9. The Agenda for Change

Based on current financing trends, the world will not achieve the SDGs by 2030 despite the increasingly intense engagement by governments, individuals, and the finance sector. Without the solid foundation that meeting the SDG goals would provide, the world will be at a severe disadvantage in addressing further challenges facing the world beyond 2030 such as the fight against climate change and the related energy transition underway today, which in turn will further delay the world’s transition to a more sustainable information age, multiply the disruptions that the world will encounter along the way and significantly increase the human, environmental and financial cost of the transition itself. However, while success is not guaranteed, neither is failure inevitable given the increasing ambition. A multistakeholder approach engaging leading financial institutions in particular given their outsized role in the world’s capital flows, across key areas of sustainability, development and inclusion is essential to funding near-term survival, a far superior future for a world of nearly 10 billion and the transition between the two. The investment themes and potential execution models that will allow international investors to participate in these developments seem clear.

The Imperative and Opportunity to Shape a Better Future

Achieving the 17 Sustainable Development Goals by 2030 so that the world has a sound platform to build the future is the prerequisite for progressing beyond today’s issues and focusing on building for a superior future.

At the same time the risks of not meeting the SDGs are significant. The world faces the twin challenge of a human development crisis and an ecosystem disaster. This manifests in global income disparities, and the lack of inclusion and economic opportunities putting pressure on governments and societies around the world, while environmental degradation, resource depletion and the effects of climate change are destroying human habitats and leading to increasing conflicts and human security risk, all
of which will drive increased mass migration and create further political civil and economic upheavals around the world. The problem is circular and financing the breakthrough solutions is the circuit breaker.

Despite the importance of the SDGS being widely recognized, the targets today remain well off track with less than a decade left to go. Among the most critical challenge in meeting the goals is funding: by some estimates, without immediate action, the achievement of the SDG targets could be pushed out by up to a further decade. The need for the world to act now is therefore imperative.

The Challenge of Managing a Global Transition

The next 30 years promise to be a time of unprecedented change with technological, social, environmental, economic and political upheaval. The extent of this upheaval and the costs associated with it depend largely on how well the global transition is managed.

Global issues require global solutions, which in today’s globalized and interconnected world requires the coordination and cooperation of multiple stakeholders. At the highest level these are the world’s 193 sovereign states, which will need to develop shared global model for managing the transition. Such a model will need to include new rules of engagement, new principles of competition and collaboration, new rules of resource management, and new principles of fiscal and monetary policy, while encompassing a diverse range of national strategies, power blocs and international coalitions. New because the old rules and ways have left the world with a funding gap of an estimated US$84-US$101 trillion for just the next decade, before the world starts to invest in breakthroughs that can create a new future for almost 10 billion people on the planet by 2050 and maintain a healthy equilibrium with the rest of the planet's systems.

Figure 45 - The Global Transition: Two Potential Paths

<table>
<thead>
<tr>
<th>Path I: Disruptive Transition</th>
<th>Path II: Orderly Transition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predation and Survival</td>
<td>Rules of Engagement</td>
</tr>
<tr>
<td>Eaters, Eaten</td>
<td>National Strategies</td>
</tr>
<tr>
<td>Hoarding, Hostile Acquisition, Protectionism</td>
<td>Critical Resources</td>
</tr>
<tr>
<td>Transient Coalitions</td>
<td>International Unity</td>
</tr>
<tr>
<td>Fear, Rivalry and Enmity: Unlimited Competition</td>
<td>Competition &amp; Collaboration</td>
</tr>
<tr>
<td>Uncertainty, Volatility, Crashes, Systemic Flaws</td>
<td>Markets</td>
</tr>
</tbody>
</table>
Depending on whether the leading states can develop such a shared model, the world is set to travel along two very different paths in the coming decades. If the world comes together and can collaborate, the transition will be an orderly one, with shared costs and burdens, strong partnerships and collaboration and the inevitable economic and social shocks mitigated. Should the world fail to come together though, the coming decades will witness increased conflict, competition, and uncertainty, as the world fails to meet the SDGs and pays the price of in terms of exacerbated economic, social, and political shocks that will hinder further its ability to manage the energy transition.

