from Jan 2020 to June 2021

- The Northern Trust ESG Vector ScoreTM, introduced in 2021, is a measurement that **Northern Trust Asset Management** developed to assess publicly traded companies in the context of financially relevant ESG criteria that could impact their operating performance. The approach captures both the magnitude and direction of potential ESG-related risks by marrying the two leading sustainability frameworks from SASB and TCFD

- **UBS AM** has over \$129 bn of sustainability-focused assets (at end of 1H 2021) – up from \$78bn in 2020 – plus \$493 bn of ESG integrated asset

EXAMPLES OF PRIVATE EQUITY FUNDS ALIGNMENT WITH THE OPSWF FRAMEWORK - 2020 TO 2021

PRINCIPLE 1 **ALIGNMENT**

€260 **Million**

Eurazeo ESG programs generated almost €260 Million in cost savings, while reducing its GHG emission by 1.5 Million metric tons of CO_2 equivalent

27%

Eurazeo reduced the firm's carbon emissions by 27% compared to 2019

185 **portfolio companies**

TPG assessed carbon emissions for 185 portfolio companies

Net Zero

Macquarie Asset Management committed to net zero emissions by 2040

1st

Tikehau Capital launched its climate efforts in 2018 with the T2 Energy Transition Fund, the first private equity mega-fund dedicated to climate change with >$1 Billion

Zero Coal

GIP says "no new coal" and divests of existing coal holdings

PRINCIPLE 2 **OWNERSHIP**

65% **of companies**

As of July 2021, more than 65 per cent of Macquarie's portfolio companies had begun their net zero journey, establishing mechanisms to track and report their greenhouse gas emissions and energy consumption data

110 **portfolio companies**

TPG baselined 110 portfolio companies on climate and other financially-material ESG practices

150

Eurazeo organized monthly webinars to support the development of ESG skills in the companies that it finances, bringing together more than 150 participants in 2020

86% **of Investments**

86% of GIP investments track Scope 1&2 GHG emissions and 40% Scope 3

616 **kt of CO_2e**

Through their products and services, the portfolio companies within the T2 Energy Transition Fund contributed to avoid 616 kt of CO_2e in 2020, the equivalent of 134,000 individual vehicles removed from the road in one year

PRINCIPLE 3 **INTEGRATION**

+326%

Ardian's capital investment increase on renewables between 2016 and 2020 +326%

£70 **Million**

Macquarie Asset Management invested £70 Million in green projects in sub-Saharan Africa

7 **GWac**
of Renewable Energy Assets

Carlyle Launches Copia Power Platform to Develop 7 GWac of Renewable Energy Assets with Over 3 GWh of Battery Storage

$2.8 **Billion**

SBIA invested $2.8 Billion in companies having a positive impact on Climate Change

12.7 **GW**

Macquarie Asset Management is invested in a portfolio of green energy assets with a combined generation capacity of 12.7 GW

€400 **Million**

Eurazeo launched a €400 Million size fund created at the initiative of a group of major institutional investors and which invests in the healthcare sector as part of the French "Recovery" plan

200 **companies**

TPG conducted a TCFD-aligned climate risk assessment & scenario analysis, characterizing the physical and transition risks of 200 companies across its portfolio

