Capital as a Force for Good
Capitalism for a Secure and Sustainable Future

The ‘Force for Good’ Initiative
In Support of the UN Secretary General’s Strategy and Roadmap for Sustainable Development
Capital as a Force for Good

CAPITALISM FOR A SECURE AND SUSTAINABLE FUTURE

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CONTEXT: COURSE CORRECTION NEEDED

“Our world is in deep trouble – and so too are the Sustainable Development Goals. Time is running out. But there is still hope. Because we know what we need to do. End the senseless, disastrous wars – now. Unleash a renewable energy revolution – now. Invest in people and build a new social contract – now. And deliver a New Global Deal to rebalance power and financial resources and enable all developing countries to invest in the SDGs. Let’s come together, starting today, with ambition, resolve and solidarity, to rescue the SDGs before it is too late.

The world faces cascading crises that are causing profound suffering today, and carry the seeds of dangerous inequality, instability, and climate chaos tomorrow. The ripple effects of Russia’s invasion of Ukraine have hit amid a fragile and uneven recovery from the COVID-19 pandemic, while the climate emergency is gathering pace. Some countries are investing in recovery through a transition to renewable energy and sustainable development. But others are unable to do so, because of deep-rooted structural challenges and inequalities, at global and national levels.

Implementing the Sustainable Development Goals will require US$4.3 trillion per year - more money than ever before - because the international community is simply not keeping pace with the commitments it made. In the face of these cascading crises, we are far from powerless. There is much we can do, and many concrete steps we can take, to turn things around. I see four areas for immediate action.

First, recovery from the pandemic in every country.
Second, we need to tackle the food, energy, and finance crisis.
Third, we need to invest in people.
Fourth, we cannot delay ambitious climate action.

The battle to keep the 1.5-degree goal alive will be won or lost this decade. While achieving this goal requires a reduction in global emissions of 45 percent below 2010 levels by 2030, current pledges would result in a 14 percent increase in emissions by that date. This is collective suicide. We must change course.

We have the knowledge, the science and technologies and the financial resources to reverse the trajectories that have led us off course. We have inspiring examples of transformative change. In just over one year's time, we will meet here for the 2023 SDG summit marking the halfway point between the adoption of the 2030 Agenda and its target date.

Let's do everything in our power to change course and build solid progress by then.”

António Guterres, Secretary-General, United Nations

Excerpted remarks at the opening of the 2022 High-level Segment of ECOSOC, Ministerial Segment of High-Level Political Forum
FOREWORD: MY LIFE

I am Susan Alderman.

I live in Hendon.

I was born in North London and come from a large family, but my parents are both deceased, and my siblings have moved away so I don't see them very much.

What I'm doing now, selling the Big Issue is a real live saver for me. It's a hand up, not a hand-out, as they say, and it's has kept me off the streets.

I had a partner who was abusive to me both aspects, mentally and physically, so I know what it's like to experience that. But when I got away, I actually made myself homeless because I had nowhere else to go.

Living in the streets was difficult and dangerous, particularly for a woman but also for men as well, because anything can happen [and you have no protection]. I'm ashamed to admit it but I had to beg for money to buy food for some time. We've all done it. I never bought alcohol or drugs but there is a lot of misery out there and lot of people can't handle it so it's their only way of coping.

I was very lucky though. Some kind people pointed me to an outreach team that came to my rescue and got me off the streets and into accommodation. These volunteer organizations do exist, but most people don't know about them or how to access them, so I feel fortunate in this regard.

"Life is about people, and the sad thing is that a lot of people have turned very selfish in this day and age, and forget that there is always someone out there doing worse than themselves. I hear a lot and see a lot and while I've been in a bad situation there are lot of people doing worse, and they're the sort of people we need to help"

I'm on universal credit (£335 a month) from the government but the Big Issue (a street newspaper that offers homeless people the opportunity to earn an income) helps me survive, and I earn a legitimate income selling these magazines at the tube station almost every day. I pay £1.50 an issue and sell it for £3.00. It's hard to say how many I'll sell in a day, some days its only 3-4, but never more than 8-10. Without the tip money this job would be extremely hard. It's not a lot of money. You put in a lot of hours but it's rewarding and that what it's about, keeping yourself above water.

What bit of money I've got I need to budget carefully to survive. I have enough for food, that’s the most important thing. Food prices are definitely going up and people will need to work more and more to make ends meet. Lately we've had a lot of mild winters so I'll be alright but that's not say you won't get a bad winter this year. It's horrible to say but sometimes you just need to put a few extra layers on. You certainly can't afford to put your heating on. You shouldn't have to walk
around the house with your coat on but unfortunately a lot of people do to keep warm. I'm more worried about the elderly who are more prone to feeling the cold, than about myself though.

My main challenge at this time is finding a suitable home. I've moved around a couple of hostels and temporary places but would like to find decent accommodation. The problem is that there isn't enough council housing to go around, and priority is given to families with children, not single people like myself, who are in a lower tier. But at least I am off the streets.

I've been fortunate to have come across some really nice people to help me, like the outreach team and volunteers who helped me get online for my universal credit application. I'm grateful for that. There's not a lot that I need – I certainly don't plan to get rich. If I won millions in the lottery, a lot of that I'd give away to help people that are marginalized and need it.

Getting by from day to day with food to eat and clean accommodation is all I need. I'm happy then.

Life is about people, and the sad thing is that a lot of people have turned very selfish in this day and age, and forget that there is always someone out there doing worse than themselves. I hear a lot and see a lot and while I've been in a bad situation there are lot of people doing worse, and they're the sort of people we need to help.

Susan Alderman

London, United Kingdom
MESSAGE FROM THE ADVISORY COUNCIL

2021 ended with a sense of purpose and optimism given the pledge that had been made and the stage was set for 2022 to push that further. Leading financial institutions committed US$130 trillion of capital to Net Zero, nearly 200 nations agreed a carbon markets deal, 100 countries agreed to end deforestation, 100 countries representing 70% of the global economy have now joined the global methane pledge and 40 agreed to phase out coal. It was not enough for scientists to believe 1.5°C was in sight, but it was progress.

2022 has shaken that optimism resolve. War and migration, broken supply chains, damaging energy price rises, global food and general inflation, and rising geopolitical strife between great powers have all been features of just the first half year. We claim in this report that, “Never in history has there been more prosperity, more knowledge, more innovation, and less suffering than today. As if to match these, a series of systemic challenges have arisen that, if not well addressed, pose potentially unbounded risk to further progress and existential risks to human civilization.”

Despite these challenges, the last year has seen a rise in global liquid assets to c.US$450 trillion and nearly US$100 trillion of annual output. Leading financial institutions provided US$2.5 trillion in SDG aligned financing, up 20%, breaking previous records, of a total global SDG spending from all sources of US$3.6-4.7 trillion.

However, our recalculation estimates a funding need of up to US$176 trillion for the SDGs to 2030, up 15%-25%, and a shortfall of up to US$135 trillion, up 35%, added to a security scenario that may require spending to 2030 of US$60 trillion.

Leaders cannot bridge such a gap with exhortations for more commitments. The total global security and sustainability funding requirement through 2030 adds up to nearly half of the total capital stock in the world today. And that capital of US$450 trillion is already committed to business as usual and to endeavors that make the investment returns required to pay pension plans, taxes, employees, and risk takers. It is not a discretionary spend for levelling up the developing world.

The basic challenge is that the SDGs are seen as a “cause,” a noble and worthy one, and not as a business case to fund for the time horizon and at the risk level that matter to owners of capital, 60% of whom are private individuals and the rest primarily governments.

Yet we can fund a mission to Mars. And that is an enormous potential positive, showing the appetite for taking big risks for big rewards, overcoming seemingly impossible issues, is intact in the human spirit. Funding the SDGs is as much about mindsets as it is about money.
Capital as a Force for Good, 2022 Report

This report shines light on where capital comes from, where it flows through and where it goes, and who has a say in the system called capitalism. It also illuminates the shortcomings of the key stakeholders and what it takes to transform this system.

It provides a perspective on the big question of which path to take. Should we act quickly to preserve and mitigate in the face of ecosystem losses, or should we break through to grow even faster? And what are the elements of reconciling these paths?

The report is a call to action and provides an agenda and framework for doing so. With that in mind, Force for Good has selected six breakthrough areas to take a multi-stakeholder approach to addressing big issues for making a magnified impact on the SDGs.

We hope you will join us in being a force for good in any way that you can, and work towards a peaceful transition to a future of peace, prosperity, and freedom for all.

Ketan Patel, Chairman, Force for Good
Chair of the Advisory Council, Force for Good

Helen Alderson | Edward Braham | Chantal Line Carpentier | Nitin Desai | Garry Jacobs | Anja Kaspersen | Jonathan Miller | Nicky Newton King | Sir Alan Parker
Advisory Council, Force for Good
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The lead for the report was Ketan Patel, Chairman, Force for Good; Chair of the Advisory Council, Capital as a Force for Good Initiative; Founder and CEO of Greater Pacific Capital.

The ‘Capital as a Force for Good’ Report was prepared by Ketan Patel, Christian Hansmeyer, Nandan Desai, Aditya Ajit and Ushma Shah, with communications support provided by Lesley Whittle, and with review, feedback, and insights from the Advisory Council.

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ABOUT THIS REPORT

Force for Good seeks to mobilize the deployment of capital as a force for good in the world at a time of profound and multi-dimensional change in the world. Force for Good engages key stakeholders, conducts research, publishes thought leadership and has an active outreach program to major global financial institutions as well as development banks, NGOs, and other stakeholders with the potential to act as a force for good in the world. It works with major institutions to accelerate their efforts to tackle increasingly complex and interrelated challenges like climate change, social inclusion, and sustainable development in the spirit of encouraging collaboration and spurring a race to the top in making an impact for good in the world.

Now in its third year, the annual Capital as a Force for Good Report provides a snapshot of finance industry leaders’ engagement across ESG, sustainability and stakeholder engagement, in support of the UN Secretary General’s 2030 Agenda for Sustainable Development, and the 17 Sustainable Development Goals.

The first part of the report considers the current challenges and obstacles for the world to bridge the growing SDG funding gap, against the backdrop of the world’s financial resources and the stakeholders who control them.

The second part of the report examines the current and potential impact of the world’s major stakeholders on the SDGs, with a particular focus on the finance industry. The report identifies the common ground across the industry on broader ESG, sustainability, and stakeholder engagement matters, as well as highlighting specific initiatives by industry leaders with the potential to make a significant impact on the SDGs.

The third part details a series of multi-stakeholder transformational projects with the potential to make a significant impact on the SDGs.

The report’s analysis is based on a detailed dataset/database capturing the engagement and initiatives of 125 of the world’s largest financial institutions building on the research of the previous two Capital as a Force for Good report, charting the changes in engagement by industry leaders and their changing sustainability commitments.

This report would not have been possible without and relies heavily on the work by the United Nations, particularly UNCTAD, UNDP, UNEP, the Global Investors for Sustainable Development (GISD) Alliance, and the UN PRI, which have pioneered the global efforts in sustainably, development and inclusion.

The Advisory Council for Force for Good comprises:

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Capital as a Force for Good, 2022 Report

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ABBREVIATIONS AND EXPLANATORY NOTES

AuM  Assets under Management
Bn   billion
CDFI Community development financial institution
ESG  Environmental, Social and Governance
G7   Group of Seven
G20  Group of Twenty
GFANZ Glasgow Financial Alliance for Net Zero
GHG  Greenhouse gases
M    million
Mtoe Million tonnes of oil equivalent
OECD Organisation for Economic Co-operation and Development
OPEC Organization of Petroleum Exporting Countries
p.a. per annum
UN   United Nations
UNCTAD United Nations Conference on Trade and Development
US   United States
US$  United States dollars
SDG  United Nations Sustainable Development Goal
SEC  United States Securities and Exchange Commission
IN SUMMARY

1. A perfect storm of global economic, political and security shocks has drawn funding and attention away from global sustainability in 2022, compromising the spirit of COP26.

2. The cost of the UN Sustainable Development Goals (SDGs) has increased by c.25% to up to US$175 trillion, and the funding gap has widened at an even faster rate of 35% requiring up to US$135 trillion, despite record levels of global funding by the private sector last year.

3. Security and sustainability have become competing priorities, although in a globalized world one cannot be delivered without the other, with a total spending need of up to c.US$200 trillion to the end of the decade.

4. The conditions for deploying the world’s c.US$450 trillion in liquid assets and c.US$100 trillion in annual global GDP to meet these demands are not in place, and so it is easier to fund a mission to Mars than to fund education, housing or the end of poverty and hunger.

5. The SDGs today are seen as worthy causes, rather than as authentic business opportunities, making much of the 99% of the world’s capital that is invested for profit all but inaccessible.

6. The US and China are unlikely to lead the world to Net Zero, and unlocking capital will require a multi-stakeholder effort aligning the owners of capital (60% of which is owned by individuals), with the managers of it (who allocate 90% of global wealth), as well as the broader stakeholders in capitalism, including regulators, consumers, and producers.

7. Leading financial institutions contributed a record US$2.5 trillion to sustainability last year, with the most active companies outperforming the MSCI Global Financial Index by 6x over five years.

8. Without a radical plan, current approaches to meeting the SDGs will fail irrespective of funding levels, requiring a blueprint for the mass roll-out of renewables, digital solutions to education and financial inclusion, affordable housing, and others to drive a levelling up across the North-South divide and within countries.

9. The world will not accept austerity as the path to future sustainability, nor has it made the transformative breakthroughs in energy and natural resources that will make oil, gas, and coal obsolete, and so vested interests are set to clash and the issues are becoming politicized.

10. We are currently between two great eras in history but lack the transition plan to move forward. Beyond the transition, the human footprint scales far beyond anything seen thus far. The journey to there is fraught with danger and needs to be navigated with a shared commitment to a blueprint that can be funded profitably.

This report provides an in-depth picture of the capital needed, the flow of capital from sources to ends, through the hubs of today and tomorrow, and how it is being innovatively applied by leading financial institutions, the shortfalls in action and the potential breakthroughs required, including six areas where Force for Good is focused in making a scaled difference, and the transition path ahead.
I. Executive Summary

I. Funding a Multi-dimensional World in Crisis

At the mid-point between their creation and the 2030 target date, the world is not on track to meet the goals, with a significant funding need of US$135-176 trillion.

1. The SDGs are set to fail to be achieved by 2030 and risk needing many more decades, with the need up by minimum 15% to US$134-176 trillion

   ▪ The total cost of achieving the SDGs has increased by 15%-25% from US$116-US$142 trillion to US$134-176 trillion, driven by inflation, funding for Net Zero, historic underfunding, a persistent gap in official development assistance funding and a shortening window

   ▪ Progress on several SDGs has been undone including on global poverty, with over 100m more people in extreme poverty since 2019. Regarding education, 100 million additional children fell below minimum reading proficiency levels over the same period, and additionally 210 million more people are experiencing acute food insecurity

   ▪ The gap in funding has risen to US$102-135 trillion, with capital failing to flow for far more complex reasons than assumed, despite a record global SDG spending from all sources of US$3.6-4.7 trillion
2. The world's focus and commitment in accelerating progress towards greater sustainability has been set-back by a perfect storm of interrelated challenges in 2022 that has reset global priorities

- Russia's war in Ukraine has triggered a global energy and commodity shock with energy costs rising by up to 100% in markets already subject to supply side disturbances from two years of the global pandemic, exacerbating significant inflationary pressure.

- With global inflation expected at 6.6%, or 9.5% for the poorest individuals, and growth down one-fifth to 3.2%, rising prices are increasing the risk of stagflation amid a period of global economic slowdown and feeble growth that will leave many parts of the world poorer.

3. Governments with constrained fiscal policy options following the pandemic are facing the need for increased spending of US$59 trillion on security, including providing relief to vulnerable populations at home.

- US$24 trillion is estimated as the funding required for defense spending as countries address military security

- US$18 trillion is estimated for resilience and recovery stimulus for economic security, including US$1 trillion invested in oil and gas to address energy security concerns

- US$18 trillion is estimated to be the cost of protectionism and trade conflicts resulting from domestic populist politics

4. For “secure sustainability” the combined total funding requirement is US$194-235 trillion

- Security spending is estimated to require funding of US$59 trillion to 2030, to cover critical areas such as military, economic and energy security

- With the SDGs requiring US$134-176 trillion, the total funding requirement is US$194-235 trillion to 2030

Security and sustainability are perceived as competing priorities, placing global projects such as the SDGs and Net Zero at risk.

5. Global stakeholders are not currently playing the roles required to address the SDGs

- National government progress stalling. For the second year in a row, the world has not made material progress on the SDGs, with the UN’s SDG Index score for the year declining from 2020

- Politicization barriers rising in the West. Some western nations are internally divided on ESG, climate change and inclusion, which have become politically partisan themes,

- Financiers limited by client mandates. The global finance industry’s client obligations ostensibly limit its impact allocation for c.80%, US$320 trillion, of the financial assets they manage given their perceived mandates, risk, return, and regulatory requirements
1. **Individual awareness low.** Up to 50% of the world’s population is unaware of the SDGs, and are therefore not inspired to act as responsible consumers, citizens and individuals mobilized for change and ready for the transition ahead.

2. **Corporations uncommitted to Net Zero.** Among the world’s largest 2000 corporations 62% of companies have not committed to Net Zero. Even among those committed, the majority have no plan to get there.

3. **Scientific game-changing breakthroughs outstanding.** Science and research have not broken through on certain game-changing breakthroughs, with the world still dependent on fossil fuels for c.82% of its primary energy needs.

6. **Despite c.US$450 trillion in global liquid assets and nearly US$100 trillion of annual output, the conditions for this to flow to sustainable development are missing**

   - The lack of commercial business cases associated with funding the SDGs, positioning them as ‘causes’ rather than as opportunities, reduces the likelihood of SDG funding, as cases framed as opportunities attract over 100x times as much capital as CSR and philanthropy.

   - The US$4 trillion capital from development finance institutions, endowments and foundations is woefully inadequate, meaning the blended finance solution is immaterial in the scheme of global finance and the needs.

   - The priority for funding is well-established mandates, “keeping the lights on” areas, which for businesses include re-investing capital and profits which provides returns for owners and asset allocators, and for governments it means services provision to citizens.

7. **Current plans fail to adequately consider what it takes for capital to flow, how the system of capitalism works and the role of stakeholders**

   - There is no multi-dimensional plan for the SDGs recognizing the global transformations underway, including the energy transition, the digital transition, and mass inclusion, reconciling long and short-term priorities, environmental and social tradeoffs, and the varying levels of progress around the world.

   - There is no alignment plan that includes all the major global stakeholders to manage a transition, with existing frameworks focused mainly on collaboration between governments, the individual, financial institutions, corporations, scientists, and technologists need to be partners in the plan.

   - The execution plan is not sufficiently responsive to shocks, on-going disruptions require resilience and flexibility to be built in to adapt in the face of inevitable setbacks for the world, such as the security, political and economic ones being experienced currently.
II. The Building Blocks for Funding the Future

Unlocking the world's capital to underwrite a secure sustainable future requires changes to each of the building blocks of capitalism that drive the global system.

Building Block One: Capital Managers, Allocators and Owners

8. The world's capital is allocated by a few key stakeholders who are subject to important constraints and obligations

- The finance industry is the custodian and/or manager of 90% of the world's gross liquid capital (c. US$400 trillion), allocating the vast majority c.80% of this to mandates on behalf of clients and to fiduciary and regulatory requirements.

- Individuals collectively are the ultimate owners of 62% of the world's gross liquid capital (US$275 trillion), controlling these assets directly or through their choices of financial intermediaries, funding their needs and priorities.

- National governments control 38% of the world's liquid capital (US$167 trillion), mostly held by central banks and in public sector assets, needing to provide essential services to underwrite peace and prosperity for their citizens.

- Non-financial corporations directly control US$60 trillion in financial assets, making them an important allocator of global capital, although they remain accountable to (and ultimately owned by) shareholders.

Building Block Two: Financial Hubs

9. Global capital flows are routed by and through a series of major financial hubs, which are being re-ordered based on geopolitical, trade, and economic shifts

- The future flows of capital favor four major blocs representing 60% of global GDP and 70% of global market cap that are set to be the future superpowers - the US, EU, China and, over time, India - with their major hubs becoming increasingly critical for funding global challenges like trade, security, and the SDGs.

- Three leading global hubs are set to drop out of the top ten globally by 2030 due to the shift to a sustainable, digital era and the rise of major trading blocs that capture the value created by these changes. This is set to threaten the position of incumbent hubs such as Hong Kong and Singapore, but also Tokyo, and London as well.
Building Block Three: The System of Stakeholders

Stakeholders

10. Capitalism’s other stakeholders all have important roles to play in achieving the SDGs beyond those of capital

- The finance industry needs to recut its deal with clients to unlock US$320 trillion in funding, manage regulators and deliver innovation to fund the SDGs
- Science and research will need to develop breakthroughs and innovations in energy and materials sciences that are game-changing, in particular replacing fossil fuels and natural resources with renewable and sustainable alternatives; this perhaps alone will move markets
- Global corporations need to universally embed sustainability in their strategies, enter markets where they can have the biggest impact and fully account for the externalities, both positive and negative, that they generate, and negotiate the appropriate understanding with their stakeholders
- National governments need to embrace sustainability goals as a part of national security, prioritize sustainability initiatives, coordinate their execution, and set rules and standards to incentivize other stakeholders and collaborate with other countries to achieve the SDGs
- The tech sector needs to lead in driving the transition to the digital era, connecting the 33% of the global population not yet online, facilitating the adoption of e-government, and educating the global population on using its platforms
- Individuals who collectively account for 72% of global GHG emissions, make active choices to buy products, support companies, invest in assets, and vote for leaders that make a positive impact on the SDGs.

Finance Industry

11. The finance industry as the custodian of 90% of the world's capital has a critical role to play, and can evolve to be a potential 'force for good'

- US$130 trillion of assets are committed to Net Zero by 2050 by financial institutions, up nearly 50% from the past year
- US$30 trillion of assets under management are now fully ESG integrated, tracking last year's achievements
- US$2.5 trillion in SDG aligned financing was delivered in 2021, up 20% from US$2.1 trillion the previous year, and is increasingly balanced with goals relating to the planet, prosperity, and platforms each receiving US$0.7-0.8 trillion in funding
- US$345 billion of capital has been mobilized for social and inclusion linked investments, building on last year’s efforts
But also, US$742 billion in financing for fossil fuels reflects a mix of client, market, industrial, government and finance industry priorities. However, the industry as a whole is at an early stage of the transition. Sustainable finance represents only c.1% of the stock of total global capital of c.US$450 trillion.

The link between acting as a ‘force for good’ and shareholder value is a critical enabler of unlocking capital for sustainability, rewarding the most active finance industry leaders with 6x outperformance

- 36% annualized five-year total shareholder returns for the most proactively engaged companies, against 5% by the MSCI world financial index
- 20% annualized returns for finance industry leaders covered in this report

The Flow of Capital

The interplay of the building blocks above determines where global capital will flow and to which of several often-competing global priorities it will be allocated, including:

- ‘Business as usual’ currently requiring nearly all the c.US$450 trillion of liquid capital in the world to fund existing systems and maintain the status quo in the face of increasing volatility and disruptions
- Funding c.US$60 trillion in global security to manage crises and build resilience against future risks
- Long term sustainability - funding US$135-176 trillion for the SDGs and an incremental c.US$100 trillion between 2030 and 2050 for Net Zero, and
- Funding the future - investing in technologies that will drive the transition to the Digital Age

III. Capitalism for a Secure Sustainable Transition and Future

The extreme nature of the challenge requires a robust system of capitalism suited to transitioning the world to a far superior future. The requirements for this change are:

14. A capitalism that is sustainable. The current model would transition away from unsustainable ESG practices to sustainable ones, and thereby establish the industry as grounded in values which support the transition to a clean and sustainable model that is more secure and sustainable, aligned with the SDGs.

15. A capitalism that can address the issues, for acceptable risk, return, and impact. Today’s model would extend to populations unserved within rich countries, new geographies that are
left behind or left out, and therefore would determine how to fund the SDGs as viable opportunities to seize for acceptable risks.

16. A **capitalism that can build the future.** One that can fund the information age and the breakthroughs required, transforming the world for a new civilization, and finance to a form that is more inclusive, embedded, scaled and intelligent.

In order to deliver long-term peace, prosperity and freedom, capitalism will need to enable a secure sustainable transition to the future for the world.

**IV. An Agenda for Breaking Through**

Even if the necessary capital can be mobilized, the achievement of the SDGs within the current decade will require radical action including a strategy of mass “roll out” of existing solutions to make “big breakthroughs” in progress.

Selecting the right issues to tackle is critical and, in this regard, the UN has clearly prioritized climate change, and has also identified four key enabling transition areas, resulting in five key priorities:

**Existential Priority**

I. **Climate Change.** Meeting the globally agreed Paris Goals to limit global warming to 1.5C by achieving global Net Zero by 2050

**Enabling Transformations**

II. **Clean Energy.** Ensure access to affordable, reliable, sustainable, and modern energy for all

III. **Food Systems.** Transform global food systems to provide sufficient and nutritious food for all in a sustainable and resilient manner

IV. **Digital Connectivity.** Enable global connectivity and the equitable use of digital public goods, while ensuring data privacy and safeguarding human rights in digital spaces

V. **Human Capital Investment.** Accelerate more and better investments in people for greater equity and economic growth aligned with digital economic transformation

**Breakthrough Impact Areas**

VI. **Foundation for Dignity: Affordable Housing.** Unlock private sector capital at scale to create affordable housing and home ownership for the un- or under-served for 2.4 billion existing and new urban inhabitants by 2050.
VII. **Route to Opportunity: Mass Education.** Leverage digital technologies to overcome insurmountable resource and infrastructure shortages to delivering high quality education for all, including the 260m children out of school today.

VIII. **Path to Prosperity: Mass Financial Inclusion.** Roll-out a digital banking stack to drive basic financial inclusion across developing and least developed countries for the 67% of the world’s un-and underbanked.

IX. **Enable Empowerment: Technology and Individual Impact.** Use technology to impact and empower individuals for both individual and collective action as consumers, voters, asset allocators and direct actors.

X. **Symbiotic Co-Existence: Biodiversity.** Make a transformative impact on biodiversity through a few targeted solutions which can be funded and scaled for global impact.

XI. **Whole Systems Decisions: Impact Externalities.** Fully internalize the cost of externalities on corporate financial statements, fundamentally changing the view of return on investments and driving global capital (re-)allocation and positive externalities currently not being financed.

**Condition for Large Scale Mobilization**

XII. **Peace and partnerships.** Ultimately the achievement of just one of the SDGs depends on the absence of conflict and strife, with stakeholders working together on a common agenda.

In the past year, Force for Good has begun to pursue the six ‘breakthrough impact areas (agenda items VI-XI), working with partners in a multi-stakeholder manner, and expects that many others are already or will choose to address the SDGs with breakthrough initiatives.

**V. The Way Ahead**

This report shows that the demands on capitalism are greater than the supply of solutions, and at this juncture, it is the SDGs that are being traded-off.

However, not funding the SDGs challenges the stability of the platform and that cost is a painful one that is damaging all regardless of geography or status. It threatens mankind ability to realize a better future. The question of how one should realize that future lies between two extremes on the path ahead:

1. **Retreat to a Secure Position: A Preservation and Mitigation Mode.** This requires reducing our ecological footprint described as “1.75 planets” back to one planet, cutting back to the consumption levels of over half a century ago, including 60% less energy consumption, cutting industrial output by 75%, advanced economies dropping consumption by 60-80%, a near total ban on travel, and resulting in the wiping out over 40% of global wealth.
2. **Grow to a Secure Position: Moving Rapidly to a Future Model.** This requires the world to rapidly invest in a series of technological and other breakthroughs that can fundamentally reset current trajectories of ecosystem damage and create a step change in human progress. Central to this is a new clean, abundant, near free and ‘more functional' energy source, which with other technological breakthroughs would remake all aspects of life, and push the limits of what mankind can achieve, resulting in a twentyfold rise in GDP by 2080 and continuing to multiply exponentially thereafter.

Neither of these paths seems realizable for now, the first because of the unrest it would lead to in a world built on mass consumerism and facing the threat of populist extremism, and the second because time may well run out before pivotal breakthroughs are realized. The reconciled path is both practical and radical:

I. Preserving and Mitigating Damage to the Planet.
II. Achieving the SDGs as a Basis for Further Growth.
III. Launching High Impact Initiatives that Drive Step-Changes in Meeting the Goals.
IV. Building and Funding the Future.
V. Managing the Dislocations of the Transition.
VI. Efficient Maintenance and Preservation.
VII. Agreeing on Peace and a Modus Operandi to Manage the Shocks.

A managed path allows for the best chance to avoid the violent transitions of the past. And this requires all of us as stakeholders to engage in a new project to manage a peaceful transition to a superior future for all as a force for good.
II. Introduction: Progress Challenged by Conflicting Priorities and Worldviews

The global effort to fund the Sustainable Development Goals has been undermined by a series of threats to national and global security, with governments reallocating attention and resources away from long-term sustainability to managing near-term risks. As a result, the goals are moving further away despite the timeline to achieving them shortening, while the funding gap is widening. However, global security and global sustainability are inextricably linked, and one cannot be adequately resolved without addressing the other. The challenge for the world is therefore to manage and fund both in an integrated manner that minimizes near term trade-offs.

1. Rising competition between security and the SDGs

Stark and powerful challenges come to the fore

Seen through a myriad of lenses, the present day is the greatest time ever to be alive. The world has seen greater development during the past century than over any other period. Global prosperity has risen with global GDP expected to cross the US$100 trillion mark for the first time this year, having increased over twenty-fold while the global population has quadrupled. During this period, global life expectancy has increased from under 40 years to currently 73 years, and the global child mortality rate fell from 32% to 4% over roughly the same period. At the same time, global literacy has almost tripled, from 31% in 1920 to currently just under 90%.
Never in history has there been more prosperity, more knowledge, more innovation, and less suffering than today. As if to match these, a series of systemic challenges has arisen that, if not well addressed, pose potentially unbounded risk to further progress and existential risks to human civilization. The story today is therefore more about the consequences of the shape of the progress, the gaps, rather than the achievements. Unless a quite different approach is taken, the future story might also be about mankind’s overreach and failure to address the challenges and gaps that came from its earlier success, and inability to prioritize and progress its situation with more breakthroughs.

At the fore is climate change driving environmental and ecological damage, the total cost of which, if left unchecked, could reach US$178 trillion over the next 50 years by some estimates. Long-term global economic power is shifting due to demographics and development, with Asia’s share of global GDP rising from under 30% to over 40% over the past two decades. At the same time inequalities in wealth and access to opportunities is increasing with half of the global population owning just 2% of global wealth. Mass migration driven by income disparities and climate is growing, with 270 million people, 3.5% of the world’s population, currently classified as migrants, a number that is estimated to grow to as many as one billion people by 2050. However, despite ageing populations and demographic disaster facing even the most advanced nations, the willingness to accept migration is falling in many developed countries where populism is defining people by their differences rather than their many commonalities.

Technology-based innovation, the critical tool for progress, is disrupting economies, societies, and politics, with the accompanying dislocations driving polarization and an increase in isolationism and nationalism. The resulting civic disaffection and cultural conflict, further amplified by new media technologies, is increasingly challenging current social orders, weakening the global community’s ability to respond to threats such as climate change, pandemics, and cybersecurity in a coordinated fashion.

These long-term challenges have been further exacerbated by recent events. Russia’s invasion of Ukraine brought interstate conflict back to Europe after over 75 years of peace, challenging the ‘peace dividend’ that following the end of the Cold War in 1989 allowed NATO countries to reduce defense spending by 25% of more, reallocating funds to social priorities such as education and healthcare. This paradigm shift has placed more basic human security back on the agenda in a raw and fundamental manner. The risk that this currently bilateral conflict triggers a broader regional war has risen significantly given the confluence of challenges the world faces, a risk further corroborated by the Global Peace Index showing a deterioration in overall global peacefulness in 11 out of the past 14 years.
Capital as a Force for Good, 2022 Report

Against this backdrop, in 2015 the UN led the way by rallying nations to the noble imperative of creating a more inclusive and sustainable world, embodied in the 17 Sustainable Development Goals, secured by the agreement of all 193 UN members to be met in a 15-year global effort. At the half-way mark of this effort however, the world is facing a series of interrelated and ‘contagious’ political, economic and security crises that threaten global peace, prosperity, and freedom. This is coupled with a resistance to change at multiple levels of society including from economies and industries that were established during the industrial era on the back of fossil fuels. These forces are now powerful enough to put into doubt whether the world will achieve the SDGs.

The rising competition between sustainable development and global security

In 2022, two distinct priorities define the global agenda. One is sustainable development, and the other is global security, both of which need to be met in the context of a world transitioning to a digital information future.

Sustainable development embodies within it the full gambit of issues encapsulated in the SDGs, from those that are immediate, related to hunger, poverty, and lack of clean water, to the existential threat to the planet’s ecosystem from climate change, biodiversity loss and pollution. Global security captures both immediate threats to peace and the longer-term risks to security at the individual human level, the national level, and the geopolitical level, among others.

