



# SDG INVESTING: ADVANCING A NEW NORMAL IN GLOBAL CAPITAL MARKETS

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## EXECUTIVE SUMMARY

In 2015, world leaders signed off on a global strategy for sustainability through three major international agreements, the Addis Ababa Action Agenda (Third International Conference on Financing for Development, 2015), the Paris Climate Agreement, and the 2030 Sustainable Development Goals (SDGs). Realizing these commitments require the “strengthening of public policies, regulatory frameworks and finance at all levels” as well as ‘unlocking the transformative potential of people and the private sector’ (Addis Agenda, para 5). Member States commit to “work towards harmonizing the various initiatives on sustainable business and financing, identifying gaps, including in relation to gender equality, and strengthening the mechanisms and incentives for compliance” in paragraph 37 of the Addis Agenda.

This report, which was commissioned by the Department of Economic and Social Affairs of the United Nations (UN-DESA), seeks to contribute to the ongoing and expanding discussion on how to increase and optimize the involvement of the private sector in financing sustainable development. Its main objective is to understand the financing challenges of the abovementioned landmark agreements through a private sector lens. Insights resulted mostly from desk research, yet were validated through interviews. To ensure that market dynamics, drivers, and barriers to investing in sustainable development received sufficient consideration, interviews with financial sector executives were prioritized. Interviewee ‘voices’ were added throughout the report to bring such factors to life.

The report highlights the need for a ‘sustainable financial system,’ flags the critical role of investment capital in sustainable development finance, describes drivers and barriers to investing with impact as well as to using the SDG framework of choice, and reviews available public sector mechanisms for advancing the role of private sector capital in development finance. It also lists critical success factors to public sector interventions, and begins to articulate recommendations for ongoing UN efforts to contribute to the establishment of more sustainable financial systems and the advancement of private sector investments in the 2030 Agenda. Box 0-1

Summary of Research Insights & Hypotheses summarizes the insights and hypotheses that are posited.

The report coins the term ‘SDG investing’ (SDGI), describing SDGI as *all* investment strategies whereby sustainability and/or the SDG’s form a ‘material’ factor – i.e., are actively considered – in investment decisions. With this term, the authors offer an umbrella term that recognises an existing, broadly accepted spectrum of sustainable, responsible, and impact investing<sup>\*/†</sup>. The authors assert that two critical market shifts are needed: First, one whereby *all* investments become SDG investments and are reviewed for their positive and negative impacts, and secondly, a shift towards a market where the net positive impact that is achieved with each investment dollar is maximized within the risk-return parameters of the investor.

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\* The term ‘SDGI’ which was first used by 20+ Dutch financial institutions that committed to a national SDGI agenda in December of 2016.

† While clearly two sides of the same coin, the report excludes corporate sustainability agendas – often referred to as corporate social responsibility (CSR) or ‘shared value’ initiatives – from its primary focus.

Worth noting is that some interviewees wondered whether investments where positive impacts are ‘accidentally’ achieved should be included in our definition of SDGI. The authors believe that as long as such impacts are not considered or transparent, mitigation of negative outcomes and acceleration of positive outcomes is not possible. By deliberately excluding these investments from the definition of SDGI and by flagging the criticality of a market shift towards impact intent and consideration, the authors hope will contribute to the emergence of more sustainable markets.

Prevailing barriers to maximizing SDGI cut across the supply, intermediation, demand, and infrastructural sides of global capital markets, also referred to as ‘market elements’. The public sector can play an important role in addressing such barriers, incentivizing investment, and in ensuring supportive market systems are in place. Specifically, public sector ‘SDGI strategies’ are likely to touch on governments playing a number of different roles, i.e., that of orchestrator, investor, regulator, policy maker, delivery organization, and connector. The report provides a cursory overview of mechanisms that can play a role in public sector SDGI strategies and extends across each of these possible roles. Importantly, it does not seek to provide a comprehensive overview of public sector mechanisms, nor does it provide a confirmative point of view on the added value and/or relevance of each. It does however provide a reference framework that public sector practitioners can use as they articulate and roll out their private sector ‘activation’ agendas.

In closing, this research is part of an ongoing learning journey on ways to ‘crowd in’ private sector capital towards the 2030 Agenda. Further research and convening to validate the findings of this research and to stimulate the adoption of forward-looking SDGI agendas across government entities are recommended. The Inter-agency Task Force on Financing for Development will play a critical role in advancing the agenda, as will other (semi-) public sector initiatives – many of which were described in this report. Importantly, future efforts should ensure broad representation from across the investor community, governments, and other ‘market builders’, as well as greater involvement from emerging and developing market actors.



### Box 0-1 Summary of Research Insights & Hypotheses

Insights and hypotheses that emerged from this research effort can be summarized as follows:

<p><b><i>Despite positive momentum around the need for a 'new normal' in capital markets, a significant uptake in 'SDG investing' (SDGI) is needed to achieve the 2030 Sustainable Development Agenda</i></b></p> <ul style="list-style-type: none"> <li>Recent years have seen significant momentum surrounding the need for a 'new normal' where financial markets are designed to not only minimize their negative impacts on society, but positively contribute to sustainable development;</li> <li>Despite this trend, significantly more private sector capital is needed to help finance the implementation of the 2030 Agenda, which requires investments in the amount of several trillions USD each year;</li> <li>While only limited data is available, rough estimates indicate that current investments into Sustainable Development Goals and its associated targets amount to approximately USD\$23 trillion today, or ~26 per cent of global Assets under Management (AuM). Impact investments are estimated to involve less than 1% of AuM and amount to roughly US\$250 billion in 2015;</li> <li>The Business &amp; Sustainable Development Commission (2017) suggests that US\$ 12 trillion in new market value can be unlocked through SDGI. If the long-term effects of investment decisions (i.e., externalities) are included, this number increases by an estimated US\$1 trillion;</li> <li>To increase and bolster SDGI, two shifts are particularly key: First, a shift towards capital markets where all investments are reviewed against a sustainable or 'SDG' lens – and where 'accidental' (mis)alignment to sustainable development outcomes is minimized; and secondly, a shift towards markets where investors seek to achieve a positive impact through their investments (i.e., move from responsible, to sustainable, or even impact investing);</li> <li>Investment clusters that are seen to offer disproportionate value and/or are considered most 'investable' tend to involve infrastructure (goal 9), economic growth (goal 8), tackling climate change (goal 13) and sustainable energy (goal 7) related investments</li> </ul>	<p><b><i>The 2030 Agenda and the Sustainable Development Goals (SDGs) are increasingly welcomed, yet numerous barriers to SDGI and to the establishment of a sustainable financial system exist</i></b></p> <ul style="list-style-type: none"> <li>The SDGs are well received by investors who are familiar with the Agenda and who take active interest in development and/or emerging or developing markets. Yet, SDG awareness can still be significantly improved;</li> <li>The SDG framework is welcomed by many investors as a possibly unifying language and point of reference between actors, as well as a lever for putting SDGI squarely and strategically on the agenda of private and public sector leaders across the world;</li> <li>Geographically, awareness and interest appears highest in the Northern Hemisphere, with notable uptake in Europe. A better understanding of this trend could help understand effective ways to advance SDGI elsewhere;</li> <li>Early adopters of SDGI such as foundations, governments, and development finance institutions have begun to screen their portfolios against the SDGs, while dedicated impact investors or funds have begun to reference the framework in their strategies and communication;</li> <li>Among institutional investors, uptake of the framework very much remains an exception. Only some pioneers – usually with longer investment horizons and more exposure to climate change or other 'externalities', such as pension funds and insurance firms – are 'leaning in' to convert the framework to usable investment indicators;</li> <li>Across the board, investors flag the intrinsic 'investability' of the SDGs and the 2030 Agenda at large as a constraint to attracting investment capital. Efforts such as those by the Sustainable Business Commission, UBS, and ShareAction have begun to unpack this constraint further;</li> <li>Frequently mentioned barriers to investing with impact and adoption of the SDG framework cut across the supply, demand, intermediation, and infrastructural side of the market. Barriers include a lack of awareness and urgency to invest with impact; restrictive mandates; misaligned incentive systems and capabilities; insufficient access to risk capital; and a lack of social and environmental data standards</li> </ul>
<p>See <i>Chapter 1: Sustainable Finance &amp; 'SDG Investing' (SDGI)</i> &amp; <i>Chapter 2: The SDGI Market Opportunity</i></p>	<p>See <i>Chapter 2: The SDGI Market Opportunity &amp; Chapter 3: Drivers &amp; Barriers to SDGI</i></p>

<p><b><i>The public sector plays a critical role in overcoming such barriers, building bridges between actors, and in orchestrating 2030 success</i></b></p>	<p><b><i>Public sector strategies for maximizing SDGI should consider at least six critical success factors to do so effectively</i></b></p>
<ul style="list-style-type: none"> <li>• The existence of stable and sustainable financial systems – across markets – are a precondition to SDGI success, and is considered table stakes in achieving SDGI success;</li> <li>• At times rooted in engrained beliefs about the role of the public sector in markets, interviewees differed in their perspectives on the extent to which government should be involved in accelerating SDGI. Similarly, perspectives on what the right balance between ‘stick and carrot’ mechanisms would be (i.e., enforcing practices for example through taxation versus incentivizing SDGI for example by providing risk capital) differed between interviewees;</li> <li>• Mechanisms or incentives for government action that are more often considered critical to unlocking and shepherding SDGI market growth, cut across market elements and are similar in nature across investor segments, asset classes, geographies, and impact areas. The right mix and design whereby mechanisms should be applied depend on the context in which they are deployed, as well as on the capacity, and capital that is available to stimulate SDGI growth;</li> <li>• Frequently mentioned public sector mechanisms to stimulate SDGI involve general awareness raising activities; catalytic financial instruments or a de-risking of capital; and efforts to advance investment principles, data, and reporting standards. Policies, regulations, pricing, and taxation systems were also recognized as powerful ways to get to a more sustainable financial system, and to achieving societal market transparency and accountability;</li> <li>• Bold ideas for government intervention included the establishment of an ‘SDG wholesale bank’ (supply/intermediation); a global push to surface the ‘true cost’ of externalities using big data technologies, or conversely getting to a single measure for development success (supply / cross-cutting); and finally, concerted outcome driven efforts to originate, replicate, and fund ‘investible and sustainable’ projects at scale across consortia of actors (demand);</li> <li>• As for the United Nations, many flag its role in raising the Agenda’s profile Agenda and in ensuring that appropriate governance mechanisms and interim milestones are in place in support of SDGs. They commend its convening power and the contributions the UN can make in forging new norms, and triggering action at a (sub-)national, regional, and global level;</li> </ul>	<ul style="list-style-type: none"> <li>• The 2030 Agenda can play an invaluable role in addressing the world’s pressing needs and in bringing actors across sectors, impact areas, and geographies together. Yet, taking a practical stance to its adoption and bringing