17 **GW**

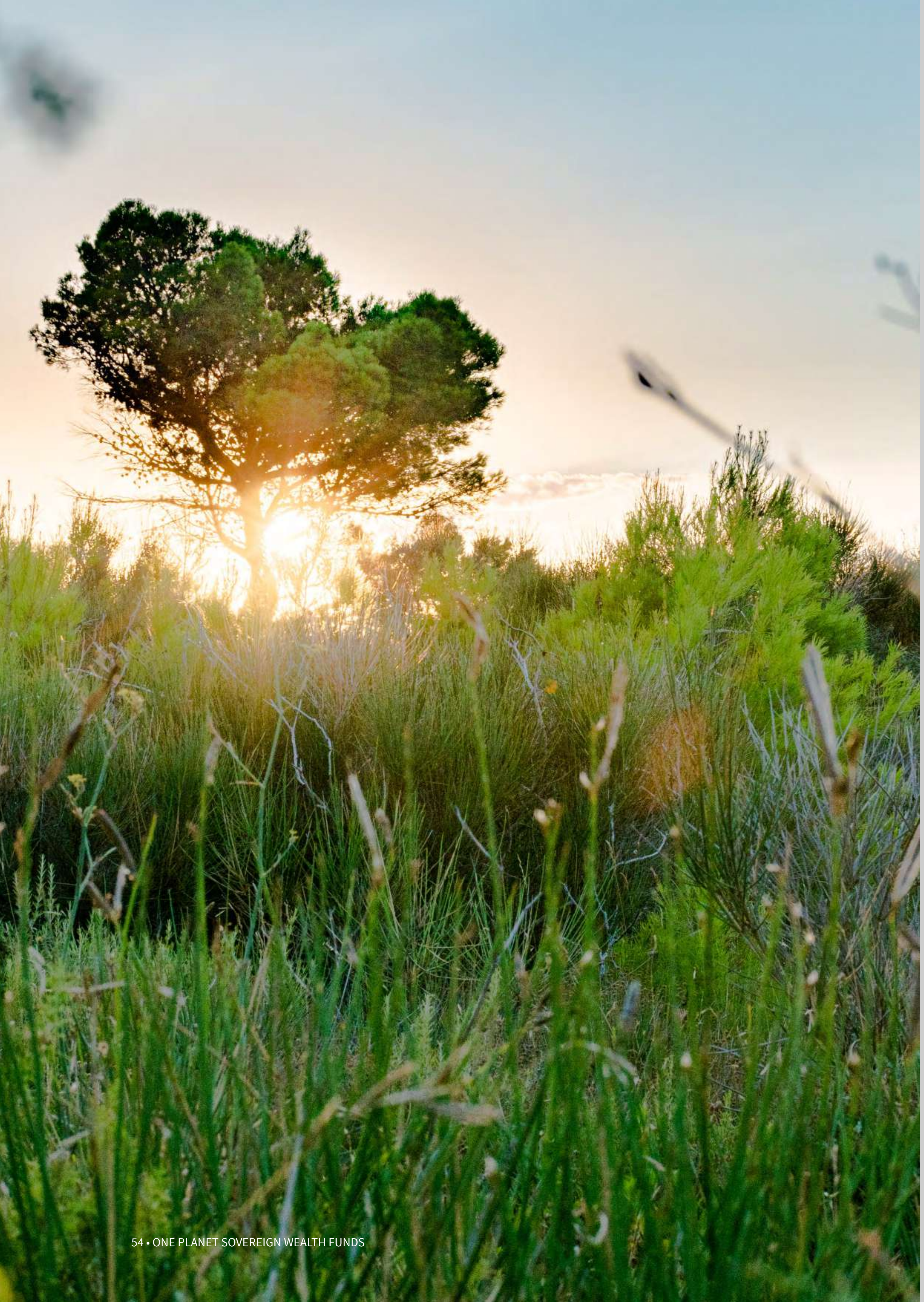
Tikehau Capital's renewables developers have developed 5 GW until now, and they finance them at corporate level to develop a pipeline of 17 GW globally

€1.045 **Billion**

Working with Carlyle, Flender, launched a €1.045 billion term loan with a margin ratchet linked to the power volume of new gearbox installations in wind turbines

$9 **Billion Investments**

GIP committed $9 Billion to renewable energy investments



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, three 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 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 is the next step for the sector.

Below, we highlight some of these efforts.

Principle 1: Alignment

Members of OPPEF have showcased investment strategies and processes that align with the principles of the OPSWF Framework and goals of 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.

- In 2020, **Eurazeo** announced the launch of O+, the group's new ESG Strategy. Under this program, Eurazeo aims to align its activities with a scenario limiting global warming to well below the 2°C threshold and has set an ambitious target to reach carbon net neutrality by 2040. This commitment resulted in the filing of reduction targets with the Science-Based Targets Initiative (SBTi).
  ▹Eurazeo undertakes to reduce its scope 1 and 2 emissions by 80% per employee by 2030. Some

of these emissions will be reduced by supplying renewable energy to all the Group's sites.
▹As of December 2020, Eurazeo increased its share of renewable energies to 56%.
▹Since 2015, Eurazeo ESG programs have generated almost €260 million in cost savings, while reducing its GHG emissions by 1.5 million metric tons of CO_2 equivalent.

- Macquarie Asset Management (MAM) announced in December 2020 its commitment to invest and manage its portfolio in line with net zero emissions by 2040. In accordance with this commitment, the asset manager will seek to measure the greenhouse gas emissions of portfolio companies held in its funds, identify pathways to reduce their emissions, and support the development of business plans that contribute to a net zero economy by 2040 or sooner. Macquarie Asset Management is targeting completion of these steps for its existing portfolio companies (where it exercises control or significant influence) by the end of 2022. For newly acquired assets, it will seek to complete these steps within 24 months of acquisition. Macquarie Asset Management is collaborating with industry peers to learn how it can enhance the implementation of its net zero strategy, share best practice, and drive more coordinated action to deliver the goals of the Paris Agreement. In addition to its membership of the One Planet Sovereign Wealth Funds Framework, the asset manager became a signatory to the Net Zero Asset Managers Initiative in 2021.