Figure 1: A Perfect Storm – Key Global Events Since COP26

A Perfect Storm– Key Global Events Since COP26

[Diagram showing key global events since COP26, including oil price up 100% y-o-y, IMF cuts 2022 growth to 3.2%, European wildfires, Chinese military drills around Taiwan, etc.]

Source: Capital as a Force for Good Initiative, FAO
Since COP26, the world has been shaken by a series of interrelated events that have created significant and unpredictable risks to global stability. Global inflation was rising significantly following the unprecedented stimulus in response to the pandemic and the release of pent-up demand. However, 2022 has also seen rapidly rising energy prices and acute supply disruptions from Russia’s invasion of Ukraine, depressing economic activity globally and disrupting recoveries that governments with limited financial headroom have been ill-equipped to manage. Russia’s war helped ignite these issues into a global economic, political and security storm that has fundamentally impacted the world’s trajectory for the remainder of the year, and likely for years to come. Indeed, the repercussions of this war are so far-reaching, they may come to define the new global order for some time as countries the world-over take sides and lose focus on other issues.

While the need for the world to underwrite long-term sustainable development is widely recognized, the year to date has demonstrated the power of short-term security and stability considerations to derail the global movement to greater sustainability. The need to address the interrelated security and economic crises has fundamentally shifted the priorities of global leaders, who in the aftermath of COP26 declared the climate action failure as the most severe risk facing the world over the next 10 years. Today, these same leaders are more urgently focused on local issues driven by spiraling inflation, stalled growth, energy, food, and national security.

As a result, most Western leaders would contend that spending billions on long-term sustainable development of developing economies in the Global South is a luxury they can currently ill-afford in the face of domestic electorates struggling in cost-of-living crises or (in the case of European countries) increasing Russian aggression. While climate change is of crucial interest to large parts of their population, it is not competing well with economic stability or national security in times of perceived uncertainty.
Competing demands risk creating dangerous trade-offs

The resulting consequences for the global sustainability transition are severe. Lower growth, economic crises and increased defense spending all reduce the capital urgently needed to fund the transition to sustainability at a critical juncture for the world, and the revival of fossil fuel risks further undoing the world’s insufficient progress on the energy transition. Both security and sustainable development have significant capital requirements.
Global commitments to the SDGs in 2020/21 totaled US$3.6-4.7 trillion, a significant sum but one that would only be sufficient to cover the current cost of just the climate transition for one year, rather than all 17 SDGs.\textsuperscript{10} This implies that the rich nations of the West believe the world, when it comes to sustainable development at least, has time on its side when in fact scientists have been clear it does not.\textsuperscript{11}

With regards to security, the West appears to have accepted that the peace dividend following the Second World War has been spent, and they are back in a scenario of arming up again with urgency. Global defense spending crossed US$2 trillion for the first time in 2021 and is set to increase further. It would appear therefore, that the two issues, sustainable development and human security are competing for both attention and capital.

\textbf{2. Funding global security}

The global security challenges facing the world today are of a severity and reach such that they demand attention and capital. The human security issues that have arisen today have damaged individuals’ basic freedoms, even in advanced economies – including access to sustenance, personal safety, and basic rights – and are multi-dimensional in coming from powerful social, economic, environmental, and political sources. Indeed, global safety and security decreased for the first time in five years, according to the Legatum Institute's 2021 Prosperity Index.\textsuperscript{12} A total of 63 countries saw declines in political freedom in the past year, with 38% of the global population living in countries considered ‘not free’, the highest proportion since 1997.\textsuperscript{13} Further, while the war in Ukraine has captured the world’s attention, it is only one of over 100 conflicts being fought in the world today.\textsuperscript{14}

The key security risks that have arisen in the past year span defense, energy, food, economic and political security challenges across the world’s major countries. Taken together, they represent a threat to geopolitical security and the liberal world order that has underwritten it.

Cumulatively the world’s recent security challenges may cost an estimated incremental US$59.4 trillion to 2030, globally.
Military Security. Countries around the world have committed to increases in defense spending in the wake of Russia’s invasion of Ukraine, NATO has expanded, and new alliances like the Asian Quad are being formalized further, helping to drive a global wave of rearmament. While this will drive security for many, it will also make multi-lateral engagement on sustainable development more challenging, diverting resources and more importantly political goodwill away from international collaboration.

Energy Security. Russia’s invasion of Ukraine has seen Western countries move to reduce or eliminate fully imports from Russia, Europe’s largest energy trading partner and the world’s largest gas and second largest oil exporter. This in turn is driving renewed investment in fossil fuel exploitation, risking the Paris Agreement to reduce these investments by US$500 billion by 2030. At the same time enhanced security risks are calling for diversification of energy sources to increase resilience.

Domestic Political Security. Liberal democracy in many advanced industrialized countries is threatened by increasing waves of nationalism and populism, driving societal unrest and social conflict. With many governments feeling that they lack the mandate to focus on (international) sustainable development, some nations have been adopting isolationist and ‘country’-first policies. The world is seeing non-tariff trade barriers rising seven-fold in the decade since 2010, and restrictions on foreign investment relating directly or indirectly to national security concerns about foreign ownership of domestic assets, all of which has been damaging global cohesion.

National Economic Security. Finally, governments need to make greater investments into preparedness to deal with global shocks in the coming decade, including both investments to build greater resilience and investments providing relief when this resilience is insufficient. This may well require deploying similar amounts in fiscal stimulus to the US$16.9 trillion deployed during 2020/21 to boost recovery from the coronavirus pandemic, further driving global indebtedness. The combined force of these security challenges is already reshaping global supply chains and globalization and is set to test the world’s incumbent leader’s resolve to work together to make a better world. Additionally, the sheer scale of the financial cost of US$59.4 trillion through 2030 (equal to c.6% of annual global GDP) and the perceived near-term urgency of these challenges carries with it the risk of crowding out other spending priorities for the world, in particular for long term matters such as sustainable development.

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**Figure 3: The Rising Cost of Global Security, Partial List**

<table>
<thead>
<tr>
<th>Security Category</th>
<th>Strategic Risk Management Measures (Actual and Potential)</th>
<th>Estimated Global Cost Through 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Security</td>
<td>Defense spending (G20 countries lift annual defense spending to 2% of GDP)</td>
<td>US$23.6 trillion</td>
</tr>
<tr>
<td>Energy Security</td>
<td>Upstream oil and gas investments (announcements by 20 largest oil majors)</td>
<td>US$0.9 trillion</td>
</tr>
<tr>
<td>Domestic Political Security</td>
<td>Protectionism and barriers to trade increase</td>
<td>US$18 trillion</td>
</tr>
<tr>
<td>National Economic Security</td>
<td>Creation of recovery and stimulus funding reserves</td>
<td>US$16.9 trillion</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>US$59.4 trillion</td>
</tr>
</tbody>
</table>

Source: Capital as a Force for Good Initiative
3. Funding the SDGs

At the halfway mark of the UN Sustainable Development Goals' 15-year lifespan, it is increasingly clear that meeting the goals will be a tall order for the world, with the annual funding gap inflated by the pandemic and the war. As we have seen, the events of 2022, with a security dimension, represent alternative calls on global funds that threaten the continued funding of the SDGs. Further, recent estimates following last year's COP26 meeting on the near-term costs of funding global Net Zero point to significant spending increase requirements, exacerbated by the roll-over of continued underfunding in 2021.

This study has re-examined the cost and the gap to deliver the SDGs taking into account the many disruptions of the last year, and the continuing failure to fund while the window to correct this closes. The results are that these factors have increased the annual cost of funding the SDGs by US$3.5 trillion over and above that estimated in the 2021 Capital as a Force for Good report to a current estimate of c.US$15-20 trillion annually, an increase of c.30-40%. This increase is driven by inflation, needed funding for Net Zero, roll-over costs from historical underfunding, and a persistent gap in ODA funding. The recalculation estimates a total cost to fund the SDGs of US$135-176 trillion to 2030, The detailed analysis is presented in Appendix 1.1.

Figure 4: Updated SDG Funding Need

2021 SDG Funding Need and Gap in US$ trillion
Given that only a quarter of the current need is being funded, the annual funding shortfall is estimated at US$11.4-15.0 trillion, a c.35-50% increase, with a gap of US$103-135 trillion to 2030. The implications are dramatic. The world is currently investing 4-5% of its GDP annually towards the SDGs. Fully funding the SDGs would require spending to increase four-fold to 16-20% of GDP.

The importance of the SDGs in underpinning peace, prosperity and freedom in the world is well established. The achievement of the SDGs within the next decade is critical for the world to avert the crises that will result from over-exploitation of resources, extreme weather events, pollution and biodiversity loss, poverty and inequality, political and social strife, and mass migration. The world is set to fail to fund the resolution of these issues in line with their commitment of 2015. Clearly, a more urgent focused, integrative, and scaled approach is required to rapidly increase the levels of SDG financing to the necessary levels, recognizing that a dollar invested now is worth more than a dollar invested later, and that the costs of inaction far outweigh the cost involved, no matter how high they may seem.

4. Human security goals and the SDGs are intertwined

The total SDG funding requirement over the next decade of approximately US$135-176 trillion, would be extremely challenging under any circumstances. With an additional c.US$60 trillion required for global security, the total spending need requires the world to reallocate nearly half of the world's capital of c.US$450 trillion in global gross liquid assets, while continuing to meet all other current and future commitments for funding such as healthcare, education, pensions, infrastructure renewal, and investments in the future, among others, particularly in advanced industrialized countries.

Fundamentally however, the notion that global security and sustainability goals are mutually exclusive priorities in their demands on global capital, resources and leadership attention is fundamentally flawed. The two are inextricably linked. Given the role of the SDGs in mitigating human, economic, social, political, and planetary risk, the major difference between global security and sustainability is one of timing and emphasis. The SDGs aim to invest for the longer-term horizon to 2030, while being concerned with the immediate crises facing the world with a focus on people and the environment. In contrast, global security goals are highly responsive to immediate risks while investing for the longer-term aim of delivering stability and are typically more focused on military and economic security.

Given the UN's role in both the SDGs and human security, if we draw on the UN's definition of human security, it covers seven dimensions comprising economic, food, health, environmental, personal, community and political security. Taking these seven dimensions and mapping their relationship to the 17 SDGs points to the deep linkages between the two.
Without security there can be no meaningful sustainable development, and without sustainable development, human security is put at risk. So, while trade-offs are being made against two seemingly separate buckets, ‘security’ and ‘development’, they should rather be seen as one bucket. Due to their interrelated nature however, any shortfalls in addressing development issues will lead to increased security risks (and cost) and any shortfalls in security will raise the bar for driving sustainable development.

The choice between security and development therefore is an illusory one and both need to be met to underwrite the world’s continued peace, prosperity, and freedom, implying that the world will need to fund the total sum US$195-236 trillion through 2030. More radical solutions will need to be examined where existing proven scalable solutions are applied to make a difference to what seem like intractable problems.

Today’s world scenario provides the perfect example where a security failure or transgression resulted in a war that has negatively impacted supply chains, and economic activity. In turn this has impacted prosperity, health, and education outcomes directly for affected regions, creating a ripple-effect the world over given the globalized nature of economics, trade, and politics. This has diverted funds from sustainable development to arms purchases, leaving a less stable and sustainable world in the wake of the conflict. Ultimately, with
development impaired, short term and longer-term security have been compromised for the world. The emerging challenge for the world therefore is to fund both security and sustainability while minimizing any near-term trade-offs between the two given the urgency of both, in a mission to deliver ‘secure sustainable development’.

5. Funding the future

Of course, today’s capital is already accounted for in supporting today’s business as usual, which has a call on virtually all the world’s capital and involved funding an expensive status quo (barring any dramatic change of heart in the citizen’s will), which comprises the normal consumption, savings, and investment requirements, and maintaining existing security and sustainability investments, thereby “keeping the lights on.” Funding the SDGs and security have a tough task to compete with this incumbent call on capital.

In addition, there is one other major category that is set to place perhaps the largest demand on capital, and that is funding the future. The world’s most successful entrepreneurs and companies have always been those that have harnessed innovation to drive progress and development, such as the railroad barons and industrialists in the 19th century, and information technology companies in the 20th. The astonishing wealth creation of companies that fund and scale breakthroughs in energy, infrastructure, transportation, communications, and technology has always been a powerful lure for capital, which gravitates to the highest return opportunities.

The world today is in a historic transition from the industrial era to a digital one. While global security is needed to establish a stable world, and the SDGs are required to level up the world, ultimately, the biggest investments will be made to create a new future as different from today’s as today’s is from the preceding agricultural era.

The building blocks of such a civilization would require a series of fundamental breakthroughs to be funded, achieved, and scaled, including new energy sources and natural resources that replace carbon with ones that are clean, scaled, cheap and global based on fundamental scientific breakthroughs. This era would also be characterized by its use of artificial intelligence, computing, and data sciences, a more pervasive distributed form of capitalism that drives mass inclusion, an
interconnected empowered global population, where the metaverse provides for an alternative platform for digital experiences and consumption, and where man has moved beyond the earth. The funding need for this transition is difficult to estimate but is likely to be vast, dwarfing the capital that exists today. While over time the investments required will be self-funding, in the near term, funding the future risks competing with those required to ensure security and sustainability.

Stepping back, the resulting overlapping and competing demands for global funding are scaled and complex, and meeting these will require a significant reallocation of global investment capital, the redirection of global capital flows and the alignment of stakeholders to do so while protecting them during the transition.

**In summary**

- The world is undergoing a series of shocks that are threatening global security and risk the SDGs being neglected by the global community.
- These shocks have also had a direct impact on the SDGs, undoing progress from previous years and raising the total need to US$135-176 trillion and widening the total funding gap to US$103-135 trillion.
- This amount, combined with the c.US$60 trillion of additional capital required to fund global security raises the total need to US$194-235 trillion and represents a significant portion of the world's liquid capital which needs to be unlocked.
- Ultimately, security and sustainability are two sides of the same coin and can only be solved together, requiring the world to adopt an integrative approach to funding these challenges.
- Investing in the future represents a potential short-term competitor to funding secure sustainability over the short-term, but over the long term it can deliver the innovation and returns needed to fund the SDGs.
III. All the Money in the World, And Who Has It

The US$194-236 trillion of capital needed for global security and the SDGs over the remainder of the current decade represents an almost insurmountable challenge to fund. However, with c.US$450 trillion in gross liquid assets and US$95 trillion in annual economic output, there should be sufficient wealth, and wealth creation, in the world to fund these amounts. However, unlocking these amounts for secure sustainable development is about mindset as much as it is about money. It requires the alignment of capital owners, managers, rule makers, and the hubs through which capital flows, as well as the other stakeholders that have a role to play in the system of capitalism. Rather than being in issue for the world’s financial institutions to solve, this will be a multi-stakeholder effort that impacts the core building blocks of the prevailing model of global consumer capitalism.

1. The map of global capital stocks and flows

During 2021, total global wealth increased by 13% to reach US$809 trillion in global assets, both liquid and illiquid. This increase was driven by a macro-economic recovery fueled by the unprecedented liquidity injected into markets around the world and recovery from the coronavirus pandemic. Real global GDP expanded by 6.1% during 2021, following a contraction of 4.9% in 2020. Global debt hit a high of US$303 trillion, jumping by a record US$77 trillion helped by persistently low interest rates, while global equities returned 18.5% in 2021, adding a further
US$14.3 trillion in global wealth.\(^\text{19}\) These increases in liquid asset prices were mirrored by illiquid asset price growth, albeit in a more moderate fashion, with global house prices rising by 10.3% on average during the year.\(^\text{20}\)

In terms of global capital flows, the world's 6.1% GDP growth translated into US$95 trillion of economic output. This includes US$5 trillion of incremental household consumption over the previous year. The key pools and allocators of the world's wealth include:

- **US$809 trillion of gross assets** (including debt), comprising c.US$450 trillion in gross liquid assets (55%) and US$365 trillion of gross illiquid assets (45%).

- **Deducting debt, US$659 trillion of total net assets** are estimated to be in the global financial system in the year 2021, comprising US$369 trillion in net liquid assets and US$290 trillion of net illiquid assets, 70% and 80% of which, respectively, are held by individual households.

- Taking the **c.US$450 trillion in gross liquid assets only**, US$274 trillion or 62% are owned by individuals, 38% are owned by governments (through their central banks, sovereign wealth funds and public finance institutions) with less than 1% coming from endowments and foundations.

- **66% of these gross liquid assets** (US$295 trillion), are allocated by asset owners to 'asset gatherer-allocators', although the degree of control that asset gatherer-allocators have over the assets they administer varies significantly.

- **US$104 trillion in assets are controlled by direct investors**, or third-party asset managers, who receive funds from both asset gatherer-allocators and directly from ultimate asset owners.

- The **finance industry as a whole therefore administers a total of c.US$399 trillion in gross liquid assets**, or 90% of the world's total, recognizing that there will be some double counting in the US$399 trillion of assets due to direct investors receiving funds from asset allocators.

- Additionally, **US$60 trillion in gross liquid assets, are held by non-financial corporations**, who while not the ultimate owners of their assets (belonging to their shareholders), have a significant impact through their decisions about how they do business.

- **56% of the world's liquid capital is held as debt**, although public equities represent the world's largest single asset class, worth US$92 trillion. Other liquid asset classes include (by order of size) government debt, corporate debt, financial institution debt, cash and deposits, private equity, and consumer debt. These numbers have some double counting between them.

- **In terms of illiquid assets, US$256 trillion, 70% of the US$365 trillion in gross illiquid assets, are owned and managed by individuals**, while 30% are owned and managed by governments (through direct investment and public sector undertakings).
Only c.1% of the world’s liquid wealth has currently been allocated to sustainable assets and strategies, led by sustainable debt 0.2% and sustainable equity 1.1%.

In addition, some key observations that arise from examining the “global flow of capital” (see Figure 6 below):

- US$95 trillion of global GDP represents the total economic output of the world’s economy generated annually, reflected in the production and consumption of goods and services (73% of the total) and in capital formation or investment (27% of the total).
- Households represent 78% of total global consumption, and their US$54 trillion of annual spending accounts for over half of global GDP.

The table outlines the global stock and flow of financial assets as of year-end 2021.

Figure 6: The Global Stock and Flow of Capital

### The global stock of capital

<table>
<thead>
<tr>
<th>A. Asset Owners: Net Assets (US$657tn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Household Wealth</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Direct Owners (US$104tn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank: US$83tn</td>
</tr>
<tr>
<td>Pension funds: US$5tn</td>
</tr>
<tr>
<td>Insurance: US$4tn</td>
</tr>
<tr>
<td>SWFs: US$1tn</td>
</tr>
<tr>
<td>Family offices: US$7bn</td>
</tr>
<tr>
<td>DPF: US$7bn</td>
</tr>
</tbody>
</table>

### The global flow of capital

- Final Consumption: US$56tn (73%)
- Capital Formation: US$26tn (37%)
- Individual Consumption: US$54tn (26%)
- Government Consumption: US$15tn (22%)

Source: Capital as a Force for Good Initiative
This analysis provides a snapshot representation of the global financial flows through the system. Stepping back, the breakdown of the world’s wealth offers several key takeaways for the funding of global security and sustainable development:

- **The world has never had more capital at its disposal than it does today, at c.US$450 trillion in gross financial assets.** Total global wealth is at its highest point in human history, with global financial assets up 11% against the previous year. Conversely, the capital needed for funding secure sustainable development has also increased by c.30-40% due to events, inflation, and the cost of inadequate action.

- **Effective control of the world’s capital is vested across four key stakeholders,** whose collaboration will be required to deploy it effectively:
  - **Households own US$275 trillion in gross liquid assets** (62% of the total), although their level of control over asset allocation varies (from very high with direct investments to lower for their pension fund assets)
  - **Governments own US$167 trillion in gross liquid assets** (38% of the total), but are individually the world’s largest allocators of capital given their scale and public spending roles
  - **The finance industry administers US$399 trillion in gross liquid assets** (equal to 90% of the total) of households and governments, acting in a variety of roles ranging from custodian to direct investor to effective asset owners
  - **The non-financial corporate sector directly controls US$60 trillion in gross liquid assets** but are accountable to their shareholders as the ultimate owners of these assets.

- While recognizing that ultimate asset ownership and control often diverge (and lead to some double counting of assets), these numbers provide an indication of the stakeholders that need to work together to mobilize capital at scale.

- **Global GDP is expected to reach nearly US$100 trillion in 2022, 3.2% higher over the previous year, and growth continues to be a yardstick by which the world measures progress and development.**

- **The individual is also a power player in consumption, representing US$54 trillion or c. 78% of total consumption of US$69 trillion in the past year.** Their collective decision to choose to buy differently has a material impact on the value generated by corporations that hold their stock.

- **Just over 1%, US$6.4 trillion, of the world’s gross liquid assets are held as sustainable investments.** A small but increasing portion of global wealth is already being allocated to sustainable assets. However, the estimated spending requirement of US$195-236 trillion
for security and the SDGs overall implies the need for a near fifty-fold increase in these assets within the current decade.

- **The stock of net illiquid assets of US$290 trillion has an important long-term role to play.** The world has a large stock of largely physical assets in the hands of stakeholders, of which households are the most powerful owning 80% (mainly in the form of home ownership) and the government owning the balance. This includes property, which as it is maintained and replaced, will have an important role to play in sustainability.

- **Corporations with direct control over US$60 trillion of gross liquid assets have an impact through the capital they allocate** to activities and actors around the world. While this sum is significant, corporations are often constrained in terms of their investing flexibility due to their mandates and need to fund the cost of their own business activities with working capital and investments, with only a small portion of their total liquid financial assets ‘invested’ in the traditional sense.

  Note: The overlap between stakeholders is clear given the amounts add up to far more than the c.US$450 trillion of gross liquid assets.

Clearly, without alignment of goals, interests and actions, the world’s biggest issues cannot be funded.

This understanding of the origins, flow and destinations of capital and the various roles of the participants, demonstrates the pivotal role that various stakeholders will need to play in determining where capital should flow to.

### 2. The role of financial hubs in directing capital flows

Global finance is dominated by a few key financial hubs. New York, London, Hong Kong, and very few others, and these have concentrated much of the world’s financial activity across banking, asset management, insurance, and capital markets, and have therefore served as nerve centers for the global economy, in some cases since the beginning of the 20th Century.

However, the shift to a sustainable, digital era and the rise of major trading blocs that capture the value created by these changes is set to upend the hubs of the industrial era. This will have a significant impact on the global flow of funds, which will shift to and through new financial hubs in innovative ways across the world. The resulting flows of capital favor four major economic and trading blocs that are set to be the future superpowers - the US, EU, China and, over time, India - and their major hubs will be increasingly critical for funding not only the SDGs and security in the near term, but also the longer-term shifts to a secure sustainable future as part of the information age.
Figure 7: The Top 15 Global Financial Hubs by Decade

The top 15 global financial hubs through 2050

<table>
<thead>
<tr>
<th>2020 Ranking</th>
<th>2030 Ranking</th>
<th>2040 Ranking</th>
<th>2050 Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. New York City</td>
<td>1. New York City</td>
<td>2. Beijing</td>
<td>1. New York City</td>
</tr>
<tr>
<td>7. Beijing</td>
<td>7. Shanghai</td>
<td>8. Tokyo</td>
<td>7. Shanghai</td>
</tr>
</tbody>
</table>

Source: Capital as a Force for Good Initiative

Discontinuity from Sustainability, Digital and the Rise of Four Superpower Blocs by 2050. Three major global discontinuities impacting financial hubs and their relative position are the shift to the information age, the sustainability transition (including the accompanying energy transition), and the emergence of a multi-polar world consisting of four superpower blocs: the US, the EU, China, and India, which have the largest economies, populations, and resources.
These Changes Have Far Reaching Consequences for the World, and Certainly for How Money Will Flow. These discontinuities have already been fundamentally changing the way businesses across all sectors need to operate, and finance is a major force that will be required to underpin these changes.

Financial Hubs are Critical Points or Conduits of the World’s Trade, and Will be Impacted by Changing Flows. As key centers of global wealth creation, financial hubs have a critical role to play in the coming transitions, and the hubs that can reinvent themselves will increasingly monopolize the flow of capital, which will lead to other hubs losing relevance and their leadership positions.

Future Leading Hubs Will be Conduits of the Finance of these Superpower Blocs and for Accessing the World Population. Future leading hubs will require more than a scaled asset base and accompanying scale in business activity and volume, they will also need to finance solutions to global issues, requiring scale and innovation in applying finance.

The Shake-out Will Lead to a Small Group of Hubs Being Strategic and The Rest Being Distribution Hubs for Them. Two different models for future financial hubs are set to emerge, one strategic, focusing on strategic decision making in the global allocation of capital, and the other, more tactical and execution oriented, serving as a base for asset gathering and the distribution of financial services. This distinction will become clearer over time as the world’s superpower blocs increasingly collaborate and compete for position.

Geopolitical Power, Sustainability and Technology Favor America, the EU, China, and Over Time, India too. Recognizing the on-going power of the US, New York, and San Francisco, can be expected to take pre-eminent positions reflecting the importance of finance and information age technology, respectively. Beijing rises to reflect the rising economic and broader power of China, and both Paris and Frankfurt are beneficiaries of the leading scaled position of the EU, while Mumbai rises over the coming decades to become a top ten hub.

London, Hong Kong, and Singapore Will Need to Rethink Their Strategic Relevance to the Superpower Blocs, in Particular. Many current global financial hubs, like Hong Kong and Singapore, are set to see their positions erode in the coming decades despite their strengths and history. London is also set to decline given its increasing alienation from the EU, (which also makes it less important to the US, China, and India.
Population and Financial Inclusion Matter, with Digital Allowing These to Be Accessed Across the World, Beyond the Top Hubs Too. There are several strategies that today’s hubs can employ to defend or even improve their relative positions, including aligning with the leading superpower blocs, allocating capital for financial and broader inclusion in developing powers and countries using digital strategies to overcome the limitations of their physical location.

Ultimately, finance will flow through digital hubs and innovators from across the world will be participants. However, the transition will see those with economic, trading, and political power supersede those that lie at the periphery of the superpowers.

3. Multi-stakeholder capitalism and its flows to fund secure sustainability

Given there appears to be enough capital in the world, and it has grown even as the world faced extreme crises, many leaders call for the SDGs to be funded. However, they have not been funded, and the gap continues to widen. So, what does it take for capital to flow to the SDGs?

The answer lies partly in addressing a common false assumption. Namely, that individual actors in the system, particularly financial institutions, if they chose to, could divert capital to the SDGs without undermining the system, and for some reason they are choosing not to. This assumption is too simplistic and needs to be grounded in understanding that the flow of capital is determined by a system and each player is part of the system. Changing the system in a secure manner requires an understanding how the system works (i.e., its design principles), the role of the key players in the system and the determinants and levers that enable it to change.

The design of the system is based on demand fueled by ever increasing consumerism which is met through an

![Multistakeholder Consumer Capitalism](Source: Capital as a Force for Good Initiative)
alignment of interests of all stakeholders to ensure supply is met at a profit adequate to pay for risk and investment.

Various stakeholders play a role in the system with varying positions and power, with each role moving the system along. Individuals drive household consumption representing the majority 57% of global economic output. The world’s political and economic systems operate to meet these demands, often at the expense of other long-term priorities. Governments rise and fall based on their ability to provide prosperity to its citizens that funds their consumption. Corporations rise and fall based on their ability to deliver the goods and services desired, and financiers ultimately rise, and fall based on their ability to fund the companies that deliver. Other participants in the system, scientists, innovators, technology providers and media, for example, play their role in both the demand and supply side of the system, providing the means by which each operates more efficiently and effectively, but essentially helping consumption and production to grow.

The level of consumption and production in the current system has already resulted in vast consumption of the planet’s resources. This has not been accounted for properly in the valuation of the impact of the activities, thereby treating natural resources, and often human resources, as a ‘free’ asset in the working of the system. This approach has distorted the calculation of financial and ethical value, promoted activities that are unsustainable and dangerous to the world’s biosphere, often out of sync with the core values of stakeholders, leading to the consumption of the world’s resources at an alarming rate.

However, capitalism has also lifted billions of people out of poverty delivered the innovation that has made the modern world possible and created the wealth and prosperity that an increasing part of the global population enjoys today. Accordingly, the goal for the world needs to be the evolution of capitalism such that it can deliver secure sustainability for all, rather than overthrowing the whole system.

The key levers for changing the system and its flow of funds include the values, culture and behaviors that confer personal and social value to activities, positions, and outcomes; accounting, legal and regulatory requirements that determine the valuation of activities and the rules of engagement; innovation that changes the value of assets, and economics that determine profit, scale, and growth. Building secure sustainability into the system itself will require adjusting these levers, beginning with the adoption of a more integrative approach to calculate profits, pricing both the positive and negative externalities of actions into corporation’s profit and loss accounts.
Systemic change such that secure sustainability is funded requires changing the mindset of global stakeholders to align and coordinate on capital allocation, which cannot be accomplished without changes to demand, production, innovation, regulation, and rewards. Viable and sustainable change requires consumers to rethink their consumption and value of consuming, governments to change the rules of engagement, scientists, and innovators to deliver new products and ways of delivering these, and ultimately businesses to do business differently and financiers to fund those most likely to succeed in meeting demand.

Such a multi-stakeholder alignment would redirect the flow of funds. Clearly, this is not the only way systems of capitalism change, shocks can also change the system and history has many examples.

The case for change is clear. The challenge is to ensure that each participant understands what their role is, what the implications are for their lifestyles and operations, and to be accountable for making the change. This is far less clear than it needs to be.

**In summary**

- The world’s c.US$450 trillion of liquid wealth appears to be sufficient to fund global security and the SDGs through 2030 and beyond.
- Deploying these assets at scale for secure sustainability however will require the alignment of the world’s most important asset owners and allocators, namely the finance industry, individuals, governments, and non-financial corporations.
- Deploying the necessary vast sums will require the world’s financial hubs that route global capital flows to also play a critical role and that power is set to be concentrated in the US, EU, China, and over time India.
- However, achieving the SDGs will require more than just money. They will require fundamental changes to the current consumption driven model of capitalism that runs the global economy.
- These changes require changing the mindsets of all the stakeholders of the system, aligning the goals, efforts, and behaviors, with stakeholder each playing unique and critical role in meeting the SDGs, delivering security, and funding the future.
- These are the building blocks for a multi-stakeholder engagement to align interests, create the blueprint, identify the solutions, and fund and implement the goals.
IV. The Finance Industry: Funding Sustainability

As the stakeholders in the world’s capital, the finance industry with c.90% in its custodianship has a potentially unique role to play in achieving the SDGs. Over the last three years, the Capital as a Force for Good report has analyzed a group of the finance industry’s leaders and their positioning across ESG, sustainability and stakeholder engagement to quantify the emerging common ground across the sector. The report also examines the boldest initiatives in these areas that are breaking new ground, setting the bar for the rest of the industry to meet and explores how that is defining the institutions and their performance.

1. The Common Ground: substantial and growing across the industry

The dataset analyzed to identify the common ground of finance industry leaders has grown in size and scope, covering companies representing cover half of the finance industry’s total assets. The analysis presented in this section provides a benchmark of 125 leading global financial institutions across major global regions and industry subsectors, with assets totaling US$190 trillion. As in previous years, these organizations are not pre-selected on the basis that they are a “force for good”. The breakdown of these institutions and their selection methodology are described in “Report Objectives, Research Process and Methodology” at the end of this report.
In keeping with the aim of examining how the finance industry is playing its role in allocating capital for good, this report analyses the commitments, actions, and initiatives of the world's leading financial institutions across three main dimensions:

- **The adoption and integration of ESG considerations** into business processes to minimize any potential harm. The imputed values are Mindful Conduct.
- **Driving sustainable development through the core business** by channeling capital towards key SDGs. The activities denote Caring for the Planet.
- **Engaging a wider group of stakeholders** including employees, customers, communities, governments, civil society, and others. This implies values and behaviors showing Compassion for All.

Together these dimensions provide the framework within which the finance industry can act as a force for good in the world at a time of profound and multi-dimensional change.

### i. Deepening integration of ESG, “Mindful Conduct”

A common ground has emerged with near universal adoption and integration of ESG into businesses practices

There is now near universal adoption of ESG considerations among finance industry leaders with 100% of the institutions profiled having public commitments, policies, frameworks, metrics tracking and reporting, active screening, and diligence for ESG factors. ESG continues to deepen, with a significant majority explicitly targeting sustainability outcomes, providing ESG training, and implementing portfolio balance targets (such as sector caps), and in some cases actively divesting from non-ESG compliant assets.

**Figure 10: Adoption of ESG Policies and Practices by Finance Industry Leaders**

<table>
<thead>
<tr>
<th>Adoption of ESG Policies and Practices by Finance Industry Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% Have publicly-committed to ESG, and implemented policies</td>
</tr>
<tr>
<td><img src="Image" alt="Graph" /></td>
</tr>
</tbody>
</table>

*Source: Capital as a Force for Good Initiative*
However, there is still further scope for improvement, with 42% of these financial institutions yet to start measuring sustainability outcomes, 40% still not looking to actively divest from non-ESG compliant assets, 33% yet to establish explicit sustainable portfolio balance targets for their loans or investments, and 21% not disclosing the ESG training that they provide to their employees.