Whether the world manages to align for an orderly transition is unclear in a world recently ravaged by political, social, and economic divisions, made even more complex by the assault of the recent pandemic. The United Nations has traditionally played a critical role in convening the countries of the world to do so for over 75 years but its absence during the recent pandemic has left a vacuum which its allies have learnt to fill for themselves but with still the wish that the US will surely rise to this coming challenge as well. Global opinion points to a median of 74% who have confidence that the current US leader(ship) will do the right thing regarding world affairs, up from 17% in 2020. However, more fundamentally, alignment is also a challenge stemming from different world views. Whether states choose to work together in the first place is a function of both their mentality with regards to collaboration and competition, and their assumption around the nature of the global opportunity, specifically its growth prospects. The 20th century post-war liberal order was built on the assumption of global growth to be shared by a global community linked by transnational institutions, while the 19th century ‘Great Power’ order was a zero-sum game built on the primacy of national interests, (which therefore lacked the flexibility to avoid the First and ultimately the Second World War, too).

Figure 46 - World View and Strategy

**A Simple Model Delineating Sharing, Competing and Resources**

<table>
<thead>
<tr>
<th>Assumption of Plenty - Growing Pie</th>
<th>Assumption of Scarcity – Fixed or Declining Pie</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Collaboration Mentality</strong></td>
<td><strong>Competition Mentality</strong></td>
</tr>
<tr>
<td>Share and Grow Together</td>
<td>Stock-pile First and then Trade</td>
</tr>
<tr>
<td>Work to Rules for Sharing</td>
<td>Take Assets for Own Interests</td>
</tr>
</tbody>
</table>
Emerging Investments Themes That Will Shape the Future

The challenge of funding the current world platform to a more equitable level - overcoming the extremes of difference between communities within and across countries, the transition and key elements of the future - requires a multi-stakeholder alignment and will likely not mobilize at the scale required as a charitable endeavor, one funded by governments or taxes, or one undertaken at losses. Hence, the requirement is to fund investment themes where profits are made sufficient to allow for re-investment in the future, while providing for employment, taxes, social security, and pensions today.

So, in plotting the way ahead, a number of themes, which will be investment themes, will define the global transition. The SDGs are of course a critical part of this transition and given their 2030 target date are often only the starting point for more fundamental transformations. Taken together, these themes determine the global transition to the sustainable information age, and each implies a development arc that will unfold over decades, not years. Some of the key themes in summary can be identified already for the agenda of stakeholders.

Investment Theme: Mass Scaling of Existing Clean Energy Solutions

17% of global primary energy from non-fossil fuels

The Challenge: Meeting 50% carbon emission reduction targets made by many countries by 2030 highly challenging given current primary energy mix

Potential Solutions: Mass scaling of current alternative energy technologies to maximize practical capacity

Core Investment Opportunities: Funding at scale of photovoltaic, wind, tidal, geothermal, and other commercial renewables

Investment Theme: Regeneration of the Environment and Ecosystem

68% decline in global animal populations since 1970

The Challenge: Ongoing environmental degradation through pollution, ocean acidification, loss of biodiversity, and other causes.

Potential Solutions: Scaled technologies to counter or minimize humankind’s environmental footprint, including regenerating legacy industrial and urban environments

Core Investment Opportunities: Investments in pollution extraction, carbon capture material science, recycling, ozone repair
Investment Theme: Global Digital Participation and Inclusion

40% of the world still lacks access to the internet

The Challenge: Over three billion people lack access to the internet in a world where value is increasingly created and delivered online,

Potential Solutions: Universal access to high-speed fixed and mobile broadband at virtually zero cost creating a fully inclusive common global platform

Core Investment Opportunities: Blended finance models for developing countries

Investment Theme: Mass Education and Skill Development

260 million children out of school globally

The Challenge: 14% of the world’s population remains illiterate while nearly half the world lacks secondary education, creating critical barriers for employment in a world growing to nine billion people

Potential Solutions: Enable universal access to high-quality affordable education, with superior learning outcomes, leveraging virtual presence technologies.