- SoftBank Investment Advisers (SBIA): ESG Due Diligence, including climate-change-related questions, is carried out on Vision Fund investments. This forms part of the IC pack and is used to inform investment decision-making by the Investment Committee.

- Tikehau Capital is a signatory of the Race to Zero Campaign and has set the objective to manage a platform dedicated to climate and impact investing and has set up dedicated governance through the Group's Climate Action Center. With five thematic funds across the Group's asset classes and circa $1.5bn AuM dedicated to financing the Energy and Ecological Transition, Tikehau Capital is already contributing to the fight against the climate emergency. The Group launched its climate efforts in 2018 with the T2 Energy Transition Fund, the first mega-fund dedicated to climate change with >$1bn and as at 30.06.2021, 20% of the Group's Private Equity AuM are dedicated to the Energy and Ecological transition. To ensure a relevant climate-related governance, the Group has launched Climate Action Center (CAC) and appointed a Head of Climate at Group level. The CAC brings together +33 people from different backgrounds, levels of seniority, gender and nationalities, contributing to design innovative ways to rethink the role of investors and to contribute to the fight against the climate emergency.

- TPG: analyzed carbon emissions for its portfolio companies, leveraging a scaleable modeling platform in alignment with the GHG Protocol.

Coal Exclusion

- Ardian: Climate action is a sustainability priority at Ardian since 2015. Ardian commits to phase-out any direct thermal coal investments by 2030 within EU / OECD countries and by 2040 in the rest of the World.

- Global Infrastructure Partners: has made a conscious decision to not invest in thermal coal power generation facilities in the future and its existing holdings have divested or shut down their thermal coal power generation assets as well. GIP views other fossil fuels, such as natural gas, as transition fuels in the journey to lower carbon emissions. Further, consideration of physical risk and transition risks is part of their investment review and decision making.

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 announced their support of the TCFD.

- Ardian has developed a climate materiality tool applicable to all direct investment activities on the basis of market standards including SASB and Carbon World Risk index to support the investment teams in assessing climate-related risks and opportunities from the pre-investment phase. When material, climate actions are defined hand in hand with the portfolio companies and monitored during ownership.

- GIP gathers ESG data, including key climate change information, from its portfolio companies twice a year. Through this data gathering and analysis GIP is able to determine that:
▹86% of its portfolio companies track Scope 1 & 2 GHG emissions and 40% Scope 3. GIP encourages its portfolio companies to track their emissions and set net zero aligned reduction targets.
▹79% of its portfolio companies set GHG emission reduction targets. 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.
▹30% 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.

• **Eurazeo** carries out 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. 80% of Eurazeo funds in marketing or investment phase comply with Article 8 (Funds promoting ESG Characteristics) or Article 9 (Funds with sustainable investment as their objective).

• **Macquarie Asset Management** is supporting its 120 portfolio companies in the infrastructure sector to establish net zero and Paris-aligned business plans by 2022. More than 500 stakeholders will be engaged through this process, with the world's largest infrastructure asset manager hosting decarbonisation workshops equipping portfolio companies with the insights and tools needed to measure and reduce their greenhouse gas emisssions. As of July 2021, more than 65 percent of companies had begun their net zero journey, establishing mechanisms to track and report their greenhouse gas emissions and energy consumption data. 22 assets have already put decarbonisation targets in place, with this figure to grow as net zero business plans are finalised ahead of Macquarie Asset Management's specified 2022 target.

• **Tikehau Capital** engages with all companies in the T2 Energy Transition Fund and is committed to conducting climate related assessments including the induced and avoided CO_2 emissions of its portfolio companies. Through their products and services, the T2 portfolio companies contributed to avoid 616 kt of CO_2e in 2020, the equivalent of circa 134,000 individual vehicles removed from the road in one year. In addition, the portfolio's Weighted average Carbon Intensity per Revenue (WACI) covering scopes 1,2 & 3 was estimated at 711 tCO_2e/m€ revenues for the six companies in the portfolio at the moment of the assessment.