**ESG-Integrated AUM declined, but a wide array of factors being considered, new factors such as biodiversity, data privacy, and supply chain gained prominence**

The total ESG integrated AUM for the 125 finance industry leaders was US$30 trillion, or 16% of total AUM. In comparison, the 100 industry leaders analyzed in last year’s report had total ESG integrated AUM of US$33 trillion, or 19% of total AUM, and on a like-for-like basis, the ESG integrated AUM of these 100 institutions decreased by 11% in 2021. The decrease can be potentially attributed to multiple factors, but increased scrutiny is a key driver, with more finance industry leaders auditing their ESG assets, often in response to increasing regulatory scrutiny, and hence raising the bar for their classifications. There is a high degree of alignment on the ESG factors being considered by finance industry leaders. Climate change (91% of institutions), human rights (86%), and ethics (78%) were the top environmental, social, and governance factors respectively being considered by financial institutions, similar to last year.

*Figure 11: Total ESG-Integrated AUM and Key ESG Factors Considered*

### Total ESG-Integrated AUM and Key ESG Factors Considered

<table>
<thead>
<tr>
<th>Environmental Factors</th>
<th>Social Factors</th>
<th>Governance Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate Change</td>
<td>Human Rights</td>
<td>Ethics</td>
</tr>
<tr>
<td>Carbon intensity</td>
<td>Diversity and Inclusion</td>
<td>Risk Management</td>
</tr>
<tr>
<td>Bio-diversity</td>
<td>Health and Safety</td>
<td>Data Privacy</td>
</tr>
<tr>
<td>Pollution</td>
<td>Community Relations</td>
<td>Bribery and Corruption</td>
</tr>
<tr>
<td>Resource Efficiency</td>
<td>Labour Practices</td>
<td>Cyber-security</td>
</tr>
<tr>
<td>Hazardous Waste</td>
<td>Human Capital Management</td>
<td></td>
</tr>
<tr>
<td>Impact on Water Quality</td>
<td>Inequality</td>
<td>Money Laundering</td>
</tr>
<tr>
<td>Fresh Water Resources</td>
<td>Product Stewardship</td>
<td>Board Structure</td>
</tr>
<tr>
<td>Natural Resources Depletion</td>
<td>Indigenous Rights</td>
<td>Business Conduct</td>
</tr>
</tbody>
</table>

**Total ESG Integrated AUM for Finance Industry Leaders***

**US$30 trillion ~16% of AUM**

Source: Capital as a Force for Good Initiative
Capital as a Force for Good, 2022 Report

There are a variety of other factors whose importance has increased significantly over the past year. For example, biodiversity was cited as a key ESG factor by 67% of institutions this year (vs. 52% last year), data privacy and cybersecurity were cited by 76% (vs. 63% last year), carbon intensity was cited by 67% (vs. 48% last year) and supply chain management was cited as a factor by 45% (vs. 32% last year).

**Negative screening is being used to drive environmental and social objectives**

Of the 125 finance industry leaders analyzed, only 63% have publicly disclosed ‘exclusion criteria’ (vs. 64% last year and 50% in 2020) that restrict financing towards certain business activities which are deemed to be harmful. Most of these finance institutions are using exclusions largely to address compliance related matters such as child labor, cluster munitions, or businesses which were in contravention of international conventions.

A smaller subgroup is actively using exclusions to address environmental and social objectives. For example, 67% of institutions who have disclosed exclusion criteria are restricting funding for thermal coal mines, 41% are restricting exploration of the Arctic Circle; and 32% are excluding fossil fuel investments altogether. Some are also using exclusions to achieve health and social objectives. For example, 56% exclude tobacco and 37% exclude businesses that make or sell alcoholic beverages, or civilian firearms.

**Figure 12: Harmful Business Activities Being Restricted Through Exclusions**

### The Defunding of Environmentally Harmful Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal coal mines or expansion of existing mines</td>
<td>67%</td>
</tr>
<tr>
<td>New coal-fired power plants or expansion of existing plants</td>
<td>52%</td>
</tr>
<tr>
<td>Oil and gas exploration in the Arctic Circle</td>
<td>41%</td>
</tr>
<tr>
<td>Nuclear power plants</td>
<td>37%</td>
</tr>
<tr>
<td>All fossil fuel investments</td>
<td>32%</td>
</tr>
<tr>
<td>Hydraulic fracturing and oil sands development</td>
<td>30%</td>
</tr>
</tbody>
</table>

### Restricting Other Activities for Social and Health Objectives

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco manufacturing and distribution</td>
<td>56%</td>
</tr>
<tr>
<td>Projects that negatively impact UNESCO World Heritage Sites</td>
<td>41%</td>
</tr>
<tr>
<td>Production and sale of civilian firearms</td>
<td>37%</td>
</tr>
<tr>
<td>Manufacturing or distribution of alcoholic beverages</td>
<td>34%</td>
</tr>
</tbody>
</table>

(% of Finance Industry Leaders that explicitly exclude or restrict investments in the following business activities)

Source: Capital as a Force for Good Initiative
However, there is clearly still a lack of alignment around these priorities, and based on the analysis above, the use of exclusions (beyond basic compliance-related matters), is not yet a common ground in the finance industry, with less than two-thirds of institutions disclosing their exclusion criteria in the first place. An even smaller subset, 20-40% of all institutions analyzed, use these exclusions proactively to drive environmental and social objectives.

Finance industry leaders are collaborating to define a common set of standards

There is a large (and growing) number of industry collaborations in which the finance industry leaders are sponsoring and participating in, to establish a set of common goals, frameworks, and standards, notably the UN Principles of Responsible Investing of which 70% of finance industry leaders are signatories of. However, their reporting systems are still evolving and voluntary in nature.

Figure 13: Finance Industry Leaders’ Participation in International Associations

<table>
<thead>
<tr>
<th>Association</th>
<th>Brief Description</th>
<th>Membership from Dataset</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRI</strong> UN Principles of Responsible Investing</td>
<td>World's leading proponent of responsible investment, which supports members in incorporating ESG into their investment decisions.</td>
<td>70% (88 out of 125)</td>
</tr>
<tr>
<td><strong>TCFD</strong> Task Force on Climate Financial Disclosures</td>
<td>Develop consistent climate-related financial risk disclosures for use by companies, in 70 countries, 31 banks, and investors in providing core members information to stakeholders.</td>
<td>66% (82 out of 125)</td>
</tr>
<tr>
<td><strong>CDP</strong> Carbon Disclosure Project</td>
<td>International NGO that aims to make 8,400+ companies environmental reporting a business norm, have disclosed driving disclosure, insight, and action through the CDP towards a sustainable economy.</td>
<td>65% (81 out of 125)</td>
</tr>
<tr>
<td><strong>UN Global Compact</strong></td>
<td>World's largest corporate sustainability initiative calling on companies across participants in sectors to align strategies and operations with universal principles of</td>
<td>55% (69 out of 125)</td>
</tr>
<tr>
<td><strong>Sustainability Accounting Standards</strong></td>
<td>NGO which has developed a common 176 partners in sustainability accounting standards to financial industry standardise the ESG data financial firms using standards use to measure ESG impact</td>
<td>50% (63 out of 125)</td>
</tr>
<tr>
<td><strong>Climate Action 100+</strong></td>
<td>Global investor initiative to ensure the world’s largest corporate greenhouse gas emitters take necessary actions on climate with &gt; US$43 trillion AUM.</td>
<td>46% (58 out of 125)</td>
</tr>
</tbody>
</table>

Source: Capital as a Force for Good Initiative
Organizations establishing climate and carbon related disclosures are seeing increasing participation, with Carbon Disclosure Project and SASB membership increasing to 65% and 55% this year, respectively (vs. 59% and 43% last year, respectively), on a larger sample size.

However, this also means that 30-45% of the institutions have not yet signed up to industry associations like the UN-PRI and the UN Global Compact. While participation has increased in carbon disclosure related organizations, 34-54% of institutions have yet to sign up for TCFD, CDP, SASB or Climate Action 100, and many who have signed up have yet to declare scientific based targets for reducing portfolio emissions.

ii. Investing in sustainability, “Caring for the Planet”

Most finance industry leaders have committed to the Paris Agreement and Achieving Net Zero Carbon Emissions by 2050

The November 2021 COP26 conference in Glasgow helped galvanize the finance industry’s commitment to achieving Net Zero emissions by 2050. Of the 125 leaders analyzed in this report, 84% of institutions with a total US$153 trillion of assets and AUM have publicly committed to achieving Net Zero (and/or the Paris Agreement goals more broadly). COP26 also succeeded in broadening the finance industry’s participation, and the newly created Glasgow Financial Alliance for Net Zero (GFANZ) has attracted over 450 members managing over US$130 trillion of financial assets, with its membership nearly doubling in the second half of 2021.

The association has been highly successful at capturing the attention and commitment of the industry and using peer group competition in securing membership. The association also recognizes that having secured commitment, an important next step is to translate this into the very clear obligations of signing up in terms of tangible actions and the timing of these, and
Capital as a Force for Good, 2022 Report

systematically move members towards driving the world to Net Zero emissions. GFANZ members are obligated to produce interim GHG reduction targets for 2030. While many members have announced targets, most have yet to publish tangible action plans on how these targets will be achieved. What is clear though is that these will require radically scaling direct funding for renewable energy production.

The expectations are that the scale and scope of actions that financial institutions can take will fall into three categories. At the most basic level institutions will need to achieve Net Zero in their own operations, and much sooner than 2050. The next level will be to reduce the ‘financed emissions’ by actively reducing exposure to emitting industries. And the highest level of action will be to proactively fund decarbonization solutions and engage in other collaborative action to drive decarbonization of high emissions sectors.

2021 was a record year for sustainability financing, with sustainable debt issuances doubling. However, 2022 is likely to see a contraction with a 27% fall in H1 2022

2021 was a record year for financing climate change and sustainable development, with the 125 finance industry leaders collectively mobilizing US$3.0 trillion in sustainable investments. In comparison, the 100 industry leaders mobilized US$2.1 trillion last year, and, on a like-for-like basis, their investments increased by 24% to US$2.6 trillion in 2021. Sustainable debt\textsuperscript{21} forms the biggest part of this financing, and there was c.US$1.6 trillion of new issuances in 2021, more than double of 2020. While green bonds form the largest portion of sustainable debt (c.40% of new issuances), social, sustainability, and sustainability-linked bonds have grown rapidly over the last year and nearly quadrupled in 2021.

Figure 15: Sustainability-Linked Financing Activity by Industry Leaders in 2021

### Sustainability-Linked Financing Activity by Industry Leaders in 2021

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>US$3.0 Trillion</td>
<td>1644</td>
<td>763</td>
<td>577</td>
<td>315</td>
<td>242</td>
<td>145</td>
<td>88</td>
<td>68</td>
</tr>
<tr>
<td>US$1.2 trillion</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Renewable Energy, Environmental Solutions and Low Carbon Investments</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>US$186 billion</td>
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<tr>
<td>Impact and SDG Funds</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>US$1 trillion</td>
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<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Green, Sustainable, Social and SDG Bonds</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>US$272 billion</td>
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<td></td>
<td></td>
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<tr>
<td>Development Finance Funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Source: Bloomberg NEF, Capital as a Force for Good Initiative
However, the momentum created for sustainability funding in 2021 appears to have faltered as tech stocks fell following Russia's invasion of Ukraine along with the subsequent rise in oil prices, equity market collapse, and a rising interest rate environment. Total sustainable debt issuance has declined by c.27% in the first half of 2022 (vs. H1 2021)\(^2\), and while sustainable debt is expected to remain resilient and exceed US$1 trillion in 2022\(^3\), total new issuances are unlikely to match the record levels they reached last year.

**Funding financial inclusion, affordable housing, and community development**

Over and above their sustainability-linked products, finance industry leaders are also looking to drive the SDGs through their core business by mobilizing c.US$345 billion in financing for affordable housing, small business loans, and other community development initiatives, in 2021, primarily in their local economies and communities.

*Figure 16: Community Financing Mobilized by Industry Leaders in 2021*

<table>
<thead>
<tr>
<th>US$345 billion</th>
<th>Total Community Financing Initiatives Mobilised in 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>278</td>
<td>Affordable Housing</td>
</tr>
<tr>
<td>60</td>
<td>Loans to Small Businesses and Minority Communities</td>
</tr>
<tr>
<td>7</td>
<td>Other Community Development Initiatives</td>
</tr>
<tr>
<td>345</td>
<td>Total Community Financing</td>
</tr>
</tbody>
</table>

*Source: Capital as a Force for Good Initiative*

However, in comparison to the total issuances of sustainable debt, these volumes remain materially smaller. Given the scale of the funding requirement for the SDGs, there is an expectation that finance industry leaders can increase this direct financing to drive the key economic and financial inclusion objectives of the SDGs.

Moreover, most of this financing is local in nature and hence not reaching the developing countries where it is needed the most. Hence, while it certainly helps alleviate poverty and
inequality in local economies and communities, it does not substantively address the SDG funding gap for the development and inclusion related goals in developing countries.

A continued focus on reducing their direct and indirect carbon footprint

Measuring and reporting direct and indirect carbon footprint is now part of the ‘common ground’ for finance industry leaders with 86% of the institutions analyzed doing so in line with the Greenhouse Gas Protocol Accounting and Reporting Standards, in line with last year (albeit on a larger sample size), and vs. 79% in 2020. With various conservation and mitigation measures, the industry leaders analyzed in this report have reduced their total direct emissions by 44% since 2018.

Figure 17: Change in Finance Industry Leaders’ Carbon Footprints

86% have adopted GHG protocol accounting and reporting standards to track CO2 emissions

Companies have taken several steps to decrease their scope 1 (direct), scope 2 (indirect) and scope 3 (value chain) related carbon footprint over the last four years*

Counts in mtCO2e (metric tons of carbon dioxide equivalent)

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1</td>
<td>1,560,130</td>
<td>1,644,634</td>
<td>1,377,786</td>
<td>867,265</td>
</tr>
<tr>
<td>Scope 2</td>
<td>5,757,795</td>
<td>5,301,518</td>
<td>4,649,662</td>
<td>4,099,057</td>
</tr>
<tr>
<td>Scope 3</td>
<td>4,899,735</td>
<td>4,810,295</td>
<td>4,967,616</td>
<td></td>
</tr>
</tbody>
</table>

*Includes companies that have disclosed GHG data for the previous four years

Source: Capital as a Force for Good Initiative

However, the industry’s direct emissions (Scope 1) pale in comparison to their indirect portfolio emissions (Scope 2 and 3), and aggregate indirect emissions have been largely flat vs. 2018 levels
(though lower than in 2019). As such, the industry appears to be making insufficient progress on the basic goal of reducing the carbon footprint of its own operations to Net Zero.

### iii. Delivering to multiple stakeholders, “Compassion for All”

The finance industry is proactively engaging multiple stakeholders on a range of issues

Since 2019 when leading financial institutions participated in the Business Roundtable committed to the interests of multiple stakeholders, beyond simple shareholder interests, 96% of finance industry leaders covered in this report have publicly committed to such an approach. Employees, customers, and local communities are the primary focal points; however, industry leaders are also engaging with their suppliers, industry peers, and policymakers.

**Figure 18: Finance Industry Leaders’ Approach to Multi-Stakeholder Engagement**

#### Finance industry leaders’ approaches to multistakeholder engagement

<table>
<thead>
<tr>
<th>Key Stakeholder</th>
<th>% of Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>91%</td>
</tr>
<tr>
<td>Local Communities</td>
<td>84%</td>
</tr>
<tr>
<td>Shareholders</td>
<td>82%</td>
</tr>
<tr>
<td>Customers</td>
<td>82%</td>
</tr>
<tr>
<td>Suppliers</td>
<td>71%</td>
</tr>
<tr>
<td>Government &amp; Regulators</td>
<td>65%</td>
</tr>
<tr>
<td>Industry Peers</td>
<td>50%</td>
</tr>
</tbody>
</table>

Source: Capital as a Force for Good Initiative

While most finance industry leaders have embraced a broader definition of who their stakeholders are, a smaller subgroup is proactively working with transnational institutions, national governments, and regulators to drive policy changes. Climate change, education, and healthcare are the main focus areas, with 31-36% of finance industry leaders having specific...
partnerships or engagements with policymakers with respect to these issues. However, some leaders have raised their ambitions and broadened their scope to include urban development and housing (22-24% of institutions), poverty and hunger (16%), and racial justice (16%).

Supporting local communities in times of adversity

In 2021, finance industry leaders analyzed in this report spent a total of US$8 billion across their corporate social responsibility (CSR) activities and philanthropic initiatives. The main areas of spend in 2021 were social welfare, pandemic relief, and diversity and inclusion.

**Figure 19: Total CSR Spending and Key Focus Areas in 2021**

<table>
<thead>
<tr>
<th>Total CSR Spending and Key Focus Areas in 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social Welfare</strong></td>
</tr>
<tr>
<td><strong>Illustrative Initiatives</strong></td>
</tr>
<tr>
<td>• “Action for Racial Equity” that provides a commitment to strengthen the organization’s policies and practices to become an anti-racist institution</td>
</tr>
<tr>
<td>• Work with philanthropic partners to support educational equity to foster human potential</td>
</tr>
<tr>
<td><strong>Impact</strong></td>
</tr>
<tr>
<td>• Committed US$1 billion in strategic initiatives through 2023 to help close the racial wealth gap</td>
</tr>
<tr>
<td>• 7 out of 10 student participants earned placement at leading universities; volunteers spent 50 hours performing online tutoring for students in English, math and psychology</td>
</tr>
<tr>
<td><strong>Covid-19 Initiatives</strong></td>
</tr>
<tr>
<td><strong>Illustrative Initiatives</strong></td>
</tr>
<tr>
<td>• “Covid-19 Relief and Recovery” to address immediate needs for COVID-19 relief while staying focused on longer term economic recovery</td>
</tr>
<tr>
<td>• “COVID-19 Relief Fund” created to help the world’s hardest-hit communities during the pandemic</td>
</tr>
<tr>
<td><strong>Impact</strong></td>
</tr>
<tr>
<td>• US$160m in COVID-19 and recovery efforts since the beginning of the pandemic with total contributions of $3m from employees to date</td>
</tr>
<tr>
<td>• Deployed US$54m to more than 300 nonprofits across 31 countries</td>
</tr>
<tr>
<td><strong>Diversity &amp; Inclusion</strong></td>
</tr>
<tr>
<td><strong>Illustrative Initiatives</strong></td>
</tr>
<tr>
<td>• “The Diverse Leaders Program”, which holds sessions for women and ethnic minorities at mid-management level to build necessary skills</td>
</tr>
<tr>
<td>• “One Million Black Women” campaign to address the dual disproportionate gender and racial biases that Black women have faced</td>
</tr>
<tr>
<td><strong>Impact</strong></td>
</tr>
<tr>
<td>• 65% of participants have expanded their role or been promoted after attending the program</td>
</tr>
<tr>
<td>• US$10 billion in investment capital and US$100 million in philanthropic grants to narrow opportunity gaps for at least one million Black women in the next decade</td>
</tr>
</tbody>
</table>

Source: Capital as a Force for Good Initiative

However, while CSR is clearly an important part of addressing key issues, the amounts mobilized are far overshadowed by the amounts invested in sustainable financing comprising local financing for housing, small businesses, and community development where business cases are clearer.
A continued focus on employee wellbeing, diversity, and inclusion in the workforce

The 125 finance industry leaders analyzed in this report employ five million employees in total worldwide, of which or 2.5 million are women. However, only approximately one third of the board directors for these financial institutions are women, leaving clear room for further improvement.

The quality of human capital is perhaps the most important differentiating factor for financial institutions. As a result, finance industry leaders have been among those at the forefront of (i) initiatives to ensure diversity and inclusion in the workforce, and (ii) programs to improve both physical and mental wellbeing of their employees. Recent projections draw attention to women across all wealth brackets being set to inherit 70% of global wealth over the next two generations. This makes inclusion of women a business imperative too.

Figure 20: Focus on Building a Diverse and Inclusive Workforce

Focus on Building a Diverse and Inclusive Workforce

| 50% of the aggregate employee base across firms is comprised of women |
| 35% of board representation across firms is comprised of women |

Key Employee Policies Focused on Increasing Diversity and Preventing Discrimination (Publicly Disclosed) (2021 vs. 2020)

- Prevention of discrimination against people with disabilities
  - 2020: 93%
  - 2021: 96%

- Prohibits discrimination against minorities
  - 2020: 95%
  - 2021: 95%

- Prevention of discrimination against people based on sexual orientation
  - 2020: 90%
  - 2021: 94%

- Increase in diverse representation across workforce
  - 2020: 95%
  - 2021: 98%

Source: Capital as a Force for Good Initiative
iv. Conclusion: Significant and growing common ground shifting to quality of action

A substantial common ground

Over the last year, the leaders of the finance industry have raised the bar for the common ground in terms of ESG, sustainability, and stakeholder engagement. Financial institutions have increasingly integrated ESG considerations into investment and business decisions, and there has been a sharp increase in various forms of sustainability financing. There is a growing willingness to lead on major global issues including climate change, inclusion and diversity, and governance.

The analysis supports the following key conclusions on the substantial common ground for the industry that has emerged over the last year:

- **95% Participation by the Industry in International Associations.** There has been a proliferation of industry associations for ESG and sustainability, and a few of these are attracting a critical mass of members and emerging as the de facto industry standards.

- **92% have Physical and Mental Wellness Programs, 50% of Employees and 35% of Board Directors are Women.** The finance industry has been among those at the forefront of diversity and inclusion in the workforce, with clearly further to go.

- **86% of Industry Leaders Measure and Report GHG Emissions Annually.** It has become the market standard for large financial institutions to measure and report their direct and indirect emissions in line with globally expected standards, although the industry has not significantly decarbonized their portfolios to date.
▪ **US$130 Trillion of Assets Committed to Net Zero by 2050.** Following COP26 in November 2021, there has been strong momentum with finance industry leaders committing to the Paris Agreement and Net Zero by 2050.

▪ **US$30 Trillion of ESG Integrated Assets, 16% of Total.** The share of ESG integrated assets has stagnated in the last year, as greater scrutiny is applied to the criteria for classifying assets as such, potentially putting at risks estimates of ESG integrated assets increasing to US$50 trillion by 2025.

▪ **US$3.0 Trillion of Funding for Sustainability Mobilized in 2021.** Last year was a record-breaking year for investments in sustainable debt with new issuances doubling over 2020 to US$1.6 trillion. The market has moved beyond green bonds with an exponential increase in social and sustainability bonds too.

▪ **US$8 Billion of CSR Spend Focused on Social Welfare, Diversity, and Inclusion.** Industry leaders spent US$8 billion in 2021 on CSR and philanthropy in total, focusing on social welfare initiatives to in health and education, as well as various diversity and economic inclusion focused initiatives.

### Rising challenges to the industry

Following a plethora of announcements from the industry as leading institutions joined various associations, committed to Net Zero and announced their ESG policies and published impact reports, several issues have arisen for the industry to address:

▪ **Combating “Greenwashing.”** The now widespread adoption of ESG systems has led to concerns around whether it is genuinely changing behaviors at these institutions or being used to put a ‘green’ or ‘sustainability’ wrapper around business-as-usual. For example, a recent analysis by Morningstar found that c.1,200 funds (or 20% of the total), with over US$1 trillion of AUM, no longer merit an ESG label, and national regulators and authorities have begun cracking down the misuse of ESG and sustainability labels by asset managers.

▪ **Slowdown in ESG Fund Flows and Sustainable Debt Issuance.** Following Russia's invasion of Ukraine earlier this year, and the subsequent collapse in global technology stocks and rise in oil and gas prices, net fund flows to ESG funds and new sustainable debt issuances have both slowed down sharply in the first half of 2022, indicating that allocating to tech was the easy decision and the difficult decisions to invest for impact are still ahead.

▪ **A Lack of Standards for Measurement and Reporting.** While some industry associations have emerged as standard bearers, there is still confusion about how to incorporate ESG data, with fund managers citing it as the single biggest adoption hurdle. The main reasons cited in doing so are the lack of consistency in ESG scores, differences in disclosures, and constantly changing methodologies, among others, with the management of the resulting complexity becoming an increasing administrative burden for many institutions.
Current Financing Levels Remain Insufficient. Addressing climate change and achieving Net Zero by 2050 alone requires US$4-6 trillion of new investments annually through 2050. With the other SDGs, the price tag increases to US$15-20 trillion of new investments per annum. Against this stark reality, even record level of funding in 2021 is woefully insufficient to address the challenges at hand.

Political Attacks Related to Fiduciary Duties and Fund Allocator Interests. There has been a growing backlash against ESG from some political quarters, particularly in the United States. States with large oil interests like Texas have threatened to withdraw funds from asset managers looking to reduce their fossil exposure, while other states have prohibited their pension funds from using ESG screening at all.

In addition, an important risk factor on the flipside of the need for rigor in measuring and adhering to ESG is that when life is based on rules rather than principles, things can go wrong in more complex situations. And so, the strict adoption of a rigid rules-based approach to ESG with binary judgements on rankings will stop the flow of capital to the certain countries where governance standards are weak, but the need is the greatest, and these are often countries where the SDGs will be either won or lost for the world at large. This is a conundrum for the UN, national policy makers, corporations, and financiers to resolve.

A higher quality common ground being established by a subgroup

Much of the industry has now established the basic architecture for being a ‘force for good’, such as having an ESG policy and framework, diversity, and inclusion program, and publicly committing to multiple stakeholders and the Paris Goals.

Given that the 125 finance industry leaders analyzed here represent 50% of the industry in terms of assets and a significant majority in terms of market valuation, these are now the basic requirements to operate and be among the leader group in the industry, but the “architecture” is not a basis of differentiating, the quality and content are.

The analysis indicates that a subset of the industry leaders has and are pushing further than the rest to establish a higher ‘quality’ common ground which looks beyond ESG policies and inclusion programs, and differentiates them through:

- **Strategic use of ESG.** Using ESG exclusions to drive environmental and social objectives, rather than just for compliance purposes. c.20-40% of finance industry leaders are doing this.

- **Targeting outcomes.** Systematically targeting and measuring sustainability outcomes from investments, c.58% of finance industry leaders are doing this.

- **Deeper ESG integration.** Integrating ESG considerations into a larger proportion of assets in a meaningful (and auditable) manner, c.16% of finance industry leaders’ AUM are ESG-integrated, and these have declined by 11% in the last year.
• **Adopting science-based targets.** Leaders are also establishing science-based targets to back up decarbonization commitments, providing a clearly defined pathway to reduce GHG emissions.

• **Driving Net Zero portfolio outcomes.** Going beyond just ‘committing’ to Net Zero and taking tangible actions to reduce the emissions of their entire portfolios.

• **Scaling development and inclusion financing.** Scaling up sustainability financing, and in particular financing for the development and inclusion related goals in developing countries.

This increase in quality is a clear feature of what is a highly competitive industry, historically driven by a race to the top measured by positions in league tables and by a drive for efficiency and effectiveness internally. This shift to quality is also critical given the increased scrutiny of the industry as the world faces increasing threats and a desperate need to fund development issues. Successive years are likely to see a leadership group establish a higher operating standard for being a force for good.
2. Breaking New Ground and creating impact at scale

With ESG policies and practices having rapidly become the norm in the finance industry, the focus is now shifting to how financial institutions are tangibly rising to the challenge of achieving the SDGs, driving both funding and impact. Finance industry leaders are approaching this in different ways. Large, scaled global banks have made trillion-dollar commitments for sustainable financing to 2030, and are mobilizing large amounts of sustainable financing for climate and social development. Other leaders are focusing on finding innovative funding solutions for the more difficult and neglected goals. Some institutions, by virtue of their leadership positions in the segments they operate in, are driving direct impact by providing insurance or affordable home financing. Another strategy, being used increasingly by large asset managers is to look to convert assets, at scale, to sustainability, with some doing it through new ESG products, and others doing it by exercising their voting power on their investee companies. Leading private financial institutions continue to leverage their platforms to drive impact, pushing the boundaries of funding the SDGs, and working alongside multilateral development banks and development finance institutions, for whom financing sustainable development is part of the core mandate. Interestingly, some financial products are “naturally” designed to do good by serving communities or delivering essential much needed services.

i. Industry leaders’ SDG funding is on the rise, and increasingly broad based

Last year’s Capital as a Force for Good report examined 40 of the world’s largest financial institutions’ sustainability targets and funding to reveal both the scale and the breadth of their engagement, with a broad array of goals targeted and significant commitments made in their pursuit. Importantly the report had calculated that industry leaders targeting the goals had deployed a record US$2.1 trillion over the course of 2020.

Sustainability financing by industry leaders continues to grow

During 2021 the same group of companies have stepped up their engagement with the goals, deploying a record US$2.5 trillion, a nearly 20% increase on a like-for-like basis. The detailed breakdown of these leaders’ initiatives and commitments points to the increasing breadth of their engagement over time.

These leaders’ SDG focus during the past year has continued to diversify. While climate change and renewable energy continue to be areas receiving the most attention, institutions are broadening their focus on SDGs relating to human development, prosperity, and broader planet related goals. The data shows institutional focus increasing across almost all goals, with a significant rise in engagement with SDG3 (Good Health and Wellbeing), SDG 4 (Quality Education), SDG 5 (Gender Equality), as well as SDG 14 (Life on Land), and SDG 10 (Reduced Inequalities),
pointing to the fact that leaders have recognized the need for broader engagement with the SDGs, and have identified or developed a broadening set of engagement models to allow them to participate in their funding.

Figure 22: Finance Industry Leader SDG Engagement 2022 vs 2021

Finance Industry Leader SDG Engagement 2022 vs 2021

However, despite these increases, private sector engagement on the SDGs as a percentage of the total capital is still tiny and is highly skewed to a few SDGs backed by strong business cases and high returns potential, with three times as many institutions focused on SDGs like SDG 7 (Clean Energy) and SDG9 (Decent Work and Economic Growth), vs. the less popular goals such as SDG 2 (Zero Hunger) and SDG 14 (Life Under Water).

In terms of the actual funds deployed to specific SDGs during the past year SDGs, funding to virtually all goals increased, with only SDG 13 (Climate Change) and SDG7 (Affordable and Clean Energy) seeing absolute declines reflecting the greater diversification in finance industry leaders' SDG spending priorities. The two goals' share of total spending accordingly decreased from 40.2% in 2020 to 25.7% over last year.
The distribution of the increased spending maps closely to the increasing prioritization of key SDGs laid out above. The biggest absolute spending increases of US$146 billion and US$142 billion went to fund SDG 10 (Reduced Inequalities) and SDG 6 (Clean Water and Sanitation), respectively, while SDGs 5 (Gender Equality), SDG 3 (Good Health and Wellbeing), and SDG 9 (Industry, Infrastructure, and Innovation) received funding increases of US$60-80 billion each last year.

**Figure 23: 2021 SDG Funding Breakdown by Industry Leaders in US$ billion**

**Annual SDG Financing Mobilised by Finance Industry Leaders (In US$bn)**

Finance industry leaders SDG financing is increasingly aligned with critical SDG funding gaps

As previously stated, the total annual funding need for the SDGs has expanded to US$15-20 trillion annually, rising 30-40% year on year, faster than the private sector’s spending increases of c.20%. As a result, the annual funding gap in developing countries now runs to total of US$11.4-15.0 trillion, with significant shortfalls across all categories of spending. The funding need of each category varies significantly with Planet related goals representing over 40% of the total funding need (given the higher estimated cost for meeting Net Zero), and People related goals counting for 16% of the funding gap.
The increasing diversification of finance industry leaders’ SDG priorities is resulting in an alignment of their spending distribution across the different SDG categories, with the actual SDG funding need. In 2020, industry leaders’ SDG spending was still highly concentrated on Planet related goals, at the expenses of People and Platforms spending needs.

During the past year, leaders have significantly diversified their commitments across the goals and have provided nearly equal amounts to Planet, Prosperity, and Platform related goals. As before, private sector financial institutions did not provide direct funding to the fifth SDG category, Peace and Partnership (SDG 16 (Peace, Justice and Strong Institutions) and SDG 17 (Partnership for the Goals)). Given these goals are commonly seen as prerequisites for the deployment of capital, rather than as direct investment opportunities in and of themselves, they typically fall into the remit of national governments to fund (partially augmented by direct foreign aid).

The diversification in spending points to the increasing sophistication of the private sector’s engagement with the SDGs, and the critical role that private capital will play in funding them. While industry leaders clearly cannot fund all the SDGs and meet the gap on their own, a task that even if it was possible would require current spending levels to increase approximately five-fold by next year), they are becoming increasingly ambitious and innovative in deploying capital at scale across the world, positioning themselves as the industry leaders of the future.
ii. Evident strategies for making an impact, examples

The initiatives listed below, categorized across different strategies leading financial institutions are using to deliver funding for and impact the SDGs, are illustrative, and begin to flesh out the parameters of the new emerging model for the industry to doing well by capturing business opportunities associated with the SDGs, rather than being a simple acknowledgement of the organizations and their initiatives. Clearly, there are many other initiatives in the industry, and the list below is not complete.

Note: we have taken the examples from company public sources, avoiding any private and confidential information, and applied this information to illustrate the six strategies we think are effective and feasible.