Core Investment Opportunities: Supporting online education, upskilling training, and hiring and recruiting

Investment Theme: Mass Financial Inclusion

67% of the world’s population remains un- or under-banked

The Challenge: Nearly 70% of the worlds’ population remains un- or under-banked without access to formal financing and markets

Potential Solutions: Universal adoption of digital payments and FinTech tools, creating universal access to financial services with new digital industry, participants, products, and services.

Example for Leveraging: India’s digital infrastructure stack has increased financial inclusion from under 50% in 2013 to over 80% today, providing a potential solution for other developing countries.
Investment Theme: Resilient Healthcare and Social Security Systems

3.9 billion people lack access to critical healthcare services\(^{86}\)

The Challenge: Half of the world’s population does not have access to the health services they need, and over 800 million people spend at least 10% of their household income on healthcare.

Potential Solutions: Creating resilient systems, including healthcare infrastructure, care providers, products, insurance and human resilience for better health outcomes and a higher quality of life.

Example for Leveraging: Digital services have proven their value in other settings and during the pandemic for healthcare.

Investment Theme: Stakeholder Aligned and Resilient Companies

0.2% of companies ‘strongly aligned’ with the SDGs\(^{87}\)

The Challenge: Solving the world’s challenges requires the active participation and leadership of the corporate sector across all industry sectors.

Potential Solutions: Active investment strategies pushing businesses to widen their purpose to include sustainability and impact goals.

Core Investment Opportunities: Responsible and impact investing with enhanced performance criteria for asset selection.

Investment Theme: Reimagined Urban Life

2.4 billion urban inhabitants being added globally by 2050\(^{88}\)

The Challenge: The world’s urban population is expected to approximately double by 2050, creating the need for new cities and new urban environments to effectively handle these inflows.

Potential Solutions: Technology and infrastructure enabling more sustainable cities, with a higher quality of life, and non-urban working.

Core Investment Opportunities: Green housing and infrastructure, building materials, smart city infrastructure and mobility.
**Investment Theme: SDG Funding**

**US$84-101 trillion-dollar shortfall to fully fund the SDGs**

The Challenge: SDGs targets will be missed at current spending trajectories, with major SDGs significantly underfunded.

Potential Solutions: Global initiative for major institutions to adopt an SDG, with a lead SDG financier (private or sovereign) appointed for each of the underserved ones.

Core Investment Opportunities: SDG 14: Life Below Water, SDG 15 Life on Land, SDG 2: Zero Hunger, SDG 6: Clean Water & Sanitation have received the least private sector capital.

**Investment Theme: Mobilizing the Consumer**

80% of global consumption driven by household spending.

The Challenge: With c.80% of global consumption controlled by households, systemic change and progress requires mass participation by individual consumers.

Potential Solutions: Technologies and platforms that engage and mobilize consumers to make investment and consumption decisions that facilitate both survival and thriving.

Core Investment Opportunities: Empower consumers through data to make point of purchase decisions.

**Investment Theme: Food Security**

70% increase in global food production required to meet rising demand by 2050.

The Challenge: Increasing populations and prosperity are driving food demand globally while challenges in food distributions continue to lead to malnutrition and starvation risk in least developed countries.

Potential Solutions: Food system transformation including increased climate resilience, supply chain and food environment improvements.

Core Investment Opportunities: AgriTech and services increasing crop yields and sustainability, supply chain optimization.
**Investment Theme: Sustainable Infrastructure**

**US$6.9 trillion annual infrastructure investment need to meet the Paris Agreement Goals**

**The Challenge:** Current energy, transport, building, and water infrastructure make up more than 60% of global greenhouse gas emissions

**Potential Solutions:** Transforming existing and deploying new infrastructure leveraging low emission technologies

**Core Investment Opportunities:** Energy efficiency, low carbon infrastructure, material sciences

**Investment Theme: Radical Energy Breakthroughs**

**55,000 barrels of oil can be replaced with 1 kg of fusion fuel**

**The Challenge:** Current and near-term energy technologies do not provide the step change in functionality that enable breakthroughs to humanity’s next civilization