• As at 30.06.2021, **Tikehau Capital** have engaged with four out of the six portfolio companies in the portfolio for the definition of a sustainability roadmap and all of them discuss ESG-related topics in Board meetings at least on an annual basis. Following the engagement efforts, one of the portfolio companies, GreenYellow, reinforced its ESG and climate-related disclosures and published for the first time a CSR Report. GreenYellow's CSR report, is available online and was updated in 2021 to include the results of the carbon related assessments supported by Tikehau Capital. In 2020, the company contributed to avoid 275,000 tCO_2e and contributed to €85m savings for its clients thanks to renewable energy and energy efficiency efforts.

• In 2021, **TPG** baselined 110 portfolio companies on financially-material ESG practices, including: emissions measurement, benchmarking, target-setting and reduction planning; integrating climate risk/opportunity analysis and scenario planning into decision-making; and Board/Executive governance of climate-related outcomes.

Principle 3: Integration

Private investment firms play a key role in the global financial system, investing in 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.

Climate risk valuation and assessment

• **Eurazeo** has developed a progress plan which is adapted to 100% of all portfolio companies to help them integrate ESG into their business model and move forward. Built across 4 levels – bronze, silver, gold, and platinum – the plan integrates 20 "ESG essentials" that help elaborate a gradual yet efficient and comprehensive ESG approach. This system also helps to define the target level required for companies in which Eurazeo is the majority shareholder, i.e gold, in compliance with the Group's ambitions and the regulatory requirements to which it is subjected.

• **Tikehau Capital** conducted physical risk assessments for the companies in the T2 Energy Transition Fund (in line with the TCFD recommendations), allowing to identify sites exposed to high physical risks and to launch engagement with portfolio companies to ensure resilience by subscribing insurance and rethinking product installation.

• **TPG**: To inform prioritization and enhance resilience across its portfolio, TPG conducted TCFD-aligned climate physical & transition risk assessment and segmentation of nearly 200 companies across its portfolio, and conducted scenario analysis to understand portfolio exposure under various scenarios.

Renewable energy

• **Ardian** is a prominent player of the energy transition. It started investing in renewables in 2006 and now has a global renewable asset base portfolio of 7.5 GW, which enables significant avoided emissions at portfolio level. Ardian has also been active on battery transactions, transitioning CO_2-exposed companies as well as hydrogen through its portfolio companies since 2019.

• **GIP**: Energy continues to be a focus sector for GIP investments. GIP has honed its focus on the energy sector with a commitment to invest $9bn of equity in renewable energy. 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. GIP feels strongly that it can meet this renewable energy commitment while continuing to meet its fiduciary obligations to its investors. During 2020, GIP portfolio companies generated 28 TWh of renewable energy (14% more than 2019) and avoided 19.7mm metric tons of CO_2 through renewable energy (21% better than 2019).

• In 2020, **Carlyle** announced a $347 million strategic growth investment in Amp Energy, an international renewables development and energy transition company. Amp's core business is to develop, build, own, and operate renewable energy and battery storage projects globally – a thesis Carlyle believes is aligned with the long-term climate resilience of its investment portfolios. Amp has successfully developed over 1.8 gigawatts of distributed and utility-scale renewable generation projects, hybrid generation + storage projects, and stand-alone battery storage projects around the world. Amp's proprietary digital energy platform, Amp X, also provides a diverse portfolio of disruptive and interoperable solutions, including a smart transformer that enables real-time autonomous management and optimized dispatch of all forms of distributed generation and loads across the grid. The investment will help catalyze the continued growth of both Amp and Amp X, within its core markets: North America, Japan, Australia, Spain, and the UK

Green financing

- Macquarie Asset Management recognises that technology will be key to mitigating climate change and is supporting its portfolio companies, such as the UK's largest gas distribution network operator Cadent, to explore the development of low carbon solutions. Macquarie Asset Management is supporting Cadent as it invests to increase the role for greener low-carbon gases in its network, which supplies more than 11 million homes and businesses with gas. Through innovative trials involving hydrogen and biomethane, Cadent is ensuring its long-term role in the UK's energy landscape whilst helping to secure zero carbon energy networks that are safe, reliable, flexible and convenient for customers.

Low carbon infrastructure and transport

- In 2021, Carlyle formed Copia Power, a platform focused on developing utility scale sustainable infrastructure in the US. Copia's strategy is to partner with established industry leaders with highly specialized skillsets to develop, own, and operate sustainable infrastructure assets. This was formed through their Renewable & Sustainable Energy platform, a dedicated team addressing energy transition by investing in the renewables and sustainable resources sector. In conjunction with Tenaska, Inc. and Birch Infrastructure, Carlyle anticipates arranging over $6 billion in project finance to advance the development and build-out of assets through the Copia platform. Copia expects to initially focus on developing, owning, and operating large-scale renewable energy generation through its strategic relationships with Tenaska and Birch. Copia has acquired a ~6GW US solar and storage development pipeline from Tenaska who will continue to work with Carlyle and Copia to develop the portfolio.