A. Breaking New Ground, and Ploughing It

Certain financial institutions have been at the forefront of transitioning their businesses to being a force for good for the last several years, making trillion-dollar commitments toward financing the SDGs, and launching new large-scale initiatives for sustainability financing to address the world’s biggest issues. Over the last year, these industry leaders have executed and deployed the capital against these commitments, and some have mobilized new large-scale financing for new initiatives.

<table>
<thead>
<tr>
<th>Selected Examples of Industry Leaders Breaking New Ground and Ploughing It²⁶</th>
<th>SDG Impact²⁷</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bank of America Deploys US$250 Billion in 2021 Towards its US$1.5 Trillion Sustainable Finance Goal by 2030</strong></td>
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<tr>
<td>In 2021, Bank of America deployed US$252 billion in sustainable financing, including US$157 billion of environmental transition financing (including solutions for renewable energy, energy efficiency, clean transportation water &amp; sanitation, recycling, sustainable agriculture, and carbon capture &amp; sequestration), and US$94 billion of inclusive social development financing (including community development, affordable housing, healthcare, education, financial inclusion, and gender / racial equality).</td>
<td></td>
</tr>
<tr>
<td><em>Source: Bank of America 2021 Environmental, Social &amp; Governance Performance Data Summary</em></td>
<td></td>
</tr>
</tbody>
</table>
**Blackrock’s AUM in Dedicated Sustainable Investment Strategies Rises to US$434 Billion**

Blackrock’s dedicated sustainable investment platform increased to US$434 billion of AUM (as of 30 September 2021), from US$199 billion in 2020, with US$64 billion of net inflows into sustainable investment strategies. Blackrock’s iShares Sustainable ETF range is one of the largest in the industry... and it also manages one of the largest renewable power infrastructure investment platforms in the world and is one of the largest investors in green bonds on behalf of clients.

*Source: Blackrock 2021 TCFD Report*

**Citi Mobilizes US$160 Billion in 2021 Towards its US$1.0 Trillion Sustainable Finance Goal by 2030**

In 2021, Citi mobilized US$160 billion in sustainable financing, including US$130 billion of environmental finance (including for renewable energy, sustainable transportation energy efficiency, and circular economy), and US$30 billion of social finance (including affordable housing, financial inclusion, healthcare, and education), reaching US$222 billion of total sustainable finance since 2020, towards its goal to mobilize US$1 trillion of sustainable finance by 2030.

*Source: Citi 2021 Environmental, Social & Governance Report*

**Goldman Sachs Commits US$10 Billion in Investment Capital and US$100 Million in Philanthropic Capital to Impact the Lives of One Million Black Women**

The Goldman Sachs Group, Inc. announced a new investment initiative to advance racial equity and economic opportunity by investing in Black women... and it will commit $10 billion in direct investment capital and $100 million in philanthropic capital over the next decade to address the dual disproportionate gender and racial biases... guided by the goal of impacting the lives of at least 1 million Black women by 2030.

*Source: Goldman Sachs Press Release, dated 10 March 2021*

**J.P. Morgan Finances or Facilitates US$285 Billion in 2021 Towards its Target of US$2.5 Trillion for Sustainable Development Finance by 2030**

In 2021, J.P. Morgan financed or facilitated approximately US$285 billion towards its US$2.5 trillion target for 2021-2030... across [its] three objectives, US$117 billion towards development finance (including financing for developing countries), US$106 billion towards green [finance] (including sustainable transportation, renewable energy, waste management, green buildings, and mixed uses), and US$61 billion towards community development (home ownership, affordable housing, small business loans)

*Source: J.P. Morgan Chase & Co. 2021 Environmental, Social & Governance Report*
Morgan Stanley’s Reaches Over US$600 Billion in 2021 of its US$1.0 Trillion 2030 Sustainable Financing Goal

Morgan Stanley’s total sustainable financing mobilized towards its US$1 trillion target by 2030 to support environmental and social solutions to the SDGs reached US$600 billion... with over US$150 billion of green, social, sustainability, and sustainability-linked bond transactions supported in 2021... and over US$70 billion of client assets invested on [its] Investing with Impact Platform.

Source: Morgan Stanley 2021 Sustainability Report

B. “Natural Impact” Financial Institutions

Some financial institutions operate scaled businesses in financial products that naturally drive impact. For example, insurance companies who protect against key risks (including climate-related risks), and home financing businesses (or divisions or larger banks) that help drive home ownership and affordable housing for the underserved. These institutions are variously expanding their impact by making commitments to other areas such as climate and social inclusion and penetrating more deeply in their core businesses to reach wider populations.

<table>
<thead>
<tr>
<th>Selected Examples of “Natural Impact” Financial Institutions Penetrating and Broadening Their Impact</th>
<th>SDG Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great-West Lifeco Focuses on Societal Challenges that Require Collective Actions</td>
<td></td>
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<tr>
<td>With over 33 million customer relationships, and 28,000 employees, Great-West Lifeco [has focused on] societal challenges that require our collective actions... [including] the ongoing pandemic threatening the health and economic well-being of so many people, the urgent need for climate action, and social injustices like the tragic legacy of residential schools in Canada and systemic racism present in many institutions and societies.</td>
<td></td>
</tr>
<tr>
<td>Source: Great-West Lifeco 2021 Annual Report</td>
<td></td>
</tr>
<tr>
<td>HDFC Seeks to Facilitate Home Ownership in India Across All Income Segments</td>
<td></td>
</tr>
<tr>
<td>HDFC was incorporated in 1977 as India's first retail mortgage finance company... and has financed over 9.3 million housing units since inception. In FY22, 48% of loans approved were to the middle-income group (annual household income from US$7,500-22,500) and 29% were to the low-income group and economically weaker section (annual household income under US$7,500) ... 64% of loans disbursed were to first time home buyers... and 70% in value terms had women as owners of the property.</td>
<td></td>
</tr>
<tr>
<td>Source: HDFC Ltd. Integrated Report 2021-22</td>
<td></td>
</tr>
</tbody>
</table>
Japan Post Committed to Supporting Customers and Local Communities and Contributing to the Realization of a Sustainable Society

By encouraging various businesses and local communities to participate in and collaborate with [its] new post office network, [Japan Post Group seeks to] create the services that meet the needs of local communities and build a “Co-creation Platform” to support customers and local communities. Committed to leaving no one behind in a rapidly changing society [Japan Post Group seeks to] deliver convenience, peace of mind, security, and comfort to local communities and all [its] customers in Japan.

Source: Japan Post Group Sustainability Report 2021

Liberty Mutual Believes Progress Happens When People Feel Secure

Liberty Mutual is among the largest property and casualty insurers in the US... with US$43.7 billion net written premiums in 2021. Underpinned by [its] conviction that insurance is a force for social good, [Liberty] is committed to addressing environmental and social challenges while delivering security for [its] customers, employees, and communities.... and [also] took important steps to address climate action... announcing a commitment to reduce [its] Scope 1 and 2 global greenhouse gas emissions by 50% from 2019 levels by 2030... and more than US$55 million to advance security and build resiliency in underserved communities.

Source: Liberty Mutual Insurance 2021 Environmental, Social and Governance Review

Zurich Determined to be Among Those Who Are Making Society More Resilient to Risks, Protecting People, and the Planet that Supports Us

With over 55 million customers... Zurich [has] identified three transformational themes and pillars that [it] believes are very important to [its] stakeholders' future, including (1) building resilience to climate impacts and innovating new solutions by announcing interim science-based targets for its operations and investment portfolio, (2) inspiring confidence in an increasingly digital society by being more responsible in how it handles data and supporting digital trends with a new generation of products and services, and (3) supporting its employees and customers in times of great change and transformation.

Source: Zurich Insurance Group Sustainability Report 2021
**Divisions of Large Banks**

**Bank of America Expands Mortgage Program to US$15 Billion to help Low-to-Moderate-Income Homebuyers in Achieving Affordable Homeownership**

Bank of America and the Neighborhood Assistance Corporation of America (NACA) announced the expansion of their national affordable homeownership mortgage program, with a goal of providing $15 billion in mortgages to low-to-moderate income (LMI) homebuyers through May 2027.

*Source: Bank of America Press Release, dated 18 May 2021*

**Citi Ranked Number One Affordable Housing Lender in the US for 12th Straight Year**

Citi was recognized as the number one affordable housing lender in the United States for 2021. Citi Community Capital, a line of business within Citi, provided approximately $5.64 billion to finance affordable housing projects in 2021 throughout the U.S. Lending and investing by Citi Community Capital in 2021 totaled over $6.9 billion in affordable housing, education, and small businesses across 144 U.S. cities.

*Source: Citi Press Release dated 30 March 2022*

**Lloyds Banking Group Seeks to Expand the Availability of Affordable and Quality Housing in the UK**

As Britain’s largest financial services group, Lloyds’ efforts to build an inclusive society are focused on improving access to quality housing... In 2021, Lloyds provided GBP16.3 billion of lending to help people buy their first home... and delivered GBP3.4 billion of new funding in support of the social housing sector, of which GBP2.4 billion is dedicated to sustainability improvements, including assessing the energy retrofit requirements of around 240,000 social homes.

*Source: Lloyds Banking Group ESG Report 2021*

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**C. Addressing the ‘Hard to Do’ Sustainability Objectives**

Some financial institutions are looking to tackle areas and strategies which are fundamentally difficult to execute. For example, rather than just making general Net Zero commitments, some are implementing tangible action plans to materially reduce their financed emissions, others are creating new financial products to address biodiversity loss, while others are channeling investments towards developing countries in South Asia and Africa which need it the most, given their existing large SDG funding gaps. These institutions are effectively showing the way to others, establishing strong business cases for sustainability objectives that are inherently difficult to tackle.
<table>
<thead>
<tr>
<th>Selected Examples of Industry Leaders Addressing ‘Hard to Do’ Sustainability Options</th>
<th>SDG Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Credit Suisse Begins Implementation of Transition Strategy to Reduce Financed Emissions from Oil, Gas and Coal Upstream and Downstream Financing</strong>&lt;br&gt;Credit Suisse made significant progress against with [its] preliminary numbers suggesting that it will achieve a year-on-year reduction of 41% for [its] financed emissions from this sector. Credit Suisse has committed to reduce financed emissions from oil, gas, and coal upstream and downstream financing by 49% by 2030 and 97% by 2050.&lt;br&gt;&lt;br&gt;<em>Source: Credit Suisse 2021 Sustainability Report</em></td>
<td></td>
</tr>
<tr>
<td><strong>GIC Committed to Enabling the Transition to a Net-Zero Economy, Through its Investments and Operations</strong>&lt;br&gt;GIC focuses on influencing its partner companies and the real economy in two ways. First, [it] invests in companies which develop solutions that help to decarbonise the economy, including batteries, hydrogen, carbon capture and storage, and even nuclear fusion... Secondly, [it] actively engages [its] portfolio companies...When opportunities arise, [it] will fund the investments needed to support their transition towards more climate-resilient business models. this helps to provide capital to sectors such as energy, industrials, and materials, which form a substantial part of the real economy and need significant investments to decarbonise.&lt;br&gt;&lt;br&gt;<em>Source: GIC ThinkSpace, 22 August 2022</em></td>
<td></td>
</tr>
<tr>
<td><strong>HSBC Offers Access to World’s First Broad-Based Biodiversity Screened Equity Indices</strong>&lt;br&gt;HSBC announced the launch of the Euronext ESG Biodiversity Screened Index series, jointly developed by HSBC, Euronext, and Iceberg Data Lab. These are the first investable biodiversity screened benchmark indices based on a broad range of equities... with constituent companies... selected from either the Euronext Eurozone 300 Index or Euronext World Index.&lt;br&gt;&lt;br&gt;<em>Source: HSBC Holdings plc Press Release, dated 23 November 2021</em></td>
<td></td>
</tr>
<tr>
<td><strong>Investec and Intesa Arrange Financing for EUR82 Million Ghana Road Upgrade Project</strong>&lt;br&gt;Investec Bank Ltd [in partnership with other institutions] have signed a loan to finance the upgrade and rehabilitation of a 109km stretch of the Bolgatanga-Bawku-Pulmakom Road in the Republic of Ghana...the Ministry of Finance said [the project will]... “provide access to essential services for local communities, stimulate trade and economic and social development, further integrate the Upper East and the Northern regions of Ghana, [and] improve access to neighboring countries.”&lt;br&gt;&lt;br&gt;<em>Source: Investec Bank Press Release, dated 22 February 2022</em></td>
<td></td>
</tr>
</tbody>
</table>
Schroders Invests in the Future of Sustainable Food and Water with New Fund

Schroder ISF Global Sustainable Food and Water will target emerging technologies and strategic industries integral to changing the food and water system. It will seek opportunities across key value chains, including the likes of water management, food production and processing, distribution, and recycling.

Source: Schroders Press Release, dated 15 December 2021

UBS Sets Decarbonization Targets for the Reduction of Greenhouse Gas Emissions Across Three Priority Sectors by 2030

UBS has committed to publish interim financing targets for 2030 with a focus on reducing our greenhouse gas emissions in priority sectors where the bank can have the most significant impact. In line with this commitment, the bank will reduce the carbon footprint of its loan book across three sectors that account for a sizable share (c. 43%) of its credit portfolio and financed emissions: fossil fuels, power generation and real estate.

Source: UBS Press Release, dated 11 March 2022

Wells Fargo Announces Interim Greenhouse Gas Reduction Targets for Oil & Gas and Power Sectors

Wells Fargo today announced its interim targets for reducing greenhouse gas emissions attributable to its financing activities in the Oil & Gas and Power sectors. The 2030 reduction targets for these sectors, based on a 2019 baseline, are a 26% reduction in absolute emissions from the oil & gas sector, and 60% reduction in portfolio emissions intensity in the power sector.

Source: Wells Fargo Press Release, dated 4 May 2022

D. Converting Assets to Sustainability at Scale

Some finance industry leaders, in particular large global asset management firms, are looking to leverage their market leading positions to drive a large-scale shift of assets towards sustainable investments through various strategies, including through active stewardship and voting against companies based on the tangibility of their climate transition plans and boardroom diversity, and by integrating a majority of their assets with ESG, sustainability, and impact considerations, thereby aligning significant investor capital towards ESG and sustainability at scale.
### Selected Examples of Industry Leaders Converting Assets to Sustainability at Scale

<table>
<thead>
<tr>
<th>Industry Leader</th>
<th>SDG Impact</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fidelity International</strong></td>
<td>13 (Green)</td>
<td><strong>Expands Global Voting Guidelines with New Diversity and Climate Change Policies</strong>&lt;br&gt;Fidelity International announced the publication of its Sustainable Investing Voting Principles and Guidelines, introducing new policies on climate change and diversity... [which] will see Fidelity increasingly hold investee companies to account, utilizing its right to vote against boards that do not meet expectations... Fidelity expects [its] investee companies to take action to manage climate change impacts and reduce their greenhouse gas (GHG) emissions, and make specific and appropriate disclosures around emissions, targets, risk management, and oversight.</td>
</tr>
<tr>
<td><strong>Nordea Asset Management</strong></td>
<td>13 (Green)</td>
<td><strong>Sees 90% of New Fund Flows from ESG Funds in 2021, with ESG Funds Now Accounting for 67% of its Total AUM</strong>&lt;br&gt;Nordea Asset Management, a leading global asset manager with EUR300 billion of AUM, saw its ESG funds increase to EUR195 billion, or 66.5% of its total AUM, with new ESG fund flows at one point accounting for c.90% of total new fund inflows. The asset manager also launched a series of new ESG funds during the year.</td>
</tr>
<tr>
<td><strong>Schroders</strong></td>
<td>13 (Green)</td>
<td><strong>Assets Under Management are 100% ESG Integrated, Increase by GBP35 Billion in 2021</strong>&lt;br&gt;Schroders’ GBP732 billion of assets under management are now fully ESG integrated... and, in 2021, it built on its climate investing expertise with a new Global Climate Leaders fund, attracting net new assets under management of GBP35 billion during the year’.</td>
</tr>
<tr>
<td><strong>State Street</strong></td>
<td>13 (Green)</td>
<td><strong>Focuses on Driving Both Broad Climate Action in the Market Across Sectors as well as More Targeted Action for Companies with the Most Significant Emissions</strong>&lt;br&gt;Beginning in the 2022 proxy season, State Street expects companies in major indices in the US, Canada, UK, Europe, and Australia to align with climate-related disclosures requested by TCFD... With approximately one-third of companies in the S&amp;P500 still not providing these TCFD disclosures, State Street will start taking voting action against directors across applicable indices should companies not meet these disclosure expectations.</td>
</tr>
</tbody>
</table>

Wellington Aligns Impact Investing Strategy with Sustainable Development Goals

In 2015, Wellington Management launched [its] first impact investment approach... [and] is committed to setting a high bar for materiality, additionality, and measurability. Through engagement, [it] encourages companies to establish key performance indicators demonstrating positive social and environmental impact... [Wellington] believes [its] approach of investing across 11 impact themes puts [it] in a strong position to capture promising new developments across developed and emerging markets.

*Wellington Management, Global Impact Annual Report, June 2022*

E. Leveraging the Platform to Create Impact

Finally, in the private sector, some finance industry leaders, have started to find ways to leverage their platforms to drive an impact, and are gaining the experience that allows for scaling up their ambitions and SDG financing by launching new sustainable investment funds and strategies and making commitments to increase their sustainability financing, amongst other strategies.

<table>
<thead>
<tr>
<th>Selected Examples of Industry Leaders Leveraging the Platform to Create Impact</th>
<th>SDG Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bridgewater Associates Launches Sustainable Investing Venture</strong></td>
<td>13 12 8</td>
</tr>
<tr>
<td>Bridgewater, a global leader in institutional portfolio management and the largest hedge fund in the world, announced the launch of a new sustainable investing venture... the effort [will include] the design and implementation of investment solutions for clients pursuing sustainability goals alongside their financial targets.</td>
<td><strong>13</strong> 12 8</td>
</tr>
<tr>
<td>Source: Bridgewater Associates Press Release, dated 14 April 2021</td>
<td></td>
</tr>
<tr>
<td><strong>First Abu Dhabi Bank Committed to Facilitate US$75 Billion for Sustainable Financing</strong></td>
<td>13 12 8</td>
</tr>
<tr>
<td>First Abu Dhabi Bank has reiterated its commitment to lend, invest, and facilitate business over $75 billion by 2030 to activities focused on sustainable solutions as the world moves towards energy transition using green sources... the bank is very keen to support the energy transition which is currently happening in the Middle East. Noting that the region was dependent on hydrocarbons for 100 years, “so the transition here is not easy.”</td>
<td><strong>13</strong> 12 8</td>
</tr>
<tr>
<td>Source: Arab News 28 June 2022, Based on Remarks by Sarah Usmani, MD and Head of Sustainable Asset and Project Finance at First Abu Dhabi Bank at MEA Energy Week</td>
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</tr>
</tbody>
</table>

Nomura Holdings, Inc. announced a commitment to align its commercial activities with the objectives agreed in the Paris Agreement, aiming to limit global temperature increases to well below 2°C, and striving for 1.5°C, above pre-industrial levels... with a target to deploy $125bn in sustainable financing by March 2026.

Source: Nomura Holdings Inc. Press Release, dated 28 September 2021

Northern Trust Asset Management Launches Quantitative ESG Strategy for EMEA and APAC Investors

Northern Trust Asset Management (NTAM), one of the world’s leading investment managers [with over US$1 trillion of investor assets and US$100 billion of sustainable investing assets], has expanded its suite of responsible quantitative investment solutions, with the launch of the NT World Quality ESG Strategy [that] seeks to efficiently target high-quality stocks and companies with higher relative environmental, social and governance (ESG)-ratings whilst defining a responsible investment universe and managing climate change risk.

Source: Putnam Investments Press Release, dated 8 June 2022

OMERS Successfully Completes First Sustainable Bond Offering

OMERS Finance Trust (OFT) announced that it has successfully closed its first offering under a recently established Sustainable Bond Framework. The inaugural dual tranche sustainable bond offering comprised US$600 million of 10-year notes and US$500 million of 30-year notes, securing strong international investor interest and a two times oversubscription. This is the first time that OFT has issued a sustainable bond.

Source: OMERS Press Release, dated 21 April 2022

Putnam Investments to Launch Fixed Income and Quantitative Equity ESG Investment Strategies

Putnam Investments announced that the firm will bring three active fixed income and two active quantitative equity exchange-traded funds (ETFs) to the market, all with an environmental, social and governance (ESG) focus, following completion of the regulatory process... The new, ESG-focused Putnam fixed income portfolios build upon the long-time capabilities and experience of the Putnam Fixed Income team, utilizing an ETF format.

Source: Putnam Investments Press Release, dated 8 June 2022
F. Impact as a Core Mandate: Multilateral Development Banks and Development Finance Institutions

While private sector financial institutions have started to scale their sustainable investing efforts, multilateral development banks (MDBs) and development finance institutions (DFIs) have been mobilizing financing for sustainable development, globally, as part of their core mandate since their inception.

**Figure 25: Largest Multilateral Development Banks**

<table>
<thead>
<tr>
<th>MDB</th>
<th>Year of Establishment</th>
<th>Annual Disbursals</th>
<th>Annual Approvals</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Bank Group</td>
<td>1944</td>
<td>49.2</td>
<td>78.2</td>
</tr>
<tr>
<td>European Investment Bank</td>
<td>1958</td>
<td>47.1</td>
<td>74.3</td>
</tr>
<tr>
<td>Asian Development Bank</td>
<td>1966</td>
<td>18.2</td>
<td>36.3</td>
</tr>
<tr>
<td>Inter-American Development Bank</td>
<td>1959</td>
<td>12.5</td>
<td>23.4</td>
</tr>
<tr>
<td>International Finance Corporation</td>
<td>1956</td>
<td>11.4</td>
<td>20.7</td>
</tr>
<tr>
<td>European Bank for Reconstruction and Development</td>
<td>1991</td>
<td>8.3</td>
<td>11.9</td>
</tr>
<tr>
<td>Asian Infrastructure Investment Bank</td>
<td>2016</td>
<td>6.2</td>
<td>10.0</td>
</tr>
<tr>
<td>Islamic Development Bank</td>
<td>1973</td>
<td>8.8</td>
<td>8.8</td>
</tr>
<tr>
<td>Council of Europe Development Bank</td>
<td>1956</td>
<td>4.6</td>
<td>6.3</td>
</tr>
<tr>
<td>African Development Bank</td>
<td>1964</td>
<td>4.0</td>
<td>5.8</td>
</tr>
<tr>
<td>New Development Bank</td>
<td>2015</td>
<td>7.6</td>
<td>5.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>177.9</strong></td>
<td><strong>280.6</strong></td>
</tr>
</tbody>
</table>

While the overall scale of funding by MDBs and DFIs is small relative to the private sector – the 11 largest MDBs collectively disbursed c.US$178 billion and committed or approved c.US$281 billion in new investment in 2021, less than the annual sustainability financing by the largest private sector institution – they play a crucial role in financing the SDGs, in part because their entire financing is towards the SDGs, and also due to the following reasons:

1. **Directing financing to the developing countries that need it the most.** MDBs and DFIs focus almost exclusively on channeling capital based on needs to the developing countries that face the biggest SDG funding shortfalls, unlike private sector players whose funding is still more concentrated in developed countries.

2. **Partnering with private sector players to drive financing for the SDGs.** MDBs and DFIs also often partner with private sector players to increase the scale of their funding, creating
instruments, structures, and risk management mechanisms that allow and encourage private financial institutions to participate easily.

3. Partnering with governments to fund critical development projects. Several development projects in developing countries, such as public health infrastructure or not-for-profit education and training, are simply unviable for private finance institutions and with MDBs often partner with local governments to finance these, acting as a critical funding source for those at the very bottom of the pyramid.

4. Establishing common standards and frameworks for the private sector. The MDBs also help set objective and transparent common standards for private sector financial institutions, helping to drive the rapid diffusion of best practices (for example the IFC Performance Standards for ESG), and impact measurement and disclosure requirements for issuers.

Despite their smaller scale individually relative to large private financial institutions, MDBs are therefore a critical driver of funding for the SDGs, both in terms of their collective funding for the SDGs, and the catalytic role they play in helping mobilize private sector sustainability financing. Their scaling is an important potential ingredient in financing the SDGs, but that requires multiples of the current finance and that seems unlikely at this stage to come from the public sector, leaving strategic alliances with the private sector as a difficult question to be answered given their neutrality across private sector participants.

New frontiers need to be broken

A sub-group of large private sector financial institutions is leading the way in adapting their organizations and strategies to become industry leaders in the 21st century. They have created distance between themselves and the rest of industry, with others not yet able to adopt similar initiatives.

For the finance industry to systematically address the SDGs, an industry-wide participation at scale will likely be required across a range of similar initiatives to the leading group.

At the same time, it is also evident that there are important new frontiers to be broken. While COP26 galvanized the finance industry on the issue of climate change – virtually every finance industry leader has major initiatives related to Net Zero or climate change – participation in the other SDGs, particularly related to financial inclusion, healthcare, and education is nowhere near the same level of breadth (in terms of the number of financial institutions pursuing path-breaking initiatives) or depth (in terms of the quality and extent of the initiatives). Only a very small group of institutions are pushing for solutions to these SDGs, and it is nowhere near enough.

Progress on climate change has shown the way, and now there is a need to similarly break through on people related themes, without which at some point, people will stop cooperating with climate initiatives ... and this problem is particularly acute in emerging markets.
Another critical frontier that needs to be broken is the geographic one. Most of the scaled non-climate related initiatives by the private sector financial institutions are still focused on the developed markets, whereas most of the need and funding gap remains in emerging markets. Clearly, there are issues of poverty, equality, and inclusion that need to be addressed in developed markets too, however, without a similar degree of focus on developing countries in the near-term, the SDGs have no hope of being achieved.

iii. Conclusion: A vanguard of leaders is emerging

Over the past year, a group of finance industry leaders have significantly stepped up their ambition to differentiate themselves in being a force for good in the world.

They are leveraging their core businesses to deliver the SDGs through a combination of redefining the scale and nature of their engagement with the SDGs, with trillion-dollar commitments and a focus on inclusion and social issues. Through scaled initiatives in affordable housing, financial inclusion, racial equity, gender equality, among others with positions not dissimilar to activists; addressing neglected and difficult SDGs having learnt by establishing business cases for funding renewables financing, affordable housing, SME loans and others they are now turning their focus to other critical and neglected SDGs such as hunger and biodiversity; new product innovation to channel increasing volumes of capital towards the goals; and by partnering to drive systemic changes that to deliver to the SDGs.
3. Financial performance: doing well by doing good

i. Market volatility creating challenging conditions

The past year has been a challenging one for global investors. The world's two largest stock exchanges, the NYSE and NASDAQ have lost nearly 10% and 20% of their value, respectively, during the past 12 months. The NASDAQ has suffered disproportionately due to the global collapse of technology stocks, of which it has more than twice as many as the NYSE, while the NYSE has benefitted from the global rally in oil and gas stocks, of which it has nearly five times as many as NASDAQ. While windfall profits and hikes in valuation give respite to the oil and gas industry, the future will not be built on oil and gas, the future will be built on technology, including alternative and breakthrough energy sources. Over the short to medium term though there will be many swings in fortune that will impact investing performance.

These changes have had a significant impact on the performance of ESG strategies, which typically seek to minimize exposure to fossil fuels and on average invest 25% of their capital in the technology sector due to its high performance on most ESG performance rankings. Nevertheless, ESG investing continues to be a resilient investing strategy in many areas. Across three major investing categories – global, US and European equities - ESG funds outperformed their non-ESG counterparts this year despite the macro-economic challenges of inflation, rising interest rates and rising energy prices.

Figure 26: Relative Performance ESG vs non-ESG Equity Funds YTD

ESG strategies have fallen less than the market in the face of severe shocks, and so appear to have proven their resilience. However, confidence in the ESG ‘premium’ appears to have been eroded too by current market conditions, casting doubts on investors ability to generate
sustained long-term outperformance based on undifferentiated ESG strategies. For many investors, ESG investing mirrors other investment strategies with an added screening layer that excludes assets with low ESG ratings. These ratings often pose several challenges for investors.

First, these ratings measure a wide range of often competing metrics across environmental impact, social performance, and corporate governance systems, which are aggregated in a single score whose weighting may not reflect the priorities of the rating users. For example, Tesla, the world’s largest electric vehicle manufacturer recently had a lower score on a major ESG index than ExxonMobil, the world’s third largest oil company, largely due to their respective performance on various social and governance matters, and this was a cause for not only surprise but a reaction by the younger generation against ESG.

Further, a lack of standards among rating agencies on measurement scope, weighting and data usage leads to their ratings diverging widely from one another, with ESG ratings across agencies found to have only a 0.6 correlation, as compared to the near perfect 0.95 correlation of credit ratings, making ESG screening strategies based on ratings somewhat arbitrary. Finally, ESG strategies based solely on ratings-based screening are largely passive with regards to the factors that drive the rating, as most scores are ‘black boxes’ that do not provide underlying data, thereby preventing the bottom-up analysis required for the careful and differentiated stock selection that drives returns in challenging market conditions.

ii. F4G performance benchmarking

Breadth, depth, and quality of activity is a performance driver

The ‘Force for Good’ engagement across ESG, sustainability and stakeholder engagement, focuses on the activities and accompanying funds flow that drives long term performance. This framework provides a significantly more comprehensive framework in assessing companies’ performance than typical ESG investing strategies do, which often rely on 3rd party ESG scorecards with narrow focus areas. The public companies in the database have been awarded ‘F4G Scores’ based on the quantitative and qualitative factors captured in the Force for Good database which assess them against the benchmark of a notional best-in-class 21st Century Financial Institution and these are used to place them in relative performance quartiles based on these scores.

The findings are informative. Despite the different approaches being used by major institutions in their Force for Good engagement, there are several common attributes shared by the most active companies, which have held to be valid across the past few years and include:

1. A commitment and quality of approach to ESG, sustainability and stakeholders.
2. A high level of integration and alignment of the organization to be and do ‘good’.
3. Quality of adaptation, innovation, and skill in designing products, processes, and businesses to withstand changes in the external environment.
4. Scale and scope of ambition in positioning the organization at the intersection of big issues, big ideas and capital.
5. Desire to Influence changes in the global system of capital.
Emerging DNA of leading organizations

These attributes and the initiatives undertaken by industry leaders in pursuit of their Force for Good goals point to the evolving DNA for industry leadership, expanding the ‘capability stack’ that will allow financial institutions to significantly outperform competitors who fail to adapt. Finance firms will need to be adept at mobilizing resources and financing the SDGs, developing new products to solve major issues, partnering with governments and other stakeholders, serving, and caring for their local communities, developing organizational resilience to cope with the increasing pace of disruptions, being inclusive, and investing their assets responsibly.

Figure 27: Key Characteristics of the Next Generation of Finance Industry Leaders

<table>
<thead>
<tr>
<th>21st Century Leader</th>
<th>20th Century Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Management</td>
<td>Customer Management</td>
</tr>
<tr>
<td>Product Offer</td>
<td>Product Offer</td>
</tr>
<tr>
<td>Risk Management</td>
<td>Risk Management</td>
</tr>
<tr>
<td>Distribution</td>
<td>Distribution</td>
</tr>
<tr>
<td>Capital Management</td>
<td>Capital Management</td>
</tr>
<tr>
<td>Operations and IT</td>
<td>Operations and IT</td>
</tr>
<tr>
<td>Human Capital Management</td>
<td>Human Capital Management</td>
</tr>
<tr>
<td>Investor Relations</td>
<td>Investor Relations</td>
</tr>
<tr>
<td>Compliance</td>
<td>Compliance</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Source: Capital as a Force for Good Initiative</td>
<td></td>
</tr>
</tbody>
</table>

The previous Capital as a Force for Good reports had accordingly found a strongly positive correlation between the Force for Good scores of finance industry leaders and their total shareholder returns.

Performance benchmarking

While returns have clearly been impacted by the market downturn and volatility of 2022, the case for being a ‘Force for Good’ integrating ESG, pursuing sustainability goals and engaging with multiple stakeholders is still a powerful one.
**Force for Good Engagement and Five-Year Total Shareholder Returns**

**Five Year Total Shareholder Returns Through July 2022**

Median Five Year Shareholder Returns from 31 July-2017 to 31 July-2022
For 90 companies in dataset with sufficient data

<table>
<thead>
<tr>
<th>Quartile of Scores</th>
<th>0-25th Percentile</th>
<th>25th-50th Percentile</th>
<th>50th-75th Percentile</th>
<th>75th-100th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSCI World Financial Index</td>
<td>5%</td>
<td>5%</td>
<td>10%</td>
<td>24%</td>
</tr>
<tr>
<td>Bottom Quartile</td>
<td>24</td>
<td>24</td>
<td>21</td>
<td>23</td>
</tr>
</tbody>
</table>

*Source: Capital as a Force for Good Initiative*

1. **Sub-Categories Considered.** Six subcategories considered for scorecard- Capital deployed towards sustainability linked finance, policies in place for ESG integration in core business, inclusion linked commitments, SDG and ESG considerations for loans & investments, environment, diversity & employee policies and peer partnerships through associations.