**Potential Solutions:** Innovation of cheap, clean, renewable, and more functional energy sources

**Core Investment Opportunities:** Fusion technologies, advanced solar, and others that have the potential to change the functionality equation

Realizing these themes holds the promise of a stable transition to a world that is very different from today’s, the sustainable information age. Such a world would be one of universals – universal connectivity, universal inclusion, universal education, and universal healthcare access – that eliminates hunger, illiteracy, diseases, and countless unnecessary deaths. Such a world would also be one of abundance – abundant food and water, abundant energy, and abundant essentials – that eliminates absolute poverty and creates economic opportunities for all. And such a world would be one of balance – with regenerated ecosystems and man-made and natural environments operating in harmony, balancing biodiversity, and thriving communities.
Multi-stakeholder Execution Considerations

The investment potential of the themes laid out above far exceeds the c. US$100 trillion total bill to achieve global net zero emissions or the c. US$120-150 trillion total bill for the world to meet the SDGs. Given that these themes collectively represent no less than the future of human civilization their funding is of course of critical importance. The attractiveness of each theme (or parts thereof) to private sector capital may vary widely, however, implying the need for a multi-stakeholder blueprint for funding the future that incorporates all the major participants of the financial system. The key stakeholders and their role in such a blueprint would include the following:

✦ **The United Nations (and other transnational organizations) – Consensus and Legitimacy.** At the highest level, the UN and other transnational organizations have a critical role to play, securing agreement between states on the key priorities and actions which needs to be taken, and importantly, providing legitimacy for the implementation measures executed by member states as a result.

✦ **International Community – Policy and Legal Alignment.** The international community of states will need to align and pass a series of resolutions, frameworks and agreements for legislation that align behavior to sustainable development, including performance targets (and requirements), reporting and disclosure, and accompanying incentive programs.

✦ **Sovereign Investors and DFIs – Blended, Bridge and Low-Cost Finance.** Developed nations with financial resources will need to strategically provide direct funding to support key themes, whether domestically through R&D support or abroad through national aid agencies that can provide low-cost finance, directly or as blended finance, which may be particularly important for people-oriented SDGs that may not qualify for commercial lending. Development finance institutions, which are semi-governmental institutions by nature, can also play this role, providing a link between political policy objectives and private finance.

✦ **Developing Nations – Becoming Investment Opportunities.** Developing and particularly least developed economies reliant on external financing will need to provide an environmental allowing for the creation of attractive investment opportunities suitable for foreign investor participation. Given the rising ESG requirements of private sector capital, governments will need to adopt and abide by a series of policies and requirements that meet investor’s governance standards without hampering the countries’ growth and governments’ ability to respond to challenges, such policies, and requirements to potentially be codified as an improved ‘Washington Consensus 2.0’ for the private sector.

✦ **Leading Financial Institutions – Leadership and Bar-setting.** Private sector capital will of course ultimately fund the vast majority of virtually any global investment opportunity, with investors deploying capital according to investments’ risk, return and (increasingly) impact profile. Within the private sector however, leading financial institutions have a critical role to play, leading the industry in targeting new opportunities and themes, raising the bar in terms of commitment levels, innovating new products and services, and setting standards in terms of policies, behaviors, and rules, particularly in less regulated markets.
Individuals – Powerful Collective Action. With the true democratization of finance, the role of the individual in funding the future will become even more important. The global “Skynet” moment in finance, when a critical mass of transactions by individuals occurs without needing an intermediary is possible, when technology is pervasive across the population such that everyone is connected to everyone else, when the transactions platform has built in security, when considerations of cost and convenience trump relationships and trust, and when enough people globally are sufficiently financially included to participate. Blockchain, social networks, identity and privacy laws and universal internet access are paving the way to this effective democratization of finance.