- Eurazeo has launched two Article 9 funds that target sustainable investments: Eurazeo Sustainable Maritime Infrastructure (this fund will back projects for the transition of the maritime economy to carbon neutrality by 2050) and Nov Santé (a €400m size fund created at the initiative of a group of major institutional investors and which invests in the healthcare sector as part of the French "Recovery" plan).

- Macquarie Asset Management is helping companies, including the Port of Newcastle on Australia's east coast, adapt their long-term business plans to support the low carbon transition. Macquarie Asset Management is supporting the port, which has been exporting coal since 1799, as it realigns its strategy in light of the transition to cleaner fuel sources. The port plans to spend more than $A300 million over the next five years on projects to further diversify its operations across a diverse range of trades including grain, fertilisers, cement, and bulk liquids. This investment, and a further potential $A3 billion of projects over the next 15 years, will help the port to maintain a strong competitive position and remain a vital part of the region's economic and social infrastructure.

- SBIA has made a number of investments which are having a positive impact on climate change. These include Tier Mobility, a fully carbon-neutral sharing mobility service, Energy Vault, a creator of long-duration renewable energy storage solutions, and GM Cruise, a developer of zero-emission electric self-driving cars.
▹Tier Mobility: Provides sharing mobility services through its electricity scooters in over 80 cities in 10 European countries. In 2020, it achieved complete carbon neutrality, a first for the micro mobility industry including scooters. It is leading the decarbonization of the entire industry.
▹Energy Vault: With the use of gravity and kinetic energy, Energy Vault has developed a system to store electricity in proprietary "blocks" stacked in tower-like structures. Energy Vault contributes to the further spread of renewable energy by reducing the cost of power storage facilities essential for the effective use of renewable energy, in which the amount of power generation is influenced by weather conditions.
▹GM Cruise: GM Cruise is developing all-electric, self-driving cars that produce zero emissions. Led by its vision of achieving zero crashes, zero emissions and zero congestion, it is a front-runner in the automobile industry on the cutting edge of both environmental conservation and safety.

TIKEHAU CAPITAL: 'ALIGNING THE INVESTMENT STRATEGY OF CLIMATE THEMED FUNDS TO TRANSITION SCENARIOS'

Conscious of its role in the transition of the real economy towards a low carbon economic system, Tikehau Capital has replicated its climate strategy by launching impact and climate investing products across its business units. This has been possible thanks to **the strong involvement of the investment teams in the definition of the climate intention**, which is rooted in the available scientific research and recognised frameworks. The goal behind the climate intention is to align the investment strategy of climate-themed funds to transition scenarios.

For example, at the conception of the T2 Energy Transition Fund investment strategy and theory of change, the team used the IEA's Sustainable Development Scenarios to identify the main levers for carbon emissions reduction. To that end, the Fund focuses on the three main segments identified by the IEA as the key levers to achieve the transition:

1/ energy efficiency;
2/ renewable energy;
3/ low carbon transport.

In 2021, following the publication of the IEA Net Zero Scenarios, the team initiated the assessment of the alignment with the key milestones included in the strategy and identified the main contribution of the T2 Energy Transition Fund and its portfolio companies. Namely:

- At Fund level, the exclusion policy already bans investment in the production of fossil fuels .
- Tikau Capital's renewables developers have developed 5GW so far, and are financing them at corporate level to develop a pipeline of 17GW globally.
- The Energy efficiency solutions of the portfolio companies contributed in 2019 to save 177.5 GWh of energy consumption in the retail and residential segments.
- The portfolio companies are contributing to the massification and the development of electric cars and heavy trucks, as well as industrial sites remediation.

LIST OF MEMBERS OF THE OPSWF NETWORK 2021

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
- Hellenic Corporation of Assets and Participations (HCAP), 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 2021

One Planet Asset Managers:

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

One Planet Private Equity Funds:

- Ardian*
- The Carlyle Group*
- Eurazeo
- Global Infrastructure Partners*
- Macquarie Asset Management (MAM) *
- SoftBank Investment Advisers*
- Tikehau Capital
- TPG

**denotes founding member*

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ONE PLANET SUMMIT

SOVEREIGN WEALTH FUNDS

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