2. **Scoring Methodology.** For sub-categories with binary responses, one point awarded for affirmative responses. Actual amounts mobilized as a share of total assets (company + client assets) considered for sub-categories with capital commitments towards sustainability finance and inclusion. Percentile calculated for each sub-category to normalize the scoring between binary responses and actual finance commitments. A final weighted average percentile by assigning equal weights to each category.

3. **Weighted Score for Final ESG Scorecard.** Customised weights applied for each category based on number of institutions who have a score in the sub-category and its relative importance to five year returns and financial metrics. The final weighted average percentile for each company based on customized weights are applied is then marked on a total score of 5 to calculate the final ESG scorecard for the company.

Over the past five years, companies with the most comprehensive and scaled initiatives and strategies have significantly outperformed the market as well as their less active competitors, with the highest scoring quartile of companies outperforming the market by 32% in terms of annual shareholder returns, and the less actively engaged companies in the third quartile still outperforming by 5%, generating twice the level of returns annually. Unlike in previous years, the companies ranked in the bottom quartile of Force for Good performance did not outperform the market. The key differentiators that emerge are:

- **Intensity of engagement.** While all the companies considered in the analysis have ESG, sustainability and stakeholder engagement strategies that are part of the industry’s common ground, the differences in engagement between the companies is striking.
- **Scale of sustainable finance.** For the top quartile companies, while sustainable financing represents only 2.7% of their total assets on average, that is c.70% higher than the middle quartiles at 1.6%, and 350% higher than the bottom quartile at 0.6%. While even for the top organizations this is a tiny proportion of their assets, it seems to matter.

- **Power and extensive engagement in industry rule setting and forums.** Top quartile leaders are significantly more powerful and active in industry and multilateral engagements (being involved in 50% more organizations that the other quartiles) and play a bigger role, including founding ones, in managing those organizations.

- **Targeting outcomes not just activity.** c.83% of top quartile leaders explicitly target sustainability outcomes vs. c.50% of others displaying the same competitive disciplines that have been success factors in the industry historically.

- **Comprehensive ESG screening.** Top quartile leaders employ significantly more comprehensive ESG screening methodologies, which on average have more than twice as many screening criteria than those employed by the remaining companies.

The highest performing companies do more and do it more intensively than their competitors, break new ground, build new capabilities, and build a superior organization in doing so, and this confers superior value. In the process, these companies lift the bar for other to rise to and shift the common ground to one of greater and greater impact.

At the other end of the spectrum, the broadening engagement of the wider finance industry has led to the former common ground of industry leaders becoming the common ground of the industry as a whole. Pursuing only the ‘baseline’ common ground of engagement, rather than the new ground being raised by the highest performers, no longer confers performance benefits relative to the market, providing some explanation why the performance of the bottom quartile of companies examined has fully converged with the rest of the market.

Given the limited sample size of the organizations scored and benchmarked, there may of course be other drivers impacting the outperformance of the group against the market, the analysis’ focus on industry leaders for example skewing for companies of above average size. (This would however not explain the performance differences between the quartiles in the group).
iii. Conclusion: A model of the future of financial institutions is emerging

A strategic change is underway whereby a large proportion of the industry, even among the leading 125 financial institutions examined for this initiative, are stuck in an old industrial financial model and a smaller group is redefining their identity and nature. The key points to note are:

The data reveals two distinct classes of financial institutions emerging, and a group in transition. Beginning with creating a more differentiated common ground, and moving to break new ground, a sub-set of the industry is creating a new strategic scope of activity which has the potential to change the nature of their organization’s values and behaviors. This group is quite different in ‘DNA’ from those that are more “traditional’ and conservative in their approach to engaging in doing good and continue to define themselves by the products and transactions they sell and process.

The initiatives, people, language, commitments, and actions of the finance industry’s most aggressive and ambitious has changed to reflect their ambition to be relevant to the emerging sustainable digital era

While these are required, they are not sufficient to confer advantages in a rapidly changing world of opportunity and risk.

The advanced subgroup is strategically shifting to define itself as a player in the secure sustainability and digital era of the future. The advanced league of financial institutions has embraced the view that making a positive impact is the direction of change and confer significant advantages if done well. As such, they have decided to take on projects, activities, products, and people that will enable them to excel at this.

Addressing complex problems and measuring their impact. These organizations are not only learning to step up to fund sustainability, but they are also participating in the rule setting and partnering that will define the rules of engagement for the industry as a whole. As such, they are better positioned for broader systemic changes in the world at large.

The superior performance of leading ‘force for good’ organizations is multi-dimensional: they are better run companies, able to attract and retain more diverse and more productive talent, with more resilient systems and processes and business strategies that position them to capitalize on high growth opportunities, and with innovative products and services that differentiate them from their competitors. While no company today has fully made this transition yet, the most ambitious companies engaging as a force for good have started the transformation, providing a potential explanation for their superior operating performance vs. their peers and the industry.
In summary

- The common ground of the finance industry continues to expand and incorporates the deepening integration of ESG, the leveraging of balance sheets to drive sustainability objectives, by mobilizing sustainability financing, and the long-term focus on multiple stakeholders.

- A subset of the industry leaders is pushing further than the rest to establish a higher ‘quality’ common ground, differentiating themselves through the strategic integration of ESG and scaled commitments to sustainability and building new capabilities in the process.

- This subset is also significantly stepping up their commitments to the SDGs, having deployed nearly US$2.5 trillion in SDG aligned financing in 2021 across a widening set of goals.

- These industry leaders are playing an increasingly critical role in meeting the SDGs, entering new markets, driving product innovation, and developing new business models to address underfunded goals.

- The Force for Good framework captures a set of comprehensive initiatives and objectives whose execution implies the development of new assets and skills that position companies for future industry leadership.

- The outperformance of ‘force for good’ organizations is significant in quantum and multi-dimensional in nature: they are better run companies, able to attract more diverse and more productive talent, with resilient systems and business strategies that position them to capitalize on high growth opportunities, and with innovative products and services that differentiate them from their competitors.

- However, even the industry’s leaders are at an early stage, with only a fraction of their capital allocated to the secure sustainable or digital opportunities. They are faced with the challenge of weaning themselves and their stakeholders off legacy investments as quickly and smoothly as possible.

- This transition opens up the opportunity for those that are bold and disruptive to carve out a pre-eminent position, even if they are not today’s leaders.
V. Capitalism’s Key Stakeholders to Drive Secure Sustainability

Beyond the coordination and allocation of funding by the finance industry, meeting the SDGs will require the participation of a broad set of global stakeholders, each with specific roles to play. Achieving the 2030 targets will require science and research to develop innovation to help achieve the goals and to disrupt the status quo too. It will require entrepreneurs and corporations to adopt, scale and deploy these innovations, and governments to incentivize engagement, funding, and innovation and disincentivize the things that hold the world back. The tech sector will need to enable stakeholders with digital technologies, and individuals around the world will need to support these efforts as consumers, investors, voters, and citizens.

1. Capitalism is bigger than financiers

The finance industry’s position in the context of the system of capitalism is a powerful one. While the finance industry is the primary facilitator of virtually all the world’s capital, private sector financial institutions are only one set of several stakeholders in the world’s economic system. While this system of global capitalism has made the finance industry one of the most powerful stakeholders, it also constrains its ability to act independently, creating obligations to the ultimate asset owners to generate returns, as well as to abide by regulation, respect the growing power of ESG rules, and adhere to constraints based on their scope of specific business areas.
Critically, capitalism is a multi-stakeholder system that is broader and more important than just the financial institutions that are custodians of much of its capital. Each stakeholder is complicit in its functioning and for the system to deliver different results, each stakeholder would need to change their behavior.

The stakeholders are of two types: firstly, those that have a meaningful direct stake in the global flow of capital and secondly, those that deliver innovations that can change the functioning of the system. In addition to financial institutions, the former includes households, governments, and private sector (non-financial) corporations. The roles that these stakeholders will need to play for the SDGs to be met include those of consumers and producers, asset allocators and investors, and regulators and enablers.

In a world increasingly defined by the need for progress, the delivery of innovation is critical to capitalism. Tech companies, and science and research institutions are two of the most significant providers of the scientific and technological breakthroughs required to meet the near-term global sustainability goals, manage the sustainability transition, and enable all stakeholders to position for an increasingly digital world. Their innovations, often brought to life by start-ups and their entrepreneurs, can also change the way the system works, for example by providing global access to information and capital, or by revolutionizing factor inputs like energy and the consumption of natural resources.

Each of these stakeholders will need to play their role as a force for good for the world to avoid the disasters that are expected from climate change, pollution, and the collapse in biodiversity, raise the world to the levels targeted in the SDGs, and realize a more sustainable future in the digital age.

2. Corporations and enterprises

Corporations and enterprises of all sizes and structures (including mutuals and cooperatives) are the organizing entities around which most of the world’s societies organize their economic activities. While SMEs number in the millions and collectively represent 95% of job creation and generate c.US$47 trillion, 50% of GDP globally, the 2000 largest corporations alone also generate nearly $50 trillion in annual revenues and tend to be far more powerful in terms of their reach and ability to drive global change at scale. How corporations operate, where they do business, what they buy and from whom, and what products and services they offer therefore has a critical impact on sustainability and the SDGs. The current sustainability footprint of businesses varies widely by industry sector, of course, with five of the largest sectors - oil & gas, retail, automotive, construction, consumer goods (including food) - having among the biggest impacts.
### Corporations and Enterprises
#### Their Role in Capitalism, Indicators of their Footprint and Impact

- 80% of water usage due to consumer goods (Source: Columbia Climate School)
- 66% of tropical forest loss due to consumer goods (Source: Columbia Climate School)
- 60% of greenhouse gas (GHG) emissions from consumer goods (including food) (Source: Columbia Climate School)
- 40% of global plastic usage through retail sector packaging (Source: OECD)
- 40% of drinking water pollution produced by the construction sector (Source: International Journal of Emerging Technologies in Engineering Research)
- 36% of global energy consumption used by construction sector (Source: UNEP)
- 35% of worldwide CO₂ and methane emissions since 1965 produced by the oil and gas sector (Source: Climate Accountability Institute)
- 25% of global GHG emissions produced through the retail supply chain (Source: Boston Consulting Group)
- 23% of air pollution produced by the construction sector (Source: International Journal of Emerging Technologies in Engineering Research)
- C.10% of global CO₂ emissions produced by the automotive sector’s passenger cars (Sources: IEA, International Council on Clean Transportation)
- 5-10% of global food and consumer product market classified as ethical/sustainable (Source: Nielsen, ResearchAndMarkets.com)
- US$47 trillion in global corporate revenues (2000 largest corporations) (Source: Forbes)

While the SDGs represent a potential major opportunity for businesses, unlocking their value is not easy and that is why business solutions and capital have not funded them well.

For corporations and other commercial enterprises to play their role in changing the system of capitalism to a more sustainable high impact one, they would need to overcome a series of constraints, adopt new business policies and strategies, and transform their position in their industries and their impact in the world in multiple ways, including, with examples:

1. **Adopt meaningful sustainability goals at the corporate level.** Only 25% of the world’s largest 500 companies having committed to net zero carbon emissions to date.33

2. **Embed the SDGs into their mission and metrics of their lines of business, products, and services.** Social or environmental targets are embedded in less than 40% of global long-term corporate strategies
3. Drive near term growth of renewable energy by decarbonizing industrial energy use. The industry sector accounted for 38% (156 EJ) of total global final energy use in 2020.\(^3\)

4. Resolve their mandates to reflect impact and values (SDGs and ESG) responsibilities. Currently, only c.25% of U.S. companies include some form of environmental or social metric as part of their executive incentive plan ESG performance measures.\(^3\)

5. Address judicial and regulatory constraints that prevent their impact for good. The U.S. Supreme Court has issued a ruling in June 2022 limiting the Environmental Protection Agency’s powers to restrict carbon emissions from power plants.

6. Address negative political impacts in each of their locations. “The ESG movement has helped drive energy prices to a record high, enabled Putin and harmed American. And this collusive behavior is almost certainly illegal” US Senator Tom Cotton, June 2022.\(^3\)

7. Enter markets and launch initiatives leveraging their assets where they can make the biggest impact for good. Total annual climate finance flows in Africa for 2020, domestic and international, were US$30 billion, about 12% of the amount needed.\(^3\)

8. Determine how they will achieve this while meeting profitability obligations, recutting their deals with shareholders where necessary. Environmental and social (E&S) shareholder proposals voted at U.S. companies attracted 27% shareholder support on average during 2021, down from 36% the previous year.\(^3\)

9. Account for the full impact of positive and negative externalities. Air pollution costs an estimated $2.9 trillion annually, which are not accounted in for polluters’ costs.\(^3\)

3. Individuals

When acting collectively, the individual is perhaps the most powerful stakeholder in consumer driven capitalism as a collective and therefore the one that can make or break the SDGs. A significant portion of the world’s nearly eight billion people simultaneously act as consumers, investors, influencers, voters, and agents for direct action. While the individual has perhaps the greatest impact on SDG12 Responsible Production and Consumption, their direct actions and behaviors also impact SDG4 Good Health and Wellbeing, SDG5 Gender Equality, SDG6 Clean Water and Sanitation, and SDG10 Reducing Inequalities, while also having an indirect impact on all SDGs as voters and investors.
# The Individual
Their Role in Capitalism, Indicators of their Footprint and Impact

- 74% have fallen victim to fake news (Source: IPSOS, Centre for International Governance Innovation)
- 73% of the world’s consumption comes from individuals in free democracies (Source: World Bank Freedom House 2022 Freedom in the World Survey)
- 60% (or US$275 trillion) of global liquid financial wealth is held by households (Source: Force for Good Research)
- 60% of global greenhouse gases are tied to consumption of end user consumer goods (Source: Columbia Climate School)
- 57% of GDP is household consumption, accounted for by individuals (Source: World Bank)
- 49.7% to 74% of adults globally having some awareness of the SDGs (Source: Global Survey on Sustainability and the SDGs, World Economic Forum)
- 41% of the capital of asset managers is provided by retail investors (Source: BCG, 2021 Global Asset Management Report)
- 35% of global GHG emissions are made by free democracies, and further 18% from partial democracies, and are subject to voter influence (Source: World Bank, Freedom House 2022 Freedom in the World Survey)
- 23% of world’s population live below US$3.20 a day, where their choices might be driven by price more than any other consideration (Source: World Bank)

For individuals to play their role in changing capitalism, they would need to change their role as consumers, investors, and as voters, which are three of the highest impact and most powerful roles in the system, this entails (with examples), among other things the need to:

1. **Make conscious choices about personal actions and behaviors supporting sustainability.** 80% of respondents across 17 advanced economies confirmed that they would be willing to make changes to the way they live or work to reduce the effects of climate change.

2. **Support brands, products, and services aligned with the SDGs and to deselect those that are against their ESG values.** 65% of consumers want to buy purpose-driven brands that advocate sustainability.

3. **Invest in businesses and sectors that support their ESG values.** 75% of investors have stated they are interested in sustainable investing.

4. **Invest in businesses that make a positive SDG impact or support themes that matter as an investor (e.g., EM, financial inclusion, etc.).** Over half of investors surveyed stated environmental impact as an important investment objective.
5. **Vote for politicians and political parties that support and plan to make an impact consistent with one’s ESG values, SDG commitments, big global issue themes.** Green parties currently form parts of governments in six of the OECD’s 38 member states.\(^46\)

6. **Buy from products and services from countries that meet one’s priorities and values related to ESG, SDG and global issues.** The anti-apartheid movement in South Africa was kicked off by a consumer boycott movement.\(^47\)

### 4. Governments and the public sector

Governments and the public sector have perhaps the most powerful top-down role to play in meeting the SDGs. While the role of individual governments will of course vary by capacity and inclination, it generally will need to provide the frameworks through policies, laws, regulations, and procurement aligning their country’s stakeholders and enabling coordination between them, provide the incentives and penalties that encourage stakeholders to act accordingly, and it will need to step in as the funder of development goals and activities that are not appropriate for the private sector investment in full or in partnership, taking risk and losses as appropriate, with backstop arrangements to kick-start an area to solve issues.

#### Governments and the Public Sector

**Their Role in Capitalism, Indicators of their Footprint and Impact**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>83% of global emissions covered by national net zero commitments (by 136 countries)</td>
<td>(Source: Net Zero Tracker)</td>
</tr>
<tr>
<td>c.50% of top 10 GHG emitting countries, responsible for over 45% of global emissions have not pledged to achieve net zero by 2050</td>
<td>(Source: Net Zero Tracker)</td>
</tr>
<tr>
<td>34% of the world's total capital and 38% of gross liquid assets held by governments</td>
<td>(Source: Force for Good Research)</td>
</tr>
<tr>
<td>0.33% of OECD’s 30 Development Assistance Committee (DAC) members' gross national incomes spent on foreign aid, less half the target level of 0.7%</td>
<td>(Source: OECD)</td>
</tr>
<tr>
<td>US$179 billion in Official Development Assistance (ODA) by the OECD’s DAC members in 2021</td>
<td>(Source: OECD)</td>
</tr>
</tbody>
</table>

For governments and the public sector to play their role in creating a more sustainable form of capitalism, they would need to set policy, laws and regulation, taxes and incentive structures, finance and prioritize the key activities at home that lead to a more sustainable country and collaborate with countries around the world through multilateralism to make change at a global level through the many agreements they are party to, including trade, aid, sanctions.

The key actions, with examples, include:
1. **Advocate sustainability goals and priorities, building a national consensus including local governments, the private sector and civil society.** “We have a government that has brought together bitter enemies into a constructive relationship ... transforming society in its totality to ensure a better life for all.” Nelson Mandela

2. **Identify priority sustainability needs and initiatives for local execution.** “NITI Aayog (public policy think tank of the Government of India) has mapped the SDGs and targets with ministries, thereby charting responsibilities of initiatives and monitoring progress clearly... bringing together the government...and business for brainstorming on the best possible ways to move forward.” Amitabh Kant, Chief executive Officer, National Institution for Transforming India government of India.

3. **Coordinate execution and implementation plans of various stakeholders.** “UN DESA provides substantive support and capacity building on stakeholder engagement for the 2030 Agenda ... to strengthen the multi-stakeholder dimension of national development planning and DG mainstreaming.”

4. **Implement policy frameworks to facilitate execution and incentivize stakeholders for action.** “The Asia Development Bank examined the types of instruments that can be used to reduce energy intensity...finding the use of incentivizing policies (subsidies, tax reductions, voluntary agreements, ETSs and cooperative schemes); market-based instruments (MBIs) (white certificates and tendering schemes); and EE finance (special credit lines and risk-sharing facilities) provided lessons for others.”

5. **Assist execution through direct action and funding where required.** PPPs are a widely used tool by governments but extracting value from them requires an instrument for financing key economic infrastructure projects, it is necessary that countries have in place the institutional capacity to create, manage, and evaluate them.

6. **Develop key metrics and indicators to track progress and monitor performance against goals to facilitate corrective actions where needed.** “The SDGs ... is more than a set of statistics; it is an agenda, a way to identify people or places that need the most help to make life better... it is radical, ambitious, inclusive, and sustainable. The Authority aims to make sure everyone counts, and is counted, and no one is forgotten.”

7. **Set the rules of engagement through standards, rules, and regulations.** “The EU provides for a detailed set of policies for the SDGs at the Goal level, with SDG targets specifically addressed by each EU policy activity and include Legal acts (Directives, Decisions, Regulations, Recommendations, Declarations, Resolutions) and Preparatory documents (Communications, Staff Working Documents).”

8. **Introduce incentives and penalties to change behaviors.** “The EU Corporate Sustainability Due Diligence and Reporting Directive will impose sanctions on companies for failure to comply, and civil liability for violations of certain due diligence obligations which lead to adverse human rights or environmental impacts.”
9. Inject capital into procurement, sustainability and development programs and initiatives to kick start and create new markets. PMJDY is a scheme of the India government to drive Financial Inclusion envisaging universal access to banking facilities … and importantly, the plan channels all government benefits from central, state and local government levels to the beneficiaries accounts reaching over 400 million Indians.56

10. Collaborate with other countries and transnational organizations to create the proper enabling environment by taxing pollution, remove subsidies for harmful activities, develop inclusive indicators, and agree on standards. “The ‘Global Goals for Local Impact’ initiative captured data from every household in Lanet Umoja, Kenya on all aspects relating to the SDGs, including security, food, agriculture, livelihoods, education, health, energy, water, and sanitation to share the solutions across the community to local improvements to be implemented.”57

Much of the world has little to no implementation of sustainability laws, standards, and practices. The “white space” dwarfs the developed space, and includes almost all of Africa, Latin America, and Asia, it stretches into China too and Russia. The penetration of ESG practices, sustainability finance and stakeholder engagement is low to absent and many of these regions have therefore not developed their market as attractive for sustainable development investments.
5. Information technology sector

Having kicked off the Digital Revolution in the second half of the 20th Century, information technology is becoming increasingly integrated into all areas of the economy and society, making the tech sector a critical driver of innovation, functionality, and efficiency, but also of disruption, whose contributions will be critical to meeting the SDGs.

As one of the world's five largest industries by revenue, the information technology sector and its leaders have an important role in the sustainability transition as businesses. However, its true potential as a driver of change stems from information technology's role as an enabler for others. Much like the finance industry's potential as a force for good rests on its ability to allocate capital, the tech industry's potential rests on its ability to deploy technology in a targeted and innovative fashion in pursuit of the SDGs. Information technology's impact providing platforms for individuals and entrepreneurs to collaborate and deploy innovations has been significant.

### Information Technology Sector
Their Role in Capitalism, Indicators of their Footprint and Impact

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>63%</td>
<td>of the world's population, or five billion people are digitally connected, among these over 90% use some form of social media (Source: ITU, Kepios)</td>
</tr>
<tr>
<td>64%</td>
<td>use fintech for internet and mobile payments (Source: World Bank Global Findex Database)</td>
</tr>
<tr>
<td>43%</td>
<td>of these use e-commerce to buy and sell goods (Source: Shopify)</td>
</tr>
<tr>
<td>c.13%</td>
<td>use edtech for online training and learning (Source: Force for Good Research)</td>
</tr>
<tr>
<td>2-3%</td>
<td>of global GHG emissions, c. 60% of which comes from the downstream use of products by customers (Source: S&amp;P Global Trucost data)</td>
</tr>
<tr>
<td>US$5 trillion</td>
<td>in annual sector revenues (Source: IDC)</td>
</tr>
<tr>
<td>c.55 million</td>
<td>people across the world's employees in the tech sector (Source: Statista)</td>
</tr>
<tr>
<td>c.20 million</td>
<td>instances of hate speech detected on Facebook every calendar quarter (Source: Facebook)</td>
</tr>
<tr>
<td>4GW</td>
<td>of green power contracted by tech industry in 2021, almost 30% of all corporate renewable energy purchase agreements (Source: Renewable Energy Buyers Alliance)</td>
</tr>
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</table>

For the IT sector to play its role in changing the system of capitalism to a more sustainable high impact one, it would need to follow a code of conduct, if not values, in its ESG policies that reflects its scale to develop, deploy and fund solutions to the world's major issues encapsulated in the SDGs and to work across the globe on major issues where technology is a solution to a non-
technology rich area. More importantly, it would need to accelerate the transition from the current industrial to the information era, including, with examples:

1. **In common with other corporations and enterprises, the industry will need to adopt ESG and the SDG in their products and services, across businesses, supply and value chains, ecosystems, resolving the necessary conflicts with shareholders, regulators, and other stakeholders, and accounting for both positive and negative externalities.**

2. **Critically, lead in addressing the digital divide across the world.** Less than half the population (47%) of developing countries is online, and an even lower percentage of women.

3. **Use existing platforms, particularly social media platforms, as tools to educate the public.** On critical social, economic, political, and environmental issues and allow entrepreneurs to roll out solutions in niche areas. Major social media platforms collectively reach over 4 billion users.

4. **Leverage the sector’s assets into new markets and launch initiatives where they can make the biggest impact for good.** The internet economy has the potential to add US$180 billion to Africa’s GDP by 2025.

5. **Take leadership of the transition the information era, working with transnational institutions and leaders from other stakeholder groups to produce and help drive the blueprint for execution.** The UN’s High-Level Panel on Digital Cooperation, consisting of tech industry leaders and policy makers, has engaged over 100 countries with proposals to together to optimize the use of digital technologies.

6. **Facilitate and support the adoption of e-government systems, increasing accountability and transparency across the world and raising standards of governance.** 170 of 193 countries already use the internet to deliver government services.

### 6. Science and research

Technological innovation has been central to nearly all progress human history from tools, and fire, to the first, second, third, and now the fourth industrial revolutions. The world today uses technologies that were unimaginable only 20 years ago alongside technologies that were widespread 2,000 years ago.

While corporations are tasked to meet the SDGs using only currently existing technologies, science and research are tasked with making the scientific and technological breakthroughs across several critical areas to enable the future to be realized. While many global challenges like digital exclusion and armed conflicts are challenges of policy and execution, others will not be solved without further innovation. The statistics below highlight the world’s science and technology gap that remains to be addressed.
### Science and Research

**Their Role in Capitalism, Indicators of their Footprint and Impact**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
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<tbody>
<tr>
<td>91% of 71.3m global passenger cars sold in 2021 still using internal combustion engines</td>
<td>(Sources: Forbes, IEA)</td>
</tr>
<tr>
<td>Over 80% of the global primary energy mix is still derived from fossil fuels</td>
<td>(Source: BP Statistical Review of World Energy 2022)</td>
</tr>
<tr>
<td>50% of buildings globally use concrete and steel, 2,000-year-old technologies, that together produce 16% of global GHG emissions</td>
<td>(Source: Nature)</td>
</tr>
<tr>
<td>50% increase in global atmospheric CO2 since the Industrial Revolution</td>
<td>(Sources: National Oceanic and Atmospheric Administration, World Economic Forum)</td>
</tr>
<tr>
<td>53 years after the first moon landing humankind remains a planetary species</td>
<td>(a period nearly as long as that between the first ever flight and the moon landing)</td>
</tr>
<tr>
<td>10% of the world’s population still lacks access to safe water</td>
<td>(Source: Water.org)</td>
</tr>
<tr>
<td>9% of the global population suffering from food insecurity, particularly in places where traditional agriculture is not feasible</td>
<td>(Source: UN FAO)</td>
</tr>
<tr>
<td>5 million STEM (science, technology, engineering, and math) graduates annually and, US$2.3 trillion in global R&amp;D spend</td>
<td>(Sources; UNCTAD, World Bank, IMF)</td>
</tr>
<tr>
<td>0 smart cities globally working with zero net emissions</td>
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</table>

For the past 400 years scientific innovation has progressed in a series of paradigm shifts that have led to radical breakthroughs and change, interspersed with a series of incremental innovations that have improved on existing technologies. Meeting the SDGs will require both incremental and radical breakthroughs across several areas of science and this is what defines the role of scientists in changing the system of capitalism, with examples:

1. **Adopt a code for the participation of scientists and science based on ESG values.**
   Laboratories consume around ten times as much energy as a typical commercial office and four times more water.  
2. **Agree priority areas for the application of science to the least served SDGs.**
   Overall funding of the SDGs remains imbalanced, with five SDGs together receiving less than 18% of total private sector funding for the goals in 2021.
3. **Replacing the major polluting resources.**
   Concrete and steel, used in building every second structure globally, together produce 16% of global GHG emissions.
4. **Achieve the energy breakthroughs required to hit Net Zero by 2050.**
   Almost half the CO2 reductions the world needs to make to hit Net Zero can only be met with further innovation in areas like energy storage, hydrogen, and carbon capture.
5. Maximize health-spans with medical breakthroughs. There is a sixty-fold difference between the childhood mortality rates between the world’s best and worst performing countries, and a 33-year gap in life expectancies.

6. Provide nutritious and affordable food with agricultural breakthroughs. There are currently 345 million people in 82 countries suffering from acute food insecurity.


8. Manage global warming with breakthrough climate technologies. The US National Academies of Sciences, Engineering, and Medicine have recommended setting up a US$100-200 million solar geoengineering research program.

9. Develop breakthroughs that alleviate water as a bottleneck for industry, agriculture, and life in general. Four billion people globally experience water scarcity for at least one month every year.

7. Conclusion: A shared responsibility to work together

Solving the world’s challenges is clearly a multi-stakeholder responsibility that will require the coordination of governments, individuals, private corporations, and financiers. Effective collaboration between these parties will require a coordinating hand. The UN is the most trusted institutions in the world. However, its traditional approach has been to work with member states to build consensus on the biggest issues facing the world and to promote united action. In recognition of the need to build a consensus to forge the way ahead, the UN Secretary General has outlined in ‘Our Common Agenda’ the need for a truly global compact. Given the nature of the challenge of funding a secure sustainable transition to the future, and the pivotal role of multiple stakeholders, it will need to expand beyond national governments to become a true global compact of multiple stakeholders. This clearly might not be the UN of the post-world war industrial era, but a multi-stakeholder institution suited to the future age it seeks to realize.

In summary

- Meeting the SDGs will require the participation of a broad set of global stakeholders, each with specific roles to play.
- Science and research will need to develop breakthroughs innovations on energy and materials sciences that replace fossil fuels and natural resources with renewable and sustainable alternatives.
- Global corporations will need to universally embed sustainability in their strategies, enter markets where they can have the biggest impact and fully account for the externalities, both positive and negative, that they generate.
National governments will need to prepare their countries for sustainable investments setting rules and standards that incentivize inward investment, advocating sustainability goals, prioritizing sustainability initiatives, and coordinating their execution and collaborate with other countries to achieve the SDGs.

The tech sector will need to lead in driving the transition to the digital era, connecting the 33% of the global population not yet online, facilitating the adoption of e-government, and educating the global population using its platforms.

Individuals who collectively account for 72% of global GHG emissions, need to make active choices buying products, supporting companies, investing in assets, and voting for leaders that make a positive impact on the SDGs.

The UN has the potential to play a critical role in coordinating the efforts of these stakeholders. To do so it will need to expand beyond national governments to become a true global compact of multiple stakeholders as it has said it can.
VI. Accelerating Impact on the SDGs

One of the most critical levers to achieve the SDGs is innovation. A confluence of innovation, solutions, entrepreneurs, and capital can deliver breakthroughs to overcome seemingly intractable challenges, creating a knock-on confidence that encourages the targeting of other challenges. Climate change is one such area where solutions in progress aim to address one of the greatest long-term threats facing the planet. In addition, the UN is also championing other critical enabling initiatives which can enable progress across the goals. Beyond these initiatives, Force for Good has identified six breakthroughs requiring multi-stakeholder execution at scale, with a potentially meaningful impact on the world's ability to meet the goals.

1. Significant barriers to successfully funding the SDGs

The widening gap to fund the SDGs highlights the fact that existing strategies focusing on significant but essentially incremental change have been inadequate and are likely to fail to meet the goals. Funding, and meeting the SDGs therefore requires a far more radical, yet feasible, approach than any envisaged thus far.
Five key challenges need to be addressed to scale and speed execution:

1. **The Global Stakeholder Alignment Challenge.** Ensuring that the trillions of dollars needed for the SDGs are efficiently deployed where needed will require a coordinated investment framework of a scale equal to that of the Paris Agreement (which secured 193 signatories) and a degree of coordination equal to the one applied to the current Russian sanction regime. This will be more complex since it requires public and private sector participants to agree.

2. **Event Risk and Crises Challenge.** The funding plan for the SDGs needs to be independent of event risks and a clear protocol needs to be in place for the recurring crises that are part of the flow of world events, thereby avoiding the risk of the latest crisis derailing progress on the long-term plan, as we are seeing today as governments face inflation, supply, security, and domestic political risks.

3. **The Sufficient Returns Challenge.** To attract funds, solving the SDGs must deliver a return that satisfies the ultimate owners of the funds, in the case of individuals it may be their pensions are at stake, for governments it may be tax revenues, and for corporations it may be returns on these investment and shareholder returns. There is insufficient development finance institutional capital and insufficient philanthropy available, at US$11 trillion and US$3 trillion respectively, to leverage private funds at scale by de-risking. Unless the SDGs are an opportunity for competitive returns as defined by the various stakeholders in capitalism, rather than as a problem or “cause”, they will not be funded.

4. **The ESG Risk Challenge.** The global increase in ESG standards and policies risks further limiting private investment into developing regions with significant SDG funding needs due to their often-poor performance on governance related indictors, for example, with respect to government effectiveness, transparency, or corruption.

5. **The Impact Delivery Challenge.** Selecting the best interventions to meet each goal can be challenging, with their impact varying based on local geographic, political, social, and economic considerations. Further, the most effective actions that drive progress on individual SDGs will often be at the expense of other goals, e.g., the most effective models of rapid economic growth (SDG8) have historically driven environmental degradation (SDGs 13, 14, and 15).

These are highly significant barriers to success and explain why the SDGs have not been sufficiently funded to date. Success requires these fundamental challenges to be overcome.
Requirement-Set for Funding

Several key requirements are self-evident:

1. **Existential risks need the highest priority**, clearly, and these are climate change and biodiversity.

2. **Addressing Human or social risks is a pre-condition for success of environmental risks**, no matter how extreme the latter is, and must be addressed or people suffering will thwart progress.