The Role of Capital in the 21st Century, Building a Superior Civilization as a Force for Good

The global context is flowing at great speed to a very different scenario, changing everything from geo-politics to the role of the individual with concurrent shifts, to the information era from the industrial one, the rise of four power blocs from one superpower, the overuse and likely exhaustion of easily available natural resources, and a population of nearly 10 billion by 2050 fully interconnected by internet media. This level of simultaneous change signifies a transition of civilizations, and such changes disrupt the status quo as they usher in a new age and with it a new set of great powers and new systems defining the order of everything from geopolitics to individual rights.

Finance is an essential ingredient - alongside science, technology governance, security, commerce, and industry - without which civilizations cannot be built. Historically however it has been distinct from the other ingredients in that it underpinned the others as the one element without which they could not survive. During the past 5,000 years, the finance industry (including the financial markets, their participants, and the instruments they employ) has adapted and innovated to scale civilization by financing economic development, technological advancement, and human progress, as well as conflicts of political adversaries.

Each era of humankind and the transitions between them have been made possible by financial innovations that funded commerce, science, art, war, and all the endeavors of humanity. The art of the Renaissance was financed by Italian merchant bankers who had created massive wealth based on the modern holding company and letters credit. The breakthroughs of the Scientific Revolution of the 17th Century were enabled by the wealth created by burgeoning international trade, facilitated by joint stock companies and financing by central banks and a national debt. A century later the Industrial Revolution brought the world modern exchanges, bond underwriting and building societies. In the 20th Century, particularly following two wars that wreaked havoc on the European powers, a new model emerged built on trade and multinational corporations, and it saw the creation of global financial institutions, regional financial zones, personal credit, derivatives and futures contracts and hedge funds.

Through these eras, the world has transformed beyond recognition many times over as new developments have opened new opportunities but also brought new challenges. Today, in the early 21st Century, while the world enjoys more peace, prosperity, and freedom than at nearly any other
time in human history, it also faces the perhaps the greatest existential risk to human life flourishing. Solving for the world’s global interconnected risks will require coordinated actions across countries, governments, markets, communities, and individuals on a scale that has seldomly been achieved.

However, the world is not only facing challenges, but also opportunities that will define its next civilization, the emerging sustainable information age. These opportunities include laying the foundations for the next part of man’s journey including innovations that change the scale, reach and character of humanity and its civilization, ranging from the development of a cheap, clean, and abundant energy source, the ongoing development of artificial intelligence and the expansion of civilization’s footprint beyond its current terrestrial boundaries, to name a few.

In the transition to a sustainable information era already underway, capital is not the exclusive territory of financial institutions, indeed other stakeholders are powerful players with a role to play. The individual, the technology platforms providing the means for the global flow of information, networking and value transfer have an outsized role too. Governments and transnational institutions have an essential role in galvanizing and supporting change. Given the finance industry’s role as the allocator of the vast majority of the world’s wealth, and its traditional role as a facilitator of growth and development it has an essential part to play in both addressing the world’s fundamental challenges and in ushering in the next phase of its civilization to which we are transitioning. The actions of industry leaders, as outlined in this report, indicate that the industry is rising to this challenge. Moreover, it points to the finance industry’s increasing willingness to take a leading role in these efforts, galvanizing other critical stakeholders to contribute to an orderly and timely transition to an age of even greater peace prosperity and freedom. This a development that can be welcomed and encouraged. While most of the industry is stuck in an industrial era model of finance, some of the largest are becoming bold financiers of change and are feeling their way to leading in addressing fundamental issues.

The world faced great multi-faceted social, economic, and political challenges, which were neglected or accentuated, by the pandemic which revealed the fragility of the world, while highlighting the global interrelatedness, interdependencies and interconnectedness of the world’s major challenges, and the urgency of meeting the UN SDGs. A stable platform for the world requires the SDGs to be met to avoid a human and ecosystem crisis, a transition to be managed and a far superior future to be financed that is not only inclusive but can accommodate the aspirations of nearly 10 billion people by 2050. Failure leads to chaos and uncontainable risks, as the past year’s pandemic has shown. The challenge ahead requires ingenuity beyond anything achieved thus far and financing beyond our apparent means, a worthy endeavor for the world at this point.