3. **Radical solutions in scale and substance are essential** in the second half of the 15-year SDG completion window, a ‘Space Race’ for the planet approach.

4. **Existing solutions need to be rolled out at scale** rather than waiting for radical breakthroughs.

5. **Making sufficient profits to meet the needs of owners of capital** is a requirement for funding to flow at the scale needed.

6. **Address mandates and conflicts of interests for boards** and executive management to align fiduciary and regulatory duties and stakeholder ones.

7. **Impact in waves is required such that the easiest impact is executed first** and the most difficult is left for last rather than holding up the whole program for the perfect solution.

8. **Enabling solutions should be implemented first** to provide the platform to unlock multiple barriers and serve to support making an impact across multiple areas should be implemented quickly.

9. **Alignment of global stakeholders of sufficient critical mass is required** to achieve success and both COVID-19 and the response of leading international to Russia's war on Ukraine demonstrate the ability to innovate, align and take unprecedented measures.

10. **Systemic changes that account better for impact, profit and loss are required** to be made to create a more complete and rational system of rewards for capital owners.
## 2. A blueprint for delivering the SDGs

The agenda that emerges from the requirement set is as follows:

### A Blueprint for Delivering the SDGs

<table>
<thead>
<tr>
<th>Key Challenges</th>
<th>Summary</th>
<th>Key SDGs Impacted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>One Core Focus Area</strong></td>
<td></td>
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</tr>
<tr>
<td>Climate Change</td>
<td>Global action plan to decrease global carbon pollution by 45% from 2010 levels by 2030, achieving Net Zero by 2050, and limiting global temperature increases to 1.5°C or less by 2100</td>
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<tr>
<td><strong>Four UN Priority Transitions</strong></td>
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<tr>
<td>Renewable Energy</td>
<td>Ensure access to affordable, reliable, sustainable and modern energy for all</td>
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<tr>
<td>Food Systems</td>
<td>Transform global food systems to provide sufficient and nutritious food for all in a sustainable and resilient manner</td>
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<tr>
<td>Digital Connectivity</td>
<td>Enable global connectivity and the equitable use of digital public goods, while ensuring data privacy and safeguarding human rights in digital spaces</td>
<td></td>
</tr>
<tr>
<td>Human Capital Investment</td>
<td>Accelerate more and better investments in people for greater equity and economic growth aligned with digital economic transformation</td>
<td></td>
</tr>
<tr>
<td><strong>Six Breakthroughs Initiatives</strong></td>
<td></td>
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<tr>
<td>Affordable Housing</td>
<td>Make a significant difference to affordable housing as the basis of human dignity across the world demonstrating that it can be funded at scale, make an impact and deliver a return</td>
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<tr>
<td>Mass Education</td>
<td>Deliver education solutions to children in a model that is global, affordable, scalable, distributable, and local, demonstrating the feasibility of using technology to compensate for the bottleneck in building enough schools and training enough teachers</td>
<td></td>
</tr>
<tr>
<td>Mass Financial Inclusion</td>
<td>Drive mass financial inclusion across the world by sharing a stack of solutions that has proven its ability to deliver ground-breaking sustainable and inclusive development</td>
<td></td>
</tr>
<tr>
<td>Technology and Individual Impacts</td>
<td>Enable the provision of technologies, including products, services and platforms, that provide individuals with the means to make a positive impact on the SDGs and broader human security</td>
<td></td>
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<tr>
<td>Biodiversity</td>
<td>Make an impact on biodiversity through a few targeted solutions which with scale can make a transformative impact on biodiversity and can be funded for global impact</td>
<td></td>
</tr>
<tr>
<td>Impact Externalities</td>
<td>Drive a systemic change to returns, asset pricing and reporting to reflect the full economic, environmental, and social costs and benefits of economic actions, influencing decision making in allocating capital</td>
<td></td>
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<tr>
<td><strong>One Fundamental Enabler</strong></td>
<td></td>
<td></td>
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<tr>
<td>Peace and Partnerships</td>
<td>Ultimately the achievement of even only one of the SDGs depends on the absence of conflict and strife, with stakeholders working together against a common agenda.</td>
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</tbody>
</table>
3. Climate change

“We left COP26 in Glasgow with a naïve optimism, based on new promises and commitments. But the main problem — the enormous, growing emissions gap — was all but ignored. The science is clear: to keep the 1.5°C limit agreed in Paris within reach, we need to cut global emissions by 45 per cent this decade.”

UN General Secretary Antonio Guterres, 4 April 2022

Historically, the majority of global SDG funding has being applied to “Planet” related goals, specifically to climate change (SDG 13) and the energy transition (SDG 7). This focus on climate related goals is unsurprising given that climate change has not only risks for business, but also a far-reaching impact on the global eco- and socioeconomic systems, directly threatening humankind’s living environment and sustainable social and economic development. However, the current execution against climate related goals, most comprehensively encapsulated in the Paris Agreement, lags far behind targets, and at current rates of CO2 emissions, the world will exhaust its total carbon budget for the Net Zero transition by 2034.

<table>
<thead>
<tr>
<th>The Paris Agreement Goals</th>
<th>The Current Reality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reducing CO2 emissions by 45% from their 2010 levels by 2030</td>
<td>Increasing CO2 emissions by 13% by 2030 based on current commitments</td>
</tr>
<tr>
<td>Net Zero by 2050</td>
<td>Only 40% of the world’s GDP committed to 2050 Net Zero.72</td>
</tr>
<tr>
<td>Limiting global warming to 1.5°C by 2100</td>
<td>Global warming on track to rise by 3.0°C</td>
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The Current Solution Stack

- **Renewable energy.** Renewable and zero carbon alternative energy source including wind, solar, PV, geothermal, tidal, and green hydrogen, among others
- **Industrial decarbonization.** Development of low-carbon technologies and infrastructure in materials, construction, industrial processes, transport, and manufacturing
- **Energy efficiency.** Technology to decrease the energy intensity of industrial processes and infrastructure, and improvement of energy transmission networks
- **Electrification.** Electrification of key energy consuming processes like heating, transportation, and manufacturing
- **Fossil fuel phase out.** Reduction and phase out of existing fossil fuel energy sources, including via lower emission transition sources like natural gas
- **Carbon sequestration and removal.** Technologies to remove atmospheric CO2 via both industrial processes and nature-based solutions
- **Adaptation and resilience.** Investments in resilient systems and infrastructure to withstand the inevitable impacts of climate change already underway
## The Funding Need Through 2050

<table>
<thead>
<tr>
<th>The Funding Need Through 2050</th>
<th>The Current Reality</th>
</tr>
</thead>
<tbody>
<tr>
<td>US$3 trillion of annual spending</td>
<td>US$632 billion of funding in 2020/21</td>
</tr>
<tr>
<td>Rising to US$4 trillion by 2030</td>
<td></td>
</tr>
<tr>
<td>Reaching $5-6 trillion from 2040</td>
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### Key Transition Challenges

**Need for Universal Commitments.** While the current national and corporate commitments to Net Zero are significant, they remain insufficient: the US$130 trillion in assets committed for example represent only c.30% of global assets, while country level commitments to the 2050 Zero target cover less than 50% of global emissions (with four of the world’s top emitters responsible for over 40% of global emissions having made 2060, 2070 or no commitments at all to date).  

**Lack of Direct Funding.** While the US$130 trillion of global assets committed to net zero, mainly under the GFANZ umbrella, are in theory more than sufficient to finance the energy transition, this capital is not designed to directly fund the energy transition, as opposed to indirectly doing so by cleaning up equity and debt investment portfolios.

**Transition Pathways Lack Coordination.** Further, there are several challenges with members’ published reduction commitments to date, including CO2 reduction targets below the Paris benchmark, inconsistent use of reference level dates and incomplete benchmarking data with which to measure reductions, and incomplete emissions reporting (with most managers excluding scope 3 emissions).

**Political and Fiduciary Risks.** Investment managers also need to manage the risk of holding stranded assets, potential breaches of fiduciary duties, near term performance implications, and political pressures, including accusations of acting in concert with other risk being accused of running a “climate cartel” to the detriment of investors.

### Shift Needed from Transition Solutions to Breakthrough Technologies

Given the significant barriers to the world's countries and investors moving in lockstep to Net Zero by 2050 in terms of investment and the adoption of new technologies, the world will also need to invest heavily into technological breakthroughs that can compensate for the insufficient progress being made by the laggards, in addition to scaling and refining the current state of the art technologies.
### Current Solutions to Scale

- Energy efficiency, reducing energy intensity across transportation, buildings, and industry,
- Clean energy provision, shifting primary energy production to zero carbon emissions through renewables and/or biofuels, and
- Clean energy use, creating the infrastructure to use electric energy and/or hydrogen across homes, transportation, and industry.

### Breakthroughs to Achieve

- An alternative to renewables that is safe, abundant, carbon free and reliable (fusion energy being the most likely candidate currently)
- Climate engineering using geo-engineering (reflecting solar radiation back to space to limit or reverse temperature increases is a controversial solution)
- Carbon capture and sequestration technologies at scale that remove atmospheric carbon and GHG at scale.

## 4. Four UN transitions to enable the SDGs

“The multiple crises we are experiencing are a wake-up call for the much needed often absent solidarity, adding that to turn crises into an opportunity ... the key lies in the required transitions in renewable energy, food systems and digital connectivity – and in investment in human capital, financing the opportunities.”

*UN Deputy Secretary-General Amina Mohammed, 5th July 2022*

In its endeavor to accelerate progress on the SDGs, the UN has spoken of enabling changes of a systemic nature. These levers for change have the potential to fundamentally shift the scenario and enable multiple SDGs to be addressed affecting both human and environmental development across its 193 members states for the achievement of the goals. They would particularly impact developing countries which lack the energy, food, digital and human assets needed to progress.

The UN has identified four key transitions that are designed to help less- and least-developed countries transition to a more inclusive and sustainable model and are critical for the world to meet some of the most challenging SDG.

### i. Renewable Energy

“The only sustainable future is a renewable one. We must end fossil fuel pollution and accelerate the renewable energy transition before we incinerate our only home.”

*UN Secretary General Antonio Guterres, 18 May 2022*
The Goal and Key 2030 Targets

Ensure access to affordable, reliable, sustainable, and modern energy for all by
- **Providing universal access** to affordable, reliable, and modern energy services
- **Increasing substantially the share of renewable energy** in the global energy mix
- Double the global rate of improvement in energy efficiency (energy intensity measured in terms of primary energy and GDP)
- **Enhancing international financial flows** to developing countries in support of clean energy research and development and renewable energy production, including in hybrid systems
- **Increasing installed renewable energy-generating capacity** in developing countries (in watts per capita)

**ii. Food Systems**

“Through sustainable food production systems, it is possible to feed a growing global population while protecting our planet...Food systems are a priority area for transformative investments, that can lead the transitions that we need to make”

*UN Deputy Secretary-General Amina Mohammed, 28 Jul 2021*

The Goal and Key 2030 Targets

Transform global food systems to provide sufficient and nutritious food for all in a sustainable and resilient manner, by
- **Ending hunger** and ensure access to safe, nutritious, and sufficient food all year round
- **Ending all forms of malnutrition** across the world
- **Doubling the agricultural productivity** and incomes of small-scale food producers
- **Ensuring the proper functioning of food commodity markets** to help limit extreme food price volatility
- **Ensuring sustainable food production systems** and implement resilient agricultural practices that increase productivity and production

**iii. Digital Connectivity**

“Over one third of humanity still has no access to the internet; this divide reinforces social, economic and gender divides. [The] task is to map out a new action plan to bring the nearly 3 billion unconnected people into the global digital community.”

*UN Secretary General Antonio Guterres, 7 Jun 2022*
The Goal and Key 2030 Targets

Enable global connectivity and the equitable use of digital public goods, while ensuring data privacy and safeguarding human rights in digital spaces, by

- Providing reliable and affordable high-speed internet access to the three billion people who remain unconnected
- Ensuring sufficient and equitable access to digital public goods, including software, data, content, and standards

iv. Human Capital Investment

“More effective spending and investment in human capital is needed to unlock and accelerate progress on the SDGs”

UN Deputy Secretary General Amina Mohammed, 9 Mar 2022

The Goal and Key 2030 Targets

Accelerate more and better investments into people for greater equity and economic growth, by

- Ensuring education for all girls and boys that is free, equitable and quality primary and secondary education
- Ensuring equal access for all women and men to affordable and quality technical, vocational, and tertiary education
- Achieving full and productive employment and decent work for all women and men
- Achieving universal health coverage, including access to quality essential health-care services and access to safe, effective, quality, and affordable essential medicines and vaccines for all

5. Six breakthrough initiatives

The SDGs have faced challenges, as outlined above, which seem fundamental and intractable and as a result capital has not flowed at the scale required. Analysis of the SDGs shows that if the 17 SDGs are prioritized using three criteria: firstly, current underservice (goals facing a current lack of funding), secondly, pivotal nature (generating a positive multiplier effect for achieving other goals) and thirdly, achievability (existing solutions that can be adapted for delivery), six key focus areas emerge, which if successful would have a meaningful impact on the world meeting the SDGs:

I. Affordable Housing needs to ultimately solve for the 2.4 billion new urban inhabitants by 2050, providing the home as a basis of dignity

II. Mass Education needs to ultimately include the 260m kids out of school to enable them to access opportunity

III. Mass Financial Inclusion needs to solve for the 67% of the world’s under-banked or totally left out, recognizing their right to the path to prosperity

IV. The Individual and Impact needs to use technology to impact and empower the world’s c.8bn individuals as a force for good
V. **Biodiversity** needs to protect, restore, and promote the sustainable use of terrestrial and ocean ecosystems

VI. **Impact Externalities** needs to change decision making to consider the whole system by pricing positive and negative externalities into financial statements to fundamentally change the view of return on investments

The aim is to realize gains from high impact projects for these six areas identifying executable solutions with the potential to have a meaningful global impact. The approach is to take leverageable solutions and to apply them to the focus area in one geography at scale to address a material proportion of the issue there, demonstrating success and enabling the solution to be applied to other geographies. The partners include subject matter experts, public and private sector stakeholders, solution providers, financing experts and potential sources of funding.

Notice of interest: **Force for Good** is leading in initiatives in each of these six areas, working with partners in a multi-stakeholder approach to make an impact.

Each of the six initiatives recognizes that every SDG is complex, multidimensional, and varied across regional and cultural contexts, with no one size fits all solution. Accordingly, the breakthrough initiatives focus on ‘making a significant dent’ into them, creating momentum for other solutions that meet unaddressed needs to be deployed in their wake.

Please see Appendix 2 for more details on the development and execution processes for the six initiatives.
Objective: Make a significant difference to affordable housing as the basis of human dignity across the world demonstrating that it can be funded at scale, make an impact, and deliver a return

The Need
1 billion people globally live in informal housing or slums
2 billion people lack waste collection services
3 billion people lack access to waste disposal facilities
c.50% of the world's urban population lack convenient access to urban transport and c.30% to green spaces

Major SDGs Impacted
Access to decent, low-cost housing can increase disposable incomes, prevent material deprivation, and improve work incentives. Homeownership also represents the primary way for households to build wealth

Substandard housing with mold, rodents and pests can trigger or cause chronic respiratory conditions, while overcrowding poses a risk to the health and physical well-being of families and their neighbors and facilitates the spread of infectious diseases

High quality affordable housing facilitates the development of clean water and sanitation with water and waste-water supply systems in deprived urban and rural areas

The provision of adequate, safe, and affordable housing is critical to the development of inclusive, sustainable, and resilient urban environments

Core Challenges
- **Availability of Land.** Significant affordable housing demand in mega-cities with high urban density and limited land
- **Lack of Affordability.** Housing price increases have outstripped earnings growth across almost all major global cities, driving unaffordability
- **Development Scale.** Scale of challenge requires mass development solutions
- **Existing Policies Counterproductive.** A significant portion of government policies to drive home ownership drive demand without addressing supply, creating further price increases
Transformation

Set up a platform and/or enable existing ones to fund affordable housing in a for-profit impact model that proves feasibility, delivers to stakeholders, scales in a test country, and can be rolled out internationally with government and private sector finance partners.

Key Elements of the Solution

- **For-Profit and Impact Credit Platform.** Funding affordable housing for low-income and lower-middle income populations.
- **Funding Through Banks and Housing Finance Companies.** Lending to leading banks and housing finance providing affordable home loans.
- **International Capital Attraction.** Pooling of international capital through generation of market rate returns.
- **Credit Enhancement Strategies.** Country- and macro-risk managed through credit enhancement strategies.
- **Risk Diversification and Scalability.** Use of pooling vehicles for loan diversification and rapid deployment.
- **Global Potential.** Initial launch in high potential country with global scale potential.

Execution Plan

- **Develop a blueprint for funding affordable housing at scale with private sector capital, beginning with one country as a pilot.**
- **Engage with an identified set of stakeholders** (including local lenders, government sponsors, and international capital providers) to launch this platform in first test country.
- **Agree conditions for capital deployment and impact maximization**, including ESG-focused underwriting, covenants, monitoring, and reporting.
- **Secure a first fund vehicle funded by private sector, and public sector capital** for further capital deployment.
- **Expand model and vehicles to other developing markets** at scale.
ii. **Mass Education: Route to Opportunity**

Objective: Deliver education solutions to children in a model that is global, affordable, scalable, distributable, and local, demonstrating the feasibility of using technology to compensate for the bottleneck in building enough schools and training enough teachers.

**The Need**
- c.260 million children were out of school in 2018
- 600 million children lack basic literacy and mathematics skills
- 825 million young people will not have the basic skills to compete for jobs of 2030 (based on current trends)
- 33% of schools in least developed countries have electricity
- c.50% of schools have access to drinking water

**Major SDGs Impacted**

Mass education is crucial for impart knowledge to children that they need to effectively function as members of society, providing skills and knowledge allowing people to contribute to their communities.

Education is a significant factor in reducing poverty. Educated people earn 10 percent more for every year they attend school. If everyone in school left school at basic reading levels, 171 million people could rise out of poverty.

Education is critical for overall economic growth, driving overall productivity, facilitating the transfer of knowledge, and increasing the creativity to create new knowledge, products, and technologies.

**Core Challenges**

- **Basic School Infrastructure Far from Universal.** Many schools lack adequate physical infrastructure creating safe, inclusive environments that nurture learning.
- **Insufficient Technology Skills and Access.** Lack of access to and a lack of usage skill for IT limit the impact of online and digital learning opportunities.
- **Urban/Rural and High/Low Income Divides.** Significant disparities in school quality within countries based on regional and sociodemographic divides.
- **Lack of Qualified Teachers.** Global shortfall of qualified teaching staff, with nearly 70 million additional teachers required to meet the SDGs based.
- **Gender Disparities.** Less than half the world’s countries have achieved gender parity in primary education, and less than quarter in upper secondary education.
Transformation

Work with non-government organizations, academia, businesses, and financiers to identify mass education solutions that can be rolled out globally, cost-effectively, quickly, and at scale

Key Elements of the Solution

- **Network Infrastructure for Connectivity.** Need to ensure robust high bandwidth connectivity to ensure access to online learning resources

- **Hardware for Affordable End-user Devices.** Need for low-cost computing/communication devices, preferably with open-source o/s supporting a large developer community

- **Software to Enrich Online Learning.** Rich software and applications offering to maximize learning, leveraging all advantage provided by online environments

- **Enhanced Content to Provide Critical Skills.** Development of additional curricula to provide competitive skills alongside literacy and numeracy

- **Reinforced Learning through Communities and Civil Organizations.** Empowering civil society and individuals to reinforce learning by driving changes in habits and behaviors

Execution Plan

- Engage leading multinational organizations (e.g., UNICEF) and NGOs (e.g., World Academy of Arts and Sciences) to determine the world’s greatest education challenges

- Identify leading providers of education and EdTech solutions and development outreach plan/timetable

- Secure participation by leading EdTech companies to deliver on solutions to educations challenges identified

- Agree the development plan for a small set of breakthrough education solutions for roll-out with commercial funding potential, engaging private sector banks

- Agree the participating countries for the first wave of roll-out
iii. Financial Inclusion: Path to Prosperity

Objective: Drive mass financial inclusion across the world by sharing a stack of solutions that has proven its ability to deliver ground-breaking sustainable and inclusive development

The Need

- c.70% of the world’s population is not adequately financially included, 1.7 billion people globally remain unbanked
- 55% of world’s unbanked are women, 10% gender gap up to 40% in some countries, 21% less likely to own a mobile phone
- <50% of the adult population in low- and middle-income countries have active bank accounts

Major SDGs Impacted

- Services such as savings allow families to better absorb financial shocks, smooth consumption, accumulate assets and investment in human capital such as education and health, helping people to climb out of poverty.
- Access to financial services allows people to gain higher returns on capital, increasing incomes and driving economic growth, mobilizing savings for productive ventures.
- By providing a foundation for equitable growth and improving the lives of the poor financial inclusion helps reduce inequalities.
- Access to financial services drives business formation and growth by financing investments, with increasing small- and medium enterprises leading to job growth.

Core Challenges

- **Inadequate Banking Infrastructure.** Banking infrastructure with branch networks in the least developed regions is often poor, providing challenges for inclusion.
- **Lack of Formal Identification Options.** Disadvantaged, poor, and rural people often lack the formal identification documents required to open bank accounts and for formal transactions.
- **Usage Frequency and Transaction Size.** Financial institutions need to offer products and services relevant to customers to encourage usage and transaction capability and avoid the dormant account phenomenon common in many countries.
- **Financial (Ill-)literacy.** Financial literacy among the unbanked is often low, providing a barrier to practical inclusion.
- **Consumer Protection.** Greater financial inclusion increases the need for effective legal and regulatory frameworks to protect low-income consumers.
Transformation

Agree on and facilitate a knowledge and solutions transfer from a donor country that possesses the necessary stack of digital technologies to countries need banking services for the poor in a ‘whole system’ approach that outline the criteria for mass inclusion

Key Elements of the Solution

Tech Stack with Core Benefits for Delivery to the Poor. India is a candidate given it has embarked on an ambitious digital financial inclusion initiative, creating a technology stack bringing more than 400 million people into the financial sector.

Demonstrated Benefits Beyond Financial Inclusion to Wider Social Protection. The system needs to enable the government to address inequality, corruption and inefficiency while encouraging financial inclusion, fintech development and a platform for broader participation among the poor.

Solution Broadly Applicable in the World. Solution provider can help other governments drive mass financial inclusion by sharing its “stack” of innovations, and the lessons learned with nations worldwide, particularly in “south-to-south” transfers to South Asia, Africa, the Middle East, and South America.

Sharing Mechanism in Conjunction with UN. Provider would share through the UN as a ‘Force for Good’ and draw on its technology services, where Indian companies are leaders and have the related expertise to help others implement.

Execution Plan

- **Develop blueprint of engagement strategy** to share stake with other countries
- **Engage with key stakeholders with leading digital inclusion programs** to catalyze initiative to take these global, India being one
- **Secure participation of global transnational institutions** such as the UN
- **Secure private sector participation** by technology and banking partners
- **Establish a joint team to agree on the details of the proposal** and to draft an outline protocol
- **Communicate and create a pipeline to roll-out**, the idea to the world
iv. **Technology and Individual Impact: Enable Empowerment**

**Objective:** Enable the provision of technologies, including products, services, and platforms, and allow individuals to make a positive impact on the SDGs and human security more broadly.

**The Need**

- c.65% of the world’s net assets are owned by individuals, making them the ultimate allocators of over US$250 trillion in net liquid assets.
- 78% of global consumption by households, US$49 trillion annually.
- 3.5 billion people live in democracies, giving them the power to drive national and global policy.

Acting collectively the individual is a powerful force for direct action.

**Major SDGs Impacted**

- Promotes the transfer of environmentally sound and sustainable technologies to individuals across the world, including to developing countries.
- Information and communications technology serves as a support structure for all of the 17 SDGs, helping bring about their advancement, particularly with regards to the universal coverage of basic services.

**Core Challenges**

- **Awareness.** There is a need to build further awareness and consensus on the need to act across all parts of society to advance the goals that meet their societies’ values.
- **Education.** Further education about the SDGs is also required, to provide a greater understanding of the goals, as well as the potential actions that can be taken to further them, in order to drive informed decision making.
- **Affordability.** Sustainability options made available to individuals need to be affordable in terms of potential economic and financial trade-offs, particularly in the low-income countries with minimal disposable income.
- **Access.** Consumers require tools and services that facilitate positive contributions to the SDGs beyond the local reach of direct action.
- **Coordination.** Individuals need to be able to coordinate their choices to maximize scale and impact.
Transformation

Work with technology associations and companies, along with human security and SDG specialists to identify technologies with a potentially transformative impact on the SDGs and the individual, particularly on individuals’ ability to impact the SDGs as a force for good, enhancing human security for all.

Elements of the Solution

- **Leveraging Technology** to translate actions into impact, and coordinate collective engagement to overcome geographic boundaries.

- **Collaboration with the Consumer Technology Association** and/or other industry groups to identify breakthrough technologies for empowerment.

- **Development of Awards Program for ‘SDG Contributors’**, to identify and promote technologies with transformative impact potential.

Execution Plan

- **Identify target areas for impact**, including responsible consumption, citizenship, and SDG participation.

- **Partner with the ‘Human Security for All’ project** launched by the World Academy of Art and Science (WAAS).

- **Engage with the Human Security program**, and partners such as Consumer Technology Association (CTA) to progress the identification of technology.

- **Select the most compelling technologies that can create breakthroughs** centered around the individual and the ability to enhance human security and contribute to the SDGs.

- **Engage selected technologies for roll-out and scaling** as appropriate for rapid adoption of the technologies.
v. Biodiversity: Symbiotic Co-Existence

Objective: Make an impact on biodiversity through targeted solutions which when scaled can make a transformative impact on biodiversity and can be funded for global impact

The Need

- 75% of the Earth’s surface altered by human activity
- 22% of the 8,300 known animal species are at risk of extinction
- 1.5 billion people affected by land degradation
- 10% of total human emissions from deforestation

Major SDGs Impacted

- Biodiversity has a critical impact on climate change, with healthy ecosystems fulfilling a variety of climate regulating roles, including carbon capture and sequestration as well as weather and precipitation regulation
- The oceans represent over 99% of habitable space, contain an estimated 50-80% of life, and generate approximately 50% of the oxygen on this planet
- Forests are home to more than 80% of all terrestrial species of animals, plants, and insects, with c.1.6bn people directly depending on forests for their livelihood.

Core Challenges

- **Economic Value of Biodiversity Not Accurately Allocated.** The value of biodiversity includes a range of monetary and non-monetary ecosystem services that have traditionally not be quantified sufficiently
- **Knowledge and Education.** Education is essential for the sustainable and equitable use of biodiversity and its conservation
- **Underinvestment Due to Lack of Commercial Opportunities.** There is a lack of business models for the sustainable use of biodiversity, leading to underinvestment, although interest in nature-based solutions is rising
- **Conservation Accountability.** Misalignment of incentives and accountability for conservation actions by both communities and economic actors
Transformation

Work with conservation organizations and financiers to promote and protect biodiversity globally, backed by the required funding

Key Elements of the Solution

- **Creation of Incentives to Prevent Habitat Loss**: Stopping deforestation through the creation of financial mechanisms and incentives promoting conservation

- **Development and Adoption of New Practices**: (including) Nature-based solutions for agriculture, forestry, or wastewater management

- **Technology Innovations**: (Including) Geodata mapping and sensors for real time monitoring in support of precision agriculture, biotech for the development sustainable agri-alternatives for food and other consumables (as an alternative to plastics)

- **Scaling of Existing Solutions**: Integrating technology and practices at scale (e.g., hydro-, aqua- and aeroponics)

- **Social Innovation**: Empowering civil society and individuals to drive changes in habits and behaviors

Execution Plan

- Engage with experts to identify potentially game changing solutions to preserve global biodiversity.

- Map out the key solution(s) that if fully deployed, could have the largest impact on biodiversity globally

- Develop funding options for solutions including (i) philanthropy-based opportunities (ii) semi-commercial opportunities (e.g., blended finance models), and (iii) standalone private sector investment opportunities
vi. Pricing Externalities: Whole Systems Decisions

Objective: Drive a systemic change to returns, asset pricing and reporting to reflect the full economic, environmental, and social cost of economic actions over both the short and long term, influencing decision making in capital allocation

The Need
US$29 trillion – Projected total annual environmental costs from global human activity in 2050*
US$25 trillion - Combined externalities for the energy and transport sectors worldwide
US$21 trillion – Projected external costs for GHG emissions and climate change in 2050*
US$20 trillion – Total annual externalities of global food production

Major SDGs Impacted
Positive and negative externalities impact all 17 of the SDGs – accurately pricing these externalities appropriately can change behaviors and redirect the flow of funds in support of the goals

Core Challenges
- **Proliferation of ‘Standards’ and Initiatives.** Multiple overlapping and competing standards initiatives create confusion among users and investors
- **Significant Data Gathering Requirement** Existing reporting frameworks demand significant corporate resources to identify, track, and aggregate relevant sustainability information
- **Quantification Without Valuation.** Existing sustainability reporting is focused on aggregation of primary data, rather than the calculation of financial costs and investment return implications
- **Financial and Sustainability Reporting Not Integrated.** Existing sustainability reporting disclosure is not linked to companies’ basic financial statements, making it difficult to reconcile the two at the corporate strategy level
- **Insufficient Data Management Capabilities.** Most companies lack the data management systems to capture the information required to calculate all externalities and the returns of sustainable investments
Transformation

Work with experts on environmental pricing, accounting, and international standards to accurately and consistent price positive and negative externalities on asset values in global capital markets, allowing global capital flows to respond to an accurate reflection of the cost and returns from activities

Key Elements of the Solution

- **Valuation of Major Externalities.** Determination of non-market valuation of ecosystems and other public goods.
- **Development of Open Valuation Database.** Creation of open access database capturing valuation outputs and methodologies.
- **Development of Accounting Methodologies.** Development of accounting rules for integrating the value of public goods into financial statements.
- **Adoption by Policy Makers and Standard Setters.** Presentation agencies/boards for adoption into (financial) reporting standards.

Execution Plan

- **Partner with academia and accounting firms,** drawing on non-government organizations, industry associations, and multi-national organizations, as needed.
- **Determine valuation methodologies for key externalities** that can be applied consistently and globally.
- **Develop draft accounting rules that incorporate the value of public goods** in integrated financial statements.
- **Draft a detailed blueprint for the pricing of externalities,** including a roadmap and implementation requirements.
- **Consult other stakeholders to build support** and incorporate learnings and best practices.
- **Engage policy makers and standard setters** regarding potential adoption.
In summary

- Progress on the SDGs has stalled despite the world’s stock of capital having risen to c.US$450 trillion and the GDP to nearly US$100 trillion.

- Climate change has been prioritized and is being pursued with a level of global coordination and commitment that is breaking new ground in the achievement of the SDGs, and the journey ahead will need to find direct funding to address the issues by deploying solutions rapidly on scale, and to 2050 will need breakthroughs in science.

- The UN has begun to raise the awareness and focus on four enablers for the SDGs, namely renewable energy, food systems and digital connectivity and investment in human capital.

- If the 17 SDGs are prioritized using three criteria: current underservice, pivotal in nature and, achievability six key focus areas emerge, which if successful would have a meaningful impact on the world meeting the SDGs.

- In some part of the world there are solutions to almost every human issue and if these can be leveraged, adapted, and shared, a big difference can be made to seemingly intractable problems and this is the principle behind the focus on six breakthrough initiatives identified by Force for Good.

- Breaking through on other SDGs requires these to be elevated through their simplicity, for example a focus on themes such as people, planet, prosperity, platform, peace & partnership, in the way that climate change has become an iconic issue of our times for people to align over.

- If these a set of issues can be addressed in some meaningful way, others are more likely to be addressed in the same spirit.
VII. The Way Ahead: Capitalism for a Sustainable Future

Despite a clear case for radical change in the face of existential threats to the world, the momentum and energy of the world's current industrial model continues to dominate. Great corrections in other periods of major change in history have been accompanied by conflict that changed the world order, and today too conflict has arisen and so security has quickly taken precedence over progressing other issues. Contrary to popular belief, these are all demonstrations of the effective working of today's system of capitalism, having evolved to address and fund business as usual, the urgent issues arising, and the future. The SDGs have been squeezed out in the process since they were not a design feature of the system. So, what does it take to incorporate the SDGs into the system of capitalism, manage an inclusive transition to the future while keeping stability and security?

This report points to c.US$450 trillion of liquid capital stock globally, and c.US$100 trillion of capital flow, which implies there should be enough capital to fund the SDGs by 2030. However, despite sustainability funding reaching unprecedented levels last year, based on the estimated requirement of US$135-176 trillion and current financing trends, the shortfall is estimated at US$103-135 trillion, and with security needing c.US$60 trillion, the SDGs are unlikely to be achieved by 2030.
Over and above the calls to fund the status quo, “business as usual”, there are three other categories of calls being made on the world’s capital: one is to fund the SDGs, the second is to fund on-going security and event risks, and the third it to fund the future.

Funding the path to a more secure sustainable future will require humankind to combine its ingenuity, its capacity for compassion and its desire for profit, out of necessity. In today’s connected world the populations of the most economically and technologically advanced countries whose quality of lives continue to improve due to new breakthroughs cannot afford to neglect the less fortunate. The consequences of such continued inequalities will range from mass migration into the rich nations to climate costs that will threaten the survival of all. And these will not necessarily be exacted as part of a negotiated transaction but as a natural consequence of a global lack of levelling up. The consequence of not using the SDGs to level up the world is likely its levelling down.

While success in funding the SDGs, security, and the future is not guaranteed, neither is failure inevitable given the increasing ambition of mankind, evident in its endeavors to reach Mars, realize quantum computing, and create scaled fusion energy.

The answer lies in a far more radical multi-stakeholder approach to capitalism one that incorporates the SDGs as a critical pillar of progress. However, there is no consensus globally on how to achieve this transformation. There are two extreme views, in one view, the way ahead would require austerity, sharing and gradually repairing the world for the damages of the industrial era to arrive at a more sustainable world where people are more balanced with nature. Another view posits that society needs to make the breakthroughs that allow it to solve its constraints and arrive at an era where the solutions and returns are far greater than the industrial age has delivered, and the science allows mankind to correct for the damages to the ecosystem of the past.

1. Starkly different assumptions on the transition to the future

A longstanding body of thought, beginning with the influential ‘Limits to Growth’ report by the Club of Rome in 1972, posits that there are limits to growth on the planet and that without significant changes in expectations, lifestyles, and asset consumption, the world's population and industrial capacity is as risk.

However, to date, the exponential growth in knowledge that has driven accelerating breakthroughs since the Industrial Revolution has not only allowed the world to avoid a
Malthusian crisis resulting from exponential growth in a world of finite resources, but it has also provided extraordinary possibilities for the way ahead. However, many now argue that climate change and biodiversity loss, indicates a moment of reckoning given they pose the existential risks that have long been predicted.

However, it is uncertain whether the moment has arrived to step off the growth escalator or whether knowledge and invention can solve the world’s challenges before it is too late. These world views may well be irreconcilable. Since the SDGs were launched, alignment has not been realized between stakeholders that believe growth must stop, and those that believe the world can solve the issues without stopping. The SDGs set the goals and did not require one or the other to be the path ahead, it left it to member states to decide what was best for them. However, given the under-funding of the SDGs, it may be time to determine the reconciliation of these views.

Unless the world can quickly come together to agree to solve its challenges with the blueprint and modus operandi for doing so, the calls for the world to stave off a global catastrophe by retreating into preservation and mitigation mode will rise. In this scenario, mankind’s footprint would need to be dramatically reduced to a sustainable level until the breakthroughs that allow renewed growth are achieved.

2. A world in retreat: preservation and mitigation mode

Of the myriad changes that drive a world in preservation and mitigation mode, one thing that separates it from today is a conscious decision to limit the use of fossil fuels, reducing the footprint of man on the planet by restrictions on the use of resources and therefore activity. The world that results from such a scenario is closer to the world in COVID lockdown than the one before it or after it for most countries, only it would be far more dramatic since it would roll the world back to before 1971, when the world consumed c.40% less of nearly everything than it does today.
The implications for how the world would need to work are severe:

- **Energy.** Global energy consumption would need to drop by over 60% from over 10,000Mtoe to under 4,000Mtoe, assuming the world cannot quickly transition to a fully renewable mix of sources and less energy intensive economy.
- **Industry.** The reduction in global output would concentrate in global industrials, which are disproportionately resources intensive. Global industrial output which contributes c.28% of global GDP would need to be reduced by c.75% (assuming that industrial resource intensity is twice that of services on average), reducing GHG emissions by c.15% as a result. Cutting services by 40%, would reduce GHG by a further c.10%.
- **Materials.** There would likely be a continuing dependence on process innovation to allow mining of key natural resources in a manner which allowed for greater yield, inevitably with greater risk and cost.
- **People.** Individuals in advanced economies would need to drop their consumption levels by c.60-80%, assuming current levels of resource intensity.
- **Travel.** There would need to be a near total ban of almost all air travel and cars, including electric cars which remain reliant on a grid still largely powered by fossil fuels, reducing...
global GHG by c.15%. Travel and leisure would need to transition to virtual models as a result.

- **Finance.** The contraction of global consumption and production would need to be managed to avoid a global debt crisis and negative real returns, which would likely be possible once global wealth reduces proportionately to the drop in global output, wiping out c.US$350 trillion of global assets.

- **Planet.** We are currently calculated to consume 1.75 planets worth of resources, a shorthand for our current level of consumption and development. The adjustment would aim for a retrenchment below one planet.

Unless the world can quickly innovate at scale across all the above areas, the only way it can return to living within the means of the planet to maintain its ecosystem is by cutting back. Who should cut back is bound to be difficult to agree. However, such a retreat would require the developed world, which is the biggest consumer of the planet and its resources (to live at America’s level, we would need 5.1 earths) to take the most pain. Under this scenario, there would need to be sufficient agreement that the rich countries do not stop trading and funding the poorer nations.

In all circumstances, the SDGs would move further from achievability for both the rich and the poor given the level of austerity across all aspects of human life across the world that a strategy of preservation would imply.

The austerity required to “reset” the world to a sustainable trajectory is not one that the developed world is currently prepared for in any of the many walks of life of the individual; not as a consumer, family household, voter, nor as an employee, employer, entrepreneur, CEO, or head of state (democratic or autocratic) or any of the other roles that the vast majority of individuals in the world play.

The simple walk through above of the preservation scenario for reducing humankind’s footprint is one that is unlikely to be successfully implemented without mass unrest if there is an available alternative, and perhaps even if there is no alternative.

However, given the world's current level of progress on addressing global challenges, some level of retreat will be all but inevitable, and will likely only be achieved at a significant cost in environmental damage, economic destruction, and human suffering. And the longer the world waits, the greater this cost will be.
3. A world in growth: moving rapidly to a future model

To avoid the scenario laid out above, the world would need to rapidly invest in a series of technological breakthroughs that can fundamentally reset current trajectories of ecosystem damage and create a step change in human progress. Breakthroughs in energy technologies have been critical in achieving such step changes throughout history.

For millennia up to the Industrial Revolution, the growth in global economic output was largely in lockstep with global population growth, with human (and animal) labor being the primary sources of energy for work. The first step change came with the development of the steam engine in the 18th century, unlocking the power of coal, driving growth in real economic output (and energy consumption) locally at first, but increasingly on a regional and global level too. The second came with electrification in the late 19th century which provided a series of functional advantages in industrial and residential energy use that created a further step change in growth (and global coal demand). The third shift came with the transition from coal to oil in the middle of the 20th Century, ushering in the apotheosis of the Industrial Age due to the ubiquity of global oil supplies and the plethora of oil’s use cases.

Accelerating growth in the Industrial Age saw global GDP increase more than threefold between 1765-1880, nearly sixfold between 1880-1960 and nearly eightfold between 1960 and the present day.

To avoid having to cut back to save the planet, the world would need to rapidly invest in a series of technological breakthroughs that can fundamentally reset current trajectories of ecosystem damage and create a step change in human progress.

Figure 31: Historical Nominal Global GDP 1700-2021

Historical Nominal Global GDP in US$ trillion - 1700-2021

<table>
<thead>
<tr>
<th>Period</th>
<th>Average GDP (in US$ trillion)</th>
<th>Average Annual Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrarian Age (-1765)</td>
<td>Avg GDP Growth: &lt;1%</td>
<td></td>
</tr>
<tr>
<td>Initial Industrial Age (1765-1880)</td>
<td>Avg GDP Growth: 0.6%</td>
<td></td>
</tr>
<tr>
<td>Accelerating Industrial Age (1880-1960)</td>
<td>Avg GDP Growth: 0.9%</td>
<td></td>
</tr>
<tr>
<td>Mature Industrial Age (1960-2021)</td>
<td>Avg GDP Growth: 3.5%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from World Bank, A. Maddison
Just as the industrial era was based, and ultimately built on fossil fuels, the next era will require unlocking a new energy source, one that is abundant, clean, scalable, and highly cost-effective. The theory goes that such an energy source would have the potential to drive the growth and wealth creation necessary for the world to address its pressing challenges without forcing it to accept unacceptable trade-offs.

Just as in previous eras, the initial period following the discovery or exploitation of a new energy source would likely only see a moderate increase in global output, while the technology is refined and scaled, and its use cases are developed. However, this period would quickly be followed by one of rapidly accelerating growth, as practical breakthroughs and innovations in energy exploitation make the new source a viable replacement to nearly all other sources. Given the accelerating rate of technological progress, the world is likely to progress through the Digital Age much quicker than it did the Industrial Age, whose initial phase lasted c. 115 years, and its second phase 80 years. Applying the principles of Moore's Law as a proxy for the increasing rate of technological innovation to these phases compresses them significantly, so that the world progresses through the first two phases of the Digital Age in 30 and 20 years, respectively, leading to a staggering growth in global output during the 21st Century.

**Figure 32: Global GDP Growth 1700-2080**

<table>
<thead>
<tr>
<th>Actual and Projected Global GDP Growth 1700-2080 in US$ trillion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrarian Age c.10,000 years</td>
</tr>
<tr>
<td>Initial Industrial Age 135 years</td>
</tr>
<tr>
<td>Accelerating Industrial Age 80 years</td>
</tr>
<tr>
<td>Mature Industrial Age 60 years</td>
</tr>
<tr>
<td>Initial Digital Age 30 years</td>
</tr>
<tr>
<td>Acc Digital Age 20 years</td>
</tr>
</tbody>
</table>

Source: Adapted from World Bank, A. Maddison, Capital as a Force for Good Initiative
Of course, the initial phase can only begin when the first fundamental breakthrough is achieved. Until then, the world will continue to remain in a period of transition, dependent on Industrial Age technologies whose ability to deliver continued sustainable growth has been all but exhausted. During this transition period, in which we are currently steeped, growth is delivered largely by marginal improvements in productivity, countries around the world share less and compete more, ignoring the plight of the developing world and failing to address pressing global challenges as a result. Until the global breakthrough to the Digital Age is accomplished, the world would continue on what is ultimately a decaying orbit that takes it closer and closer to the preservation and mitigation mode it is desperately seeking to avoid.

However, once achieved, the changes to the world wrought by the growth and development in the Digital Age are likely to be staggering. Conceptualizing the world at the end of the first phase is still fairly straightforward. The US$350 trillion of GDP by 2060 implies an average GDP per capita globally equal to that of countries like Italy or South Korea today, (although in practice countries would still have GDPs in a wide range even if the SDGs are all met given the inevitable unevenness of exploitation of new resources). Imagining a world in 2080 with nearly US$2 quadrillion in GDP however is another matter entirely. To envision what such a future might look like, it is worth considering the likely building blocks of that future civilization:

- **Energy.** New energy sources that replace carbon, with fusion and its derivatives being the most likely near-term prospect for commercialization, while other fundamental alternatives are explored. Solar, wind, thermal in its current form would not be “functionally” superior in the way coal was to manual power.

- **Technology.** Advances in artificial intelligence, computing and data sciences that remake all aspects of life and work. culling irrelevant industries, and creating entirely new ones

- **Industry.** Increasing automation, the use of AI and abundant near-free energy allows for nearly limitless scaling that drives down the marginal costs of production towards zero.

- **Materials.** Breakthroughs in material sciences replace the need for the extraction of finite natural resources with sustainable and cost-effective “synthetic” alternatives.

- **Finance.** The adoption of a pervasive distributed form of capitalism that drives mass inclusion, while renewing and reinventing global trade without the need for centralized control or financial intermediaries.

- **People.** People empowered by technology with access to opportunities regardless of time, space, geography, demography, gender, race, or income levels.
- **Reality.** The metaverse creating a shift in the human paradigm itself through the widespread adoption of virtual, augmented, and mixed reality platforms

- **Space.** The leveraging of space for access to new resources, exploration, and new territories to live in, will drive massive innovations of their own along the way.

A civilization based on these breakthroughs would be as different from today's as the industrial one was from the agricultural civilization that preceded it, and if these breakthroughs were realized today, rather than over the decades to come, they would also address the SDGs, as long as the necessary institutions to ensure a just transition are in place.

These breakthroughs require not only bold investments in R&D but also significant investments to commercialize, scale and to manage the disruptions that they will create by making large parts of existing industrial sectors (and their people) obsolete. While this funding will compete with the SDGs in the short run, they will become self-funding given the growth and value generation that accompanies such a period, and they will likely be critical to fully meeting the SDGs in the long run given the impact of the technologies they enable and the resulting uplift in global growth and wealth.

However, the time to make the pivotal breakthroughs, energy being critical, that realize this scenario are not known and in the meantime the world continues to burn through its ecosystem getting closer to the existential threat. So, this scenario cannot be relied on as the only option. The answer, as one would expect, is a path between the extremes.

**4. A managed transition requires managing parallel streams in a balanced fashion**

Today, we sit in the gap between two great eras in history, for which there is no transition plan. Beyond the transition, the human footprint scales far beyond anything seen thus far.

Achieving a successful transition, one that is sustainable and just, in terms of inclusiveness and the fundamental right to a dignified existence for people, other species, and the environment, requires global collaboration, careful thought, and measured judgements to maximize the overall benefit and to minimize transition costs.

Now is exactly the time when the blueprint, with the potential to change the world’s trajectory is most needed, much like the Marshall Plan did for a post-war Europe in similar circumstances as the world is in today.

In some ways, the timing for development and execution of such a blueprint couldn’t be worse, amid global economic stagnation, the exhaustion of public finance, rising inflation, falling international cooperation and the threat of further geopolitical conflict. But today is exactly the time when the blueprint, with the potential to change the world’s trajectory is most needed, much like the Marshall Plan did for a post-war Europe in circumstances similar to today's.
The blueprint for such a shift would reconcile the two extreme scenarios above and would need to combine the obvious and the radical, and constitute:

I. **Preserving and Mitigating Damage to the Planet.** A successful transition depends on the world arresting further damage to the global ecosystem, preserving finite resources, protecting biodiversity, reducing pollution and waste, and reversing environmental degradation.

II. **Achieving the SDGs as a Basis for Further Growth.** Meeting the SDGs is a prerequisite for managing an efficient and just transition to the future, levelling up less developed countries, particularly driving mass inclusion provides a more level playing field for the world to transition in a coordinated and equitable fashion.

III. **Launching High Impact Initiatives that Drive Step-Changes in Meeting the Goals.** The transition to such a future would need three requirements to play out: scaled and bold solutions, far higher-level risk taking, and large-scale mobilization of capital to investment in these solutions.

IV. **Building and Funding the Future.** At the same time, the world will need to fund and achieve next generation energy, communications, information, and materials technologies that can provide a step-change in global progress, investing heavily into fundamental research and its translation into applied technologies.

V. **Managing the Dislocations of the Transition.** All transitions, on some level, imply shifts in resources and opportunities, creating dislocations that risk leaving some stakeholders behind. The world will need to proactively manage the economic, political, and social dislocations that will accompany the transition, including significant investments in climate change adaptation, given that the world will likely face potentially severe local disruptions, even if the Paris goals are met by 2050.

VI. **Efficient Maintenance and Preservation.** During the transition, the world still needs to “keep the lights on”, maintaining its current infrastructure and operating existing systems, paying pensions, delivering healthcare, operating and regulating markets, and feeding, clothing, and providing for its nearly eight billion people in an efficient manner.

VII. **Ensuring Peace and Building Resilience.** A smooth transition to the future can only be accomplished in a peaceful manner, with the global community working together to build global resilience to withstand the inevitable event risks, crises, and setbacks that emerge, as well as to benefit from any breakthroughs that materialize

This is a daunting set of streams of activity. In history, these may have happened without humankind assuming it needed to manage such change. The force of enterprises of the day – commercial and military, primarily – drove large societal changes. Therefore, the philosophical question is important on whether such complex world-defining transitions are ‘architected’ or whether they are best left to ‘occur’ through a series of events that seem accidental or driven by individual change-makers.
On some level it is undeniably true that the world’s issues could be solved top down. While the US, China, and the EU together account for less than half the world’s carbon emissions, they account for nearly 70% of global economic output and the same share of global net wealth. If the leaders of these three powers could agree on a common timeline and a credible path to Net Zero, with common standards and consistent incentives and penalties at the national level, the rest of the world would likely quickly follow or be encouraged to follow their lead, and the achievement of 2050 Net Zero would move into sight. However, we do not appear to live in a world where such agreement and execution is possible, for now.

The alternative bottom-up approach, a multi-stakeholder effort of individual actors aligned on the goal and broadly moving in the same direction. This alternative has only become feasible recently due to globalization and the interconnectedness it has delivered, which allows stakeholders to coordinate the executing the changes required.

Managing these changes to a blueprint and modus operandi seems a clear requirement for a broad multi-stakeholder aligned effort, one that populists have left the world ill-suited to pursue, but one that is required, nonetheless.

Such an effort would need to go well beyond the alignment of member states that the UN secured as signatories to the SDGs. Each stakeholder group would need to align and play their role to create the system of capitalism that can include, protect and enable the transition to build the future:

- **The aware responsible and empowered individual.** The individual owns and mandates 62% of the world’s money and consumes 78% of the world’s products and services needs to play their role in defunding damage and funding progress, without which the change will not be followed through by those that receive their capital.

- **The government setting the rules of engagement, incentives, and penalties.** The governments that own and mandate 38% of the world’s money and consume 22% of the world’s products and services need to play their role providing the incentives and rules that allow other stakeholders to invest, innovate and act boldly in pursuit of shared objectives.

- **The financier of bold solutions, to big issues, taking risk, for agreed profit.** The finance industry that oversees 90% of the world’s liquid assets needs to play its role in developing new markets, products, and business models to reshape the global flow of funds.

- **The SDG mission-oriented enterprises.** Enterprises that contribute over 70% of the world’s total economic output, and effectively process most of the resources consumed globally, need to play their role to protect the world including aligning their strategies to the SDGs, reducing their footprints, while investing to create radical solutions for the future.
• **The driver of the world into the digital age.** The information technology sector, which is emerging as the largest driver of global economic growth and development, needs to play its role in driving the global digitization of communities, governments, and enterprises to drive a step-change in productivity and the nature of value creation.

• **The scientists that break the grip of the energy and resources of the industrial age.** The science and research community, which spends over US$2 trillion annually on innovation and discovery, needs to play its role in delivering both the initial incremental technologies as well as the fundamental breakthroughs in materials, energy, transportation, and information processing that will facilitate the transition.

Such a level of multi-stakeholder alignment has the chance to steer the world through the storm, and manage a complex transition to a more peaceful, prosperous, and free world.

The world faces great multi-faceted social, economic, and political challenges today. The temptation is to ignore these and focus on the rivalry that defines an exclusive view of the world, seeing neighbors as enemies and defining “them” by their differences. Meanwhile, the temperature rises, consumption and production pumps fossil fuel waste into the air, and more and more people in both developed and developing nations enter poverty.

The ingenuity that created the greatest achievements of history cannot save those that ‘have’ if they do not solve this situation. This requires every stakeholder group to make a conscious decision to change and work together to push the wheels of the system towards a sustainable, secure, and superior future. This is only achieved with unity, and so rejection of those that divide is a pre-requisite for a peaceful transition.

There are breakthroughs to be made and a new era to be built, so mankind is at one of the most critical times in history, in the transition of eras when new civilizations are built. The future will be built through ingenuity beyond anything seen thus far, financing beyond the apparent means, and practicing generosity towards each other beyond what has been exhibited; a worthy endeavor for the world at this point.
APPENDIX

1. Calculating the increasing cost of the SDGs

A Simple Framework to Target, Fund, and Measure the SDGS, Recap

While the SDGs consist of a comprehensive set of human development, environmental, and economic goals that are closely interlinked and need to be addressed holistically, stakeholders tend to see these issues in silos, making it difficult to align these different stakeholders in a common agenda. The “climate” theme provides an important lesson: while there are myriad components to addressing climate concerns (e.g., building renewables capacity, phasing out fossil fuels, adaptation, industrial de-carbonization), it has been presented in its entirety as one idea, now accepted by most of the world as a critical issue, that has accordingly attracted significant attention, action, and investment over the last several years.

A similar simple and practical approach is required for all the SDGs. The 2021 Capital as a Force for Good report broke up the 17 SDGs into four interrelated, interconnected, and interconnected categories, with one important enabling category:

I. **People.** Addressing basic human needs including access to quality education and healthcare, and ending world hunger

II. **Planet.** Saving the planet by addressing climate change, biodiversity loss, and addressing plastics

III. **Platforms** Enabling human activity by building the necessary infrastructure, and affordable housing

IV. **Prosperity.** Creating shared prosperity through financial inclusion for small businesses, women, and underserved populations, and providing social security

V. **Peace and Partnership.** Delivering peace and partnerships to enable stakeholders to work together with the aim of meeting the SDGs.
A Simple Framework for Financing the 2030 Global Sustainability Agenda

<table>
<thead>
<tr>
<th>Category</th>
<th>Relevant SDGs</th>
<th>Key Financing Needs, Examples</th>
</tr>
</thead>
</table>
| People               | 2, 3, 4       | • Increasing access to high quality healthcare, and access to quality education and training
|                      | 5, 6, 7       | • Ending world hunger       |
| Planet               | 8, 9, 10      | • Global energy transition and net zero commitments
|                      | 11, 12        | • Stopping biodiversity loss (in water and on land) |
| Physical & Digital Infrastructure | 13, 14 | • Investments in roads, electricity network, clean water and sanitation
|                      | 15, 16        | • Providing affordable housing for all
|                      |               | • Investments in broadband networks |
| Prosperity           | 17, 18        | • Financial inclusion and gender empowerment through microfinance, and loans to small businesses
|                      | 19, 20        | • Providing social security and eradicating poverty |
| Peace & Partnership  | 21, 22        | • Common standards for measuring and reporting impact outcomes
|                      | 23, 24        | • Strong governance with improved institutional capacity |

Last year’s analysis\textsuperscript{80} estimated a gap of c.US$8.4-10.1 trillion annually across the first four categories, largely in developing countries, and a total requirement of US$11.6-14.2 trillion per annum to meet the SDGs by 2030 (or a total requirement of US$116-142 trillion between 2021-2030). The buildup to this average annual funding gap and total requirement, as presented in last year’s report, is summarized in the chart below:

Figure 34: Previous Year’s Estimate of Total SDG Financing Cost and Gap

![Diagram showing the previous year's estimate of total SDG financing cost and gap.](Image)
It is noteworthy that Peace and Partnership, are crucial to the SDGs overall success, and are not included in the financing estimates. While governments and policy makers often play the leading role in addressing peace and facilitating partnership, their success or failure (from a financier’s perspective) results in financiers supporting or withholding investments in states that do not meet their criteria. This adverse impact on countries with low governance, which often have the most acute SDG funding needs, is set to grow as a side-effect of the adoption of ESG by financial institutions and businesses.

**Revised Assessment of the Funding Need and the Gap**

In recognition of multiple factors that have changed since last year’s report, the funding gap has been revisited to reflect a number of factors. Despite record levels of sustainability funding in 2021, the goals have remained significantly under-funded. Hence the average annual funding requirement needs to be adjusted for the ‘rollover’ of the under-funded amount from 2021. Current funding levels also need to be estimated to assess the funding gap.

COP-26 has led to a sharpened focus on achieving Net Zero emissions by 2050, and there are now multiple revised estimates of the funding requirement (and gap) for achieving Net Zero, which indicate a significantly larger gap than the estimates available last year.

Foreign direct investment (FDI) and official development assistance (ODA) recovered in 2021 (from its sharp contraction in 2020), however, the majority of FDI was between developed countries, hence the funding gap for developing countries only decreased by c.US$0.2 trillion as a result. Inflation in 2021 reached record levels across major markets, including developed countries. Hence the estimate also needs to be adjusted for inflation.

Taking the above factors into account, the revised estimate suggests that the total annual funding required to meet the SDGs has increased to c.US$15-20 trillion (in constant 2021 US dollars), a 29-37% increase vs. last year’s estimate, and the total funding gap for the SDGs has increased to US$11-15 trillion per annum, 35-48% higher than last year’s estimate. The revised estimate of the SDG financing gap is summarized in the chart below:
Effectively, the annual funding gap for the SDGs, estimated last year at US$8-10 trillion, has increased by US$3-5 trillion this year (with the total need also increasing by a roughly similar quantum). The key components of this increase are broken down in the table below.

### Figure 35: Revised Estimate of Total SDG Annual Financing Gap

![Graph showing revised estimate of total SDG annual financing gap.]

Source: Capital as a Force for Good Initiative

### Total SDG Funding Gap, 2022 Revised Estimate (vs. 2021 Estimate)

<table>
<thead>
<tr>
<th>Constant 2021 US$ trillion, except where noted</th>
<th>Low</th>
<th>High</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>Last Year’s Estimate of Annual SDG Funding Gap (2020 US$)</td>
<td>8.4</td>
<td>10.1</td>
<td>2021 Capital as a Force for Good report</td>
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<tr>
<td>Add: Rolled Over Underfunded Amount from 2021</td>
<td>0.9</td>
<td>1.1</td>
<td>US$8.2-9.9 trillion unfunded requirement from 2021 split over 9 years (2022-2030)</td>
</tr>
<tr>
<td>Add: Revised Estimates of Funding Gap (2021-2030) to Meet Net Zero</td>
<td>1.8</td>
<td>3.3</td>
<td>Revised estimates of funding gap in 2021-2030 range from US$3.3-5.1 trillion p.a</td>
</tr>
<tr>
<td>Add: Impact of Inflation (Adjustment from 2020 to 2021 Constant US$)</td>
<td>0.5</td>
<td>0.6</td>
<td>Based on global consumer price inflation of 4.4% in 2021</td>
</tr>
<tr>
<td>Less: Increase in FDI and ODA to Developing Countries in 2021</td>
<td>(0.2)</td>
<td>(0.2)</td>
<td>c.US$200 billion additional FDI and ODA for developing countries in 2021 vs. 2020</td>
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<tr>
<td>Revised Estimate of Annual SDG Funding Gap (2022-2030)</td>
<td>11.3</td>
<td>14.9</td>
<td></td>
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<tr>
<td>% Increase in Last Year</td>
<td>35%</td>
<td>48%</td>
<td></td>
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<tr>
<td>Add: Estimated Current SDG Funding Annually (as of 2021)</td>
<td>3.6</td>
<td>4.7</td>
<td>2020 SDG funding estimate increased at the rate of nominal GDP</td>
</tr>
<tr>
<td>Revised Estimate of Total Annual SDG Funding Requirement</td>
<td>15.0</td>
<td>19.6</td>
<td></td>
</tr>
<tr>
<td>% Increase in Last Year</td>
<td>29%</td>
<td>37%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Capital as a Force for Good Initiative
Notes: The total supply of SDG funding is inherently difficult to estimate given the absence of any publicly available estimates which aggregate public investments by member states, investments by the private sector, and cross-border flows of development assistance and direct investment by developed countries in developing countries specifically against the SDGs. The analysis above assumes that the supply of financing for the SDGs increased at the rate of nominal GDP growth in 2021 (factoring in both the economic recovery and inflation) to reach US$3.6-4.7 trillion in 2021. This appears to be a safe assumption considering the following factors:

After record stimulus levels in 2020 and early 2021, developed and developing economies were fundamentally fiscally constrained in increasing public expenditure on the SDGs to the extent of the growth in their total output. Given the devastating economic impact of the pandemic in many developing countries and potentially hundred more million people being pushed into poverty, combined with long-term issues around lost earnings due to prolonged school closures would indicate that the total funding need has also increased in secular terms, offsetting any potential increase in funding in 2021.

SDG achievement gaps still point to persistent gaps in developing countries, indicating that, even with the record levels of funding seen in 2021, this has been altogether insufficient.

Moreover, there appears to have been a slowdown in SDG funding in 2022 vs. the 2021 levels (with sustainable debt issuances slowing down by c.27% vs. the first half of 2021 for example), suggesting that the funding levels achieved in 2021 may not be sustained in 2022.

Taken together, the total funding requirement to achieve the SDGs is estimated at US$15-20 trillion annually between 2022 and 2030, or US$135-176 trillion in total over nine years, only a quarter of which is currently being funded and mostly in developed nations.

Detailed Methodology for Updated SDG Funding Requirement Estimates

The US$15.0-19.6 trillion p.a. total funding requirement for the SDGs from 2022-2030, and the US$11.4-15.0 trillion annual funding gap, has been estimated based on an update of a similar analysis which was completed for the 2021 Capital as a Force for Good Report. The key updates made to last year’s estimated total SDG funding need and funding gap are:

Rolled Over Un-Funded Requirement from 2021: The total SDG funding requirement last year was estimated at US$11.6-14.2 trillion p.a. Against this, we estimate that the actual financing for the SDGs was US$3.6-4.7 trillion, resulting in an unfunded requirement of US$8.0-9.6 trillion last year. The US$3.6-4.7 trillion of actual financing for the SDGs has been estimated by growing the estimated actual SDG funding by the rate of nominal GDP growth in 2021 (thus factoring in both inflation and additional financing capacity due to economic growth), as outlined in the table below:

**Figure 37: 2021 SDG Funding Estimates**

## 2021 SDG Funding Estimates

<table>
<thead>
<tr>
<th></th>
<th>2021 Estimated Actual SDG Funding*</th>
<th>Nominal GDP Growth in 2021**</th>
<th>2021 Estimated Actual SDG Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Developed Countries</td>
<td>2.1</td>
<td>3.1</td>
<td>10.6%</td>
</tr>
<tr>
<td>Developing Countries</td>
<td>1.1</td>
<td>1.1</td>
<td>16.5%</td>
</tr>
<tr>
<td>Total</td>
<td>3.2</td>
<td>4.2</td>
<td>3.6</td>
</tr>
</tbody>
</table>

* Source: 2021 Capital as a Force for Good Report
**Source: IMF World Economic Outlook Database, April 2022 (nominal GDP growth in US$ terms)
The US$8.0-9.6 trillion unfunded amount is assumed to be rolled over and financed over the remaining nine years until 2030 (i.e., 2022-2030), resulting in an additional annual funding gap requirement of US$0.9-1.1 trillion p.a.

**Additional Cost of Achieving Net Zero Emissions Trajectory:** Last year’s estimated SDG funding requirement included the estimated incremental funding required to achieve Net Zero, based on an estimate by the Energy Transitions Commission. Over the last year, there have been several new estimates of the investments required to achieve Net Zero, which range from US$3.9-5.8 trillion p.a. between 2021-2030, in order to ensure the world moves to a trajectory of achieving Net Zero emissions by 2050.

- The Climate Policy Initiative’s estimates c.US$3.9 trillion p.a. (average) investment required between 2021-2030, the most conservative of the revised estimates.
- The International Energy Agency’s estimates c.US$5.0 trillion p.a. investment required from 2021-2030.
- The International Renewable Energy Agency (IRENA) and Bloomberg New Energy Foundation (BNEF) estimate US$5.7-5.8 trillion p.a. investment required from 2021-2030, due to a higher up-front investment.

The above estimates are all for the total investment required for Net Zero, from which the total amount of actual annual climate financing in 2021 (US$0.6 trillion, based on a detailed assessment by the Climate Policy Initiative) is subtracted to arrive at a revised funding gap of US$3.3-5.1 trillion p.a. for achieving Net Zero (vs. a US$1.5-1.8 trillion p.a. gap factored into last year’s SDG funding gap estimate), resulting in a US$1.8-3.3 trillion p.a. increase in the SDG funding gap.

**Impact of Increased External Financing to Developing Countries in 2021:** Last year’s SDG funding gap factored in a US$0.7 trillion decline in external financing for developing countries seen in 2020, based on an OECD analysis. Overall foreign direct investment (FDI) rebounded sharply in 2021, however most of this additional FDI was amongst developed countries, and total FDI to developing countries increased by c.US$200 billion, based on an estimate by UNCTAD. ODA to developing countries also increased by 4.4% in 2021 to US$178.9 billion, based on an OECD estimate. Together, this results in a c.US$0.2 trillion reduction in the funding gap, with the additional external financing required (to return to 2019 levels) reducing to US$0.5 trillion (vs. US$0.7 trillion last year).

**Impact of Inflation:** 2021 saw inflation reach record levels across developed and developing markets due to persistent supply chain bottlenecks. Average consumer prices for the year, globally, increased by 4.7% in 2021 vs. 2020, based on the latest available IMF estimate. This rate of inflation is applied to the revised funding gap estimates to arrive at a revised funding gap in constant 2021 US dollars. Overall, inflation has added c.US$0.5-0.7 trillion p.a. to the overall SDG funding gap and total need.

Please refer to the 2021 Capital as a Force for Good report for further details about the methodology used to arrive at last year’s estimates.
2. Six breakthrough initiatives: selection process

Force for Good has identified six potentially transformative breakthrough initiatives for major global challenges, which if successful would have a meaningful impact on the world meeting the SDGs.

I. Affordable Housing to ultimately solve for the 2.4 billion new urban inhabitants by 2050, providing the home as a basis of dignity

II. Mass Education to ultimately include the 260m kids out of school to enable them to access opportunity

III. Mass Financial Inclusion to solve for the 67% of the world’s under-banked or totally left out, recognizing their right to the path to prosperity

IV. The Individual and Impact to use technology to impact and empower the world’s c.8bn individuals as a force for good

V. Biodiversity to protect, restore, and promote the sustainable use of terrestrial and ocean ecosystems

VI. Impact Externalities to change decision making to consider the whole system by pricing positive and negative externalities into financial statements to fundamentally change the view of return on investments

This appendix lays out the process for how the underlying goals were prioritized and the opportunities developed, as well as describing the project execution plan for these initiatives

The underlying SDGs were prioritized based on a combination of need, opportunity, and executability, with the goals assessed using a common framework that has ultimately identified several potential SDGs for prioritization. Elements of the framework include:

Recognition of Integrated Nature of SDGs. The 17 SDGs represent the world’s most comprehensive attempt at defining what sustainable development looks like in the 21st century. As the UN’s 2030 Agenda states “They are integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental.” However, with 17 Sustainable Development Goals with 169 associated targets the 2030 Agenda in unwieldy in terms of execution and it resembles an ambition much more closely than it does a plan. So, despite their indivisibility, progress towards their achievement needs to be broken up into discrete pieces, prioritizing actions with the greatest impact potential, in the shortest period of time, for the least amount of (relative) effort and risk. This realization has driven the following series of selection criteria.

Delivery Line of Sight. Some SDGs are more straightforward to solve than others, depending on their scale, complexity, the level of interdependency with other goals, and other factors. The actions required to solve global hunger (SDG2) for example are well understood, with the World Food Programme having drawn up a plan and a US$6.6 billion budget for solving the challenge of acute hunger suffered by 135 million people today. Goals like SDG10 (Reduced Inequalities) on
the other hand are structural in nature, and require systemic economic, political, and social changes to achieve. Goals with delivery line of sight have been prioritized for the purposes of selecting breakthrough initiatives.

**Focus on Pivotal SDGs.** While the UN 2030 Agenda explicitly highlights the indivisible nature of the 17 SDGs, not all goals are created equal. Several core goals like SDG4 (Quality Education) act as a force multiplier for other goals if solved, while other goals like SDG (Good Health and Wellbeing) are path dependent that cannot be solved without addressing others first (like SDG2 – Zero Hunger or SDG6 – Clean Water and Sanitation). The 17 SDGs were assessed based on their interdependencies, and goals with the highest multiplier effect were prioritized.

**Focus on Underserved Goals.** As the breakdown of SDG in section [x] shows, the absolute spending towards each SDG varies significantly, with a small number of goals (e.g., SDG7 – Affordable and Clean Energy, and SDG13 - Climate Action) receiving the [majority] of private sector SDG funding. These imbalances exacerbate existing funding gaps for major goals and create opportunities for the scaled deployment of capital on favorable terms. The spending gap assessment was completed in 2021 using the current spending data (see chart x below for conclusions) but the results have been largely borne out by the spending data collected for the 2022 Capital as a Force for Good Report.

Applying these criteria to the 17 SDG has led to the prioritization of nine goals: SDG1 (No Poverty), SDG2 (Zero Hunger), SDG4 (Quality Education), SDG (Gender Equality), SDG7 (Affordable and Clean Energy), SDG12 (Responsible Production and Consumption), SDG13 (Climate Action), SDG14 (Life Under Water) and SDG 15 (Life on Land).

![Figure 38: Multidimensional Prioritization of Key SDGs for Execution](image)
SDGs 2, 5 and 13 were deselected given the existing global focus on climate action and the UN's initiatives on hunger and gender equality, leading to a list priority SDGs around which the following six initiatives were developed.

**Principles for Solution Development**
The development of the actual solutions for each of the six initiative was driven by a series of core principles, recognizing that every SDG and its keystone challenge are complex, multidimensional, and varied across regional and cultural contexts, with no one size fits all solutions capable of addressing them. Effective breakthroughs therefore need to prioritize efficiency, solving as much of the problem as possible in as many places as possible, and in the simplest possible fashion. Rather than seeking to solve all aspects of multifaceted global challenges, the transformational initiatives are focused on ‘making a significant dent’ into them, creating momentum for other solutions that meet unaddressed needs to be deployed in their wake. The core principles used to develop the solutions therefore included:

- Prioritization of existing solutions and technologies with the potential for mass scaling in the ‘Global South’ in particular
- Focus on specific issues of the goals that can be addressed by these [existing] solutions
- Match the solutions to opportunities that require the least collateral execution, thereby delivering the greatest adoption
- Demonstration that this approach can have a significant impact on the overall goals
- Identification of opportunities to generate commercial returns, where appropriate, to attract scaled capital
- Consideration that fully addressing the remainder of the issue will require far more complex or broader scope solutions.

**Solution Execution Approach**
In keeping with Force for Good’s conviction that solving complex and interrelated challenges requires the alignment of a broad range of stakeholders, the approach to solution development and execution has been a multi-stakeholder one. For each pivotal area, Force for Good has sought to build a broad coalition of partners to prioritize the biggest issues, identify the solutions with the highest impact potential and work with potential sources of capital to validate financial feasibility.
**Issues Identification.** The development of high impact solutions in all cases began with a comprehensive analysis of the underlying issues facing the selected challenges. For this Force for Good engaged with a range of subject matter experts for each challenge, including, among others, the United Nations, academia, think tanks, and non-government organizations, to understand the key issues, their interdependences, and any specific barriers to their resolution.

**Solution Identification.** Engaged private sector partners, including leading global corporations and associations, have provided a series of solutions, that if properly implemented are best placed to address the issues identified, with such solutions including both new innovations and novel combination of existing products and services.

**Funding Validation.** Finally, the proposed solutions have been tested with a range of capital allocation partners. Global solutions will require the global deployment of capital at levels that is likely to exceed the capacity of the public sector to fund on its own. Breakthrough solutions therefore will need to be innovative in generating adequate risk adjusted returns to attract private sector capital at scale from around the world. Validating the solutions' commercial attractiveness with a range of global investors is therefore critical to ensuring their scaled execution.
## 3. Acknowledgements

### i. Actives

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<td>Tanya Dos Santos, Global Head of Sustainability</td>
</tr>
<tr>
<td></td>
<td>Melanie Janse Van Vuuren, Sustainability Manager</td>
</tr>
<tr>
<td>Japan Post Holdings</td>
<td>Masuda Hiroya, Director and Representative Executive Officer, President &amp; CEO</td>
</tr>
<tr>
<td></td>
<td>Japan Post Holdings Co., Ltd.</td>
</tr>
<tr>
<td>JPMorgan Chase</td>
<td>Richard Kaye, Head of International Public Affairs</td>
</tr>
<tr>
<td>Liberty Mutual Insurance Group</td>
<td>Vlad Barbalat, Chief Investment Officer</td>
</tr>
<tr>
<td></td>
<td>Patrizio Urciuoli, EVP, Head Strategy and Asset Allocation and senior ESG leader</td>
</tr>
<tr>
<td></td>
<td>Francis Hyatt, EVP, Chief Sustainability Officer</td>
</tr>
<tr>
<td>Lloyds Banking Group</td>
<td>Janet Pope, Chief of Staff and Group Director Sustainable Business</td>
</tr>
<tr>
<td></td>
<td>Fiona Cannon, Group Sustainable Business Director</td>
</tr>
<tr>
<td>Morgan Stanley</td>
<td>Audrey Choi, Chief Marketing Officer &amp; Chief Sustainability Officer</td>
</tr>
<tr>
<td></td>
<td>Matthew Slovik, Managing Director, Global Sustainable Finance</td>
</tr>
<tr>
<td>Nomura</td>
<td>Chie Toriumi, Senior Managing Director, Head of Content Company and Sustainability Development</td>
</tr>
<tr>
<td></td>
<td>Akiko Sonobe, Head of Sustainability Development Department</td>
</tr>
<tr>
<td></td>
<td>Yuko Deguchi, Planning Section Head of Sustainability Development Department</td>
</tr>
<tr>
<td>Nordea</td>
<td>Snorre Storset, Head of Asset &amp; Wealth Management</td>
</tr>
<tr>
<td></td>
<td>Anders Langworth, Head of Group Sustainable Finance</td>
</tr>
<tr>
<td>Northern Trust</td>
<td>Bob Browne, Chief Investment Officer</td>
</tr>
<tr>
<td>OMERS</td>
<td>Michael Kelly, Chief Legal &amp; Corporate Affairs Officer</td>
</tr>
<tr>
<td></td>
<td>Katharine Preston, Vice President, Sustainable Investing</td>
</tr>
</tbody>
</table>
### Full List of Organizations Analyzed in this Report

#### FINANCIAL INSTITUTIONS

<table>
<thead>
<tr>
<th>Putnam Investments</th>
<th>Katherine Collins, Head of Sustainable Investing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schroders</td>
<td>Andy Howard, Head of Sustainable Research</td>
</tr>
<tr>
<td></td>
<td>Margot von Aesch, Head of Sustainable Investment Management,</td>
</tr>
<tr>
<td>State Street Global Advisors</td>
<td>Richard Lacaille, Executive Vice President, Head of ESG</td>
</tr>
<tr>
<td></td>
<td>Adrienne Zak, Vice President, ESG Reporting and Communications</td>
</tr>
<tr>
<td>UBS</td>
<td>Judson Berkey, Managing Director, Head of Engagement and Sustainability Regulatory Strategy, Chief Sustainability Office</td>
</tr>
<tr>
<td>Wellington</td>
<td>Wendy Cromwell, Vice Chair; Senior Managing Director; Partner; Sustainable Investment; and Portfolio Manager at Wellington Management</td>
</tr>
<tr>
<td></td>
<td>Andria Weil, Managing Director, Director of Sustainable Investment Policy</td>
</tr>
<tr>
<td>Wells Fargo</td>
<td>Eraj Zaidi, ESG Reporting and Disclosure Lead</td>
</tr>
<tr>
<td>Zurich Insurance Group</td>
<td>Johanna Köb, Head of Responsible Investment</td>
</tr>
</tbody>
</table>

#### Development Finance Institutions

<table>
<thead>
<tr>
<th>AIIB</th>
<th>Pieter Bakker, Senior Communications Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADB</td>
<td>Leslie Maarsdorp, Vice President and CFO</td>
</tr>
<tr>
<td>DEG</td>
<td>Martin Geiger, Director Sustainability &amp; Corporate Governance</td>
</tr>
<tr>
<td>IFC</td>
<td>Neil Gregory, Chief Thought Leadership Officer</td>
</tr>
<tr>
<td></td>
<td>Martine Valcin - Global Manager, Corporate Governance / ESG Advisory,</td>
</tr>
<tr>
<td></td>
<td>Luyen Tran - Chief Development Impact Officer · IFC - International Finance Corporation</td>
</tr>
<tr>
<td>World Bank Group</td>
<td>Svetlana Klimenko, Lead Financial Management Specialist</td>
</tr>
</tbody>
</table>
### MULTILATERAL AND GOVERNMENT INSTITUTIONS

1. Asian Development Bank (ADB)
iii. Report Leadership and Execution

UN Guidance, Support and Review

Chantal Line Carpentier, Chief, United Nations Conference on Trade and Development (UNCTAD) New York office of the Secretary-General

William Kennedy, UN, Senior Program Officer, UN Office for Partnerships

Project Leadership

Ketan Patel, Chairman, Force for Good, Chair of the Advisory Council, Force for Good, CEO and Founder, Greater Pacific Capital

The Force for Good Advisory Council

Helen Alderson, Head of Regional Delegation to the UK and Ireland, International Committee of the Red Cross

Edward Braham, Chairman, M&G plc.

Chantal Line Carpentier, Chief, United Nations Conference on Trade and Development (UNCTAD) New York office of the Secretary-General

Nitin Desai, Former Under-Secretary-General for Economic and Social Affairs of the United Nations

Garry Jacobs, President and CEO of the World Academy of Art & Science

Anja Kaspersen, Senior Fellow Carnegie Council; former Director of the UN Office for Disarmament Affairs

Jonathan F Miller, Former CEO of Digital Media at News Corp, Former chairman and CEO of America Online

Nicky Newton King, former Chief Executive Officer, Johannesburg Stock Exchange; former Director, World Federation of Exchanges.

Sir Alan Parker, Chairman and founder, Brunswick Group

Report Authorship
This report was prepared by Ketan Patel, Christian Hansmeyer, and Nandan Desai, with review, feedback, and insights from the Advisory Council.

Final review and insights were provided by Chantal Line Carpentier of UNCTAD, and William Kennedy of the UN Office for Partnerships.

**Data Gathering and Analysis**

Christian Hansmeyer, Report lead, Nandan Desai, Analysis, and research team lead, Aditya Ajit, Analytics and research, Ushma Shah, Analytics and research, Lesley Whittle, Project administration

**iv. Special Acknowledgements**

A special acknowledgement to those that provided support that enabled this initiative to engage the right people at launch and continued to provide their support to enable it to succeed this year too: María Elena Agüero, Secretary General of WLA-Club de Madrid; Kerry Bannigan, Executive Director, Fashion Impact Fund; Neeti Bhalla Johnson, President of Global Risk Solutions, Liberty Mutual Insurance Group; Madhav Chavan, Co-Founder & President, Pratham Education Foundation; Nick Clapham, Head of North America Alternatives Sector, State Street Global Advisors; Katherine Collins, Head of Sustainable Investing, Putnam Investments; Andrew Cohen, Executive Chairman, J.P. Morgan Global Wealth Management; Elizabeth Cousens, President and Chief Executive Officer, UN Foundation; Sergio A. Fernández de Córdova, Chairman of PVBLIC Foundation; John Darsie, Managing Director, SALT, Director, Skybridge Capital; Vivek Doval, Managing Director, Economic Strategy & Transformation, Royal Group; Frank Dixon Founder and Advisor, Global System Change; Charles Edmond, CEO, CDPQ, Lawrence Ford, CEO and Founder of Conscious Capital Wealth Management, Founder and Chairman of Future Capital; Gil Friend, Founder, President and CEO of Natural Logic, Inc; Detlef Geldmacher, Private Equity Asia, DEG; Tom Glocer, Founder and Co-Founder Capitolis Inc; Christa Gyori, CEO and Co-Founder, Leaders on Purpose; Simon Hamilton, Head of Real Assets, Investec Bank; Garry Jacobs, President and Chief Executive Officer, World Academy of Art and Science; Jeffrey Jaensubhakij, Group Chief Investment Officer of GIC Pte. Ltd.; Scott Kapnick, Chief Executive Officer and a Governing Partner of HPS Investment Partners, LLC; Tatiana Kazakova, Chief Strategy Officer and Co-Founder, Leaders on Purpose; Ralph Keitel, Principal Investment Officer, IFC (World Bank Group); Steven Lovink, Founder/CEO · Planet2025 Network & Power of One; David McCormick, former CEO, Bridgewater; Ray McGuire, former Vice Chairman, Chairman, Banking, Capital Markets & Advisory, Citi;
Leslie Maasdorp, Vice President and CFO, New Development Bank; Yutaka Mogi, Senior Managing Director, Nomura Holdings Inc.; Terry Mollner, Founder and Chair, Stakeholders Capital, Inc.; Dr. Stephen Pereira, Consultant psychiatrist and cognitive behavior therapy specialist; Deepak Parekh, Chairman, Housing Development Finance Corporation Ltd. (HDFC); Norman Roesch, Founder and Managing Partner of Coreleus; Hideya Sadanaga, Head of Private Equity Investment Department, Japan Post Bank; Anthony Scaramucci, Founder and Chairman, SALT, and Founder and Managing Partner, Skybridge Capital; Mark Sloss, Executive Director, Future Capital, Satish Rai, Chief Investment Officer, OMERS; Raman Srivastava, EVP and Global Chief Investment Officer, Great-West Lifeco; Angie Tate, Church of the Holy Spirit, Cape Town; Craig Tate, Managing Executive at Metacom; Casper von Koskull, ex-CEO of Nordea; and John E. Waldron, President and Chief Operating Office, The Goldman Sachs Group, Inc.
Creating the ‘Force for Good’ Initiatives Dataset

This report utilizes a detailed dataset of initiatives developed ‘organically’ across the categories of the framework described above in this report compiled using publicly available information for 125 leading financial institutions listed in Annex 1.2. It analyzes the initiatives of the leading financial institutions across ESG, sustainability, and broader stakeholder engagement, examining their development over time and the increasing priority of these activities within the respective organizations.

The report examines 125 financial institutions with assets of c.US$190 trillion representing an c.50% of total finance industry assets. Annex 1.2 provides a complete list of the institutions which have been examined in this report.

Figure 40: Institutions and Assets Covered in Dataset

<table>
<thead>
<tr>
<th>Number of Financial Institutions Profiled</th>
<th>Total Assets (Owned and Managed) in US$ trillion</th>
<th>% of Total Finance Industry Assets Represented</th>
</tr>
</thead>
<tbody>
<tr>
<td>63</td>
<td>100</td>
<td>29%</td>
</tr>
<tr>
<td>2020 Report</td>
<td>170</td>
<td>50%</td>
</tr>
<tr>
<td>2021 Report</td>
<td>190</td>
<td>50%</td>
</tr>
<tr>
<td>2022 Report</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is important to note that the dataset does not represent an exhaustive list of institutions leading on matters of sustainability, and that by nature of the industry’s size and diversity, many companies that may well be leading in this regard have not been included. These companies have been selected to provide as broad and representative a sample as possible for the leaders of the global finance industry across major geographic regions, and asset classes (see tables below), such that their activities and initiatives can be evaluated against the idea of being a ‘force for good’ and provide an important indicator of the progress of the industry in this regard. Further, the report has focused on established companies with visible public footprints, creating a strong bias for large companies over smaller ones.
Further, the database excludes China’s largest financial institutions due to the lack of detailed disclosures on ESG available from these. Given these exclusions, it is important to note that the quantitative outputs of the Force for Good dataset are not extrapolated accurately to the finance industry as a whole and should be construed as a trend set by the industry’s leaders in the identified markets and asset classes.

Figure 41: Total Assets and AUM of Companies Analyzed in this Report

Total Assets and AUM of 125 Finance Industry Leaders Analyzed in this Report

<table>
<thead>
<tr>
<th>US$ trillion</th>
<th>Banks</th>
<th>Asset Managers</th>
<th>Insurance</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americas</td>
<td>36</td>
<td>51</td>
<td>12</td>
<td>99</td>
</tr>
<tr>
<td>EMEA</td>
<td>45</td>
<td>8</td>
<td>15</td>
<td>68</td>
</tr>
<tr>
<td>Asia</td>
<td>12</td>
<td>7</td>
<td>4</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>66</td>
<td>31</td>
<td>190</td>
</tr>
</tbody>
</table>

The position and visibility of those identified as leaders in the finance industry provides a sense of the direction of travel for the industry. It is important to note that the companies included do not represent an exclusive or exhaustive list of institutions leading on matters of sustainability, and that by nature of the industry’s size and diversity, many companies that may well be leading in this regard have not been included in the interests of having a more representative sample. Further, while the dataset includes companies of a range of sizes, the report has focused on visible companies with large public footprints. Given the many smaller private institutions that populate the industry and have much lower public visibility, the overall scope and impact of the industry’s activities in terms of ESG and sustainability is likely significantly larger than what is outlined in this report.

In terms of the database’s scope, the study has updated the organically developed template used in the inaugural 2020 Capital as a Force for Good report, included publicly available sources of information as a base, and added both qualitative and quantitative data captured from the companies examined. Last year, the database was expanded to include a more granular analysis of the financial institutions’ ESG and sustainable investing assets and the extent to which these are contributing to the various SDGs, providing richer insights on the scope of industry leaders’ initiatives. The methodology to assemble the ‘Force for Good’ Initiative’s dataset was as follows:

**Identification of Finance Industry Institutions.** Leading companies from the finance industry were identified across all key regions and key segments including banking (including commercial banks,
investment banks and diversified banking institutions), asset management (including traditional mutual fund asset managers, government and private pension funds, sovereign wealth funds, private equity, and hedge funds) and insurance (including life, general and re-insurers and diversified institutions). Based on a preliminary screening, the 125 institutions listed in Annex 1.3 were selected for further data collection based on the following factors:

**Scale and Industry Leadership.** Institutions were selected based on their total assets (including both owned assets on the balance sheet and client-owned assets under management or supervision) to identify a group of industry leaders that represented as broad a sample of the total assets globally as much as possible.

**Availability of Public Information.** Institutions were also identified for further data collection based on an initial assessment of the extent of publicly available information on their initiatives across ESG, sustainability, and stakeholders (Note: in certain cases, institutions with limited public information which were willing to engage as Actives in the projects were identified for further data collection).

**Regional and Asset Class Representation.** Institutions were selected for further data collection by distributing them across regions and asset classes. In cases where institutions had businesses across multiple geographies and asset classes, they were listed in their primary geography (where their headquarter is based) and primary asset class (usually accounting for most of total assets). It is important to note that certain regions such as Latin America and the Middle East are underrepresented in the sample due to the limited data availability. Notably, Chinese financial institutions have not been included in the study due to the relative concentration of assets with large state-run banks and the lack of publicly available data on their activities in terms of ESG, sustainability, and stakeholder engagement.

**Actives.** Of the 125 companies in the Capital as a Force for Good 2021 Dataset, c.30 companies listed in Annex 1.1 are ‘Actives’ that have actively been engaged and have contributed to the underlying dataset, providing additional information across the areas outlined above, and engaged directly with the project team where required. The Actives come from various geographical regions and industry segments within the finance industry and were identified based on a combination of factors including:

**Scale and Influence.** Actives were prioritized based on absolute scale (within their industry segments) given their pivotal role in shaping global asset allocation. Most of these industry leaders are also transnational businesses (often generating the majority of their business outside their home countries) which therefore can make an impact across the world, with several of these leaders also being diversified across various industry segments.

**Established Commitment.** Actives as a group display a high level of organizational commitment to ESG, sustainability and/or stakeholder needs, which ensures that there is sufficient track record and information available enable a meaningful assessment of their engagement.

**Willingness and Capacity to Engage.** Institutions were further prioritized based on their ability and willingness to engage with the project team at the senior management level to (a) provide
additional information on their initiatives and, (b) identify major initiatives with the potential to deliver systems level changes.

The Actives collectively represent c.US$77 trillion in total assets, or c.40% of the total dataset and 19% of total global financial assets. While representing multiple industry segments and geographic regions, a significant concentration of Actives is U.S based, given the criteria. However, many of these institutions have significant businesses outside the US (often larger than their domestic businesses). Asset managers are also well represented among Actives given that the dataset considers both owned assets and assets under management, and because these institutions play a critical role in shaping the global capital allocation.

Actives have variously engaged in multi-stakeholder forums, such as the UN's World Investment Forum, had their strategies and initiatives tracked and reported, and directly engaged with the project team on their activities and initiatives through interviews and meetings, and provided their relevant datasets for this report, where appropriate, which goes beyond the confines of narrower scope initiatives given the definition of what it means to be a ‘force for good‘ as laid out in this report.
In Support of the UN Secretary General’s Strategy for Financing the 2030 Agenda and its Subsequent Roadmap for Financing the 2030 Agenda for Sustainable Development

Figure 42: Actives

### Active Financial Institutions

‘Capital as a Force for Good’

#### By Region

- North America: 73%
- EMEA: 21%
- Asia: 6%

#### By Industry Segment

- Banks: 38%
- Asset Managers: 13%
- Insurance: 55%

(125 Total Financial Institutions in the Dataset with Total Assets US$190 trillion)

**Data Collection Methodology**

The dataset used in this year’s report consists of publicly available quantitative and qualitative sources of information, covering a granular analysis of the financial institutions’ ESG and sustainability initiatives and the extent to which these are contributing to the various SDGs, providing richer insights on the scope of industry leaders’ initiatives.

Core Data Sources. All publicly available information on initiatives relating to ESG, sustainability, climate change, stakeholder engagement (including employee and corporate social responsibility programs) for the companies considered in this report was collected and reviewed. Information sources include annual reports to shareholders, ESG and sustainability reports, ESG policies and frameworks, company websites, and public statements by company leaders.

Data Collection Methodology. Information on the initiatives was extracted from the above sources, into a template designed to capture all publicly available information on these initiatives irrespective of how each institution captured it, more akin to a register. The key categories in the information template are provided below. For Actives, the information templates were shared with the respective for review and the provision of additional information, where required. All initiatives have been either directly sourced to a public document or to direct inputs from Actives.

Data Analysis. The information from the templates was then aggregated into a common database to complete the analysis which is shown in this report.
**Key Categories of Data Captured**

The information template for each of the institutions listed in Annex 1.2 captures information on initiatives across two sections. All the information outlined was collected for all 125 institutions in the dataset. The key information in each of these sections is shown below:

**Basic Information Checklist: Data Supporting the Breadth of “Force for Good” Policies, Practices, and Initiatives**

- Total owned and managed assets
- Women’s empowerment including information on policies, % of employees and leadership
- Minority empowerment including information on policies, % of employees and leadership
- ESG policy, framework, and public reporting
- Formal adoption of multi-stakeholder focus
- Employee policies and programs including diversity and inclusion, wellness, mental health, and mindfulness
- Sector-specific ESG standards
- ESG oversight and governance
- ESG integration with core business processes
- Governance policies and training
- Exclusion List, ESG Risk Factors Assessed and ESG Associations: ESG "Exclusion Criteria", Specific ESG factors considered/prioritized, Participation in international ESG or sustainability associations, Greenhouse gas protocol accounting and reporting
- ESG Exclusion criteria
- ESG Risk Factors considered in screening
- ESG associations
- Climate change, sustainability, and inclusion related associations
- Greenhouse gas protocol accounting and reporting standards and carbon footprint data
- Sustainability Related Financing: Sustainability related financing mobilized in 2021, Other SDG Financing (Affordable Housing, Small Business Loans, Community Financing), and CSR Spend
- Sustainability related financing across different asset types and products mobilized in 2020
- Other SDG or inclusion related financing (affordable housing, small business loans, and community financing)
- Corporate social responsibility (CSR) spending and key initiatives
Detailed Methodology for F4G Scorecard

The three and five-year total shareholder returns, calculated as the change in the stock price and cumulative dividends paid per share for the five-year period from 1st August 2017 until 31st July 2022, and for the three-year period from 1st August 2019 until 31st July 2022, has been calculated for all publicly listed institutions in the analysis.

A custom F4G scorecard calculated for each of the three segment – banks, insurance, and asset managers. To arrive at the initial score, six sub-categories are considered - capital deployed for sustainability linked finance, policies in place for ESG integration in core business, inclusion linked commitments, SDG considerations, ESG considerations for loans & investments, environment, diversity & employee policies, CSR investments.

Of these sub-categories that are binary - policies in place for ESG integration in core business, SDG considerations, ESG considerations for loans & investments, environment, diversity & employee policies - are assigned a score of 1 point if the company has policies or consideration in place. The percentiles are then calculated in each of the four sub-categories for the different companies based on their score by adding the total number of points assigned for each policy and consideration in place.

Percentiles are also calculated for each firm on the remaining three sub-categories based on their capital deployed for sustainability linked finance, inclusion linked commitments and CSR investments relative to other firms. The percentile system has been used to normalize the scoring between binary factors and actual financial commitments.

Each of the sub-categories are initially assigned equal weights to calculate an initial weighted average percentile for each company. Following this, customized weights are calculated for each sub-category based on number of institutions who have a score in the sub-category and its relative importance to five-year returns and financial metrics.

Once the final weights are assigned to each sub-category, a final weighted average percentile is calculated for each company. The weighted average percentile for each company is then marked on a total score of 5 to calculate the final F4G score for the company.
Disclaimer

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References

The terms country and economy as used in this Report also refer, as appropriate, to territories or areas; the designations employed and the presentation of the material do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. In addition, the designations of country groups are intended solely for statistical or analytical convenience and do not necessarily express a judgment about the stage of development reached by a particular country or area in the development process. The major country groupings used in this Report follow the classification of the United Nations Statistical Office:

The boundaries and names shown, and designations used on the maps presented in this publication do not imply official endorsement or acceptance by the United Nations.

The following symbols have been used in the tables:

- A slash (/) between dates representing years, e.g., 2010/11, indicates a financial year.
- Use of a dash (–) between dates representing years, e.g., 2010–2011, signifies the full period involved, including the beginning and end years.
- Reference to “dollars“ ($) means United States dollars, unless otherwise indicated.

Annual rates of growth or change, unless otherwise stated, refer to annual compound rates. Details and percentages in tables do not necessarily add to totals because of rounding.
End Notes, Sources

1 Source: BP Statistical Review of World Energy
2 Global Pension Assets Study, Goldman Sachs Asset Management Insurance Survey 2022
3 Sources: World Bank
4 Sources: UN Inter-agency Group for Child Mortality Estimation (via World Bank)
5 Sources: UNESCO (Via World Bank)
6 Source: Deloitte
7 Source: UN International Organization for Migration
8 Source: OECD, IFS
9 Source; WEF 2021-22 Global Risk Report
10 Source: IEA
11 Source: IPCC Sixth Assessment Report
12 2021 Legatum Prosperity Index: Safety and Security Pillar
13 Source: Freedom House - 2022 Freedom in the World Index
14 Source: ICRC 2022 Appeal
15 Source: Global Trade Alert
16 Source: World Investment Report 2022
17 Source: IMF World Economic Outlook
18 Source: IMF Global Debt Database
19 Source: UBS
20 Source: Knight Frank
21 includes green bonds and loans, social and sustainability bonds, and sustainability-linked bonds
22 Source: Climate Bonds Initiative Update, 4th August 2022
23 Source: Bloomberg Intelligence, 19th July 2022
24 Source: Cap Gemini 2022 World Wealth Report
25 Source: Harvard Law School Forum on Corporate Governance, ESG Global Study 2022
26 Examples have been selected in order to provide a broad sample of initiatives by various finance industry leaders
27 Mapping of initiatives to the SDGs is based on F4G Foundation analysis; SDGs from other categories which are indirectly impacted by the initiative (given the complex interlinkages between the SDGs) are shown in faded SDG icons
28 Excluding the International Finance Corporation, which is shown separately
29 For certain MDBs, latest available annual reports are for the period ending 31 December 2020 or 30 June 2021
30 Source: EFPR
31 Source: MIT Aggregate Confusion Project
32 Note: Two Indian banks, new additions to the 2022 database were excluded from the performance benchmarking, given the current volatility of Indian equity markets and the resulting lack of correlation between company share prices and Force for Good performance.
33 Source: Net Zero Tracker
34 Source: IEA
35 Source: Bloomberg Law, March 2022
36 Source: Twitter
37 Source: Climate Policy Initiative
38 Source: BlackRock Investment Stewardship team
39 Source: WEF
40 Source: Global Survey on Sustainability and the SDGs, 2020
41 Source: World Economic Forum 2019
42 Source: Pew Research Center's Spring 2021 Global Attitudes Survey
43 Source: Harvard Business Review
44 Source: Allianz Global Investors
45 Source: Schroders Global Investor Study
46 Source: Council on Foreign Relations
48 Source: https://www.africa.upenn.edu/Govern_Political/Mandel_100.html
49 Source:
50 Source: UN DESA
51 Source: Asian Development Bank
53 Source: UK Office of National Statistics
54 Source: EU
55 Source: EU Corporate Sustainability Due Diligence and Reporting Directive. Art 22
56 Source: Government of India
57 Source: SDG Global Action Awards
58 Based on the active users of the 15 largest Edtech companies, assuming no overlap in users across apps
59 Source: WEF
60 Source: Kepios
61 Source: International Finance Corporation
62 Source: UN
63 Source: UN DESA
64 Source: ThermoFischer
65 Source: Force for Good Analysis
66 Source: Nature
67 Source: IEA
68 Source: World Food Organisation
69 Source: World Bank, Remote Learning During COVID-19
70 Source: MIT Technology Review
71 Source: World Bank
72 Source: Net Zero Tracker, IMF
73 China, India, Russia, and Indonesia (commitment currently in discussions)
74 Source: Glasgow Financial Alliance for Net Zero
75 Source: Tom Cotton interview
76 Selected list of SDG targets and indicators. For the full list please see https://sdg-tracker.org
77 ibid
78 ibid
79 ibid
80 Last year’s analysis was based on initial and revised estimates of funding the SDGs by UNCTAD, the IMF, and the OECD, along with estimated levels of total current funding. These estimates were then: (1) brought up to date by including revised estimates for meeting the Paris treaty objectives (from IEA and the Energy Transition Commission), and incorporating the implications of the coronavirus pandemic (based on an OECD estimate); (2) including estimates for certain components not included in the initial estimate, such as affordable housing, financial inclusion, and social security, and (3) factoring in inflation from the time the initial estimates were made to calculate the requirement in 2020 US dollars.
81 The combined GDP of all developing countries grew by 6.8% in 2021 in real terms and 16.5% in nominal terms, while developed economies grew by 5.2% and 10.6% in real and nominal terms, respectively (Source: IMF World Economic Outlook, April 2022); estimated developed and developing countries’ funding in 2020 have been increased at the rate of nominal GDP growth in 2021 for developed and developing countries, respectively
82 Source: United Nations, Sustainable Development Goals Progress Chart 2022 Technical Note
83 Source: Bloomberg
84 Certain geographies such as China and the Middle East are underrepresented in the sample due to the lack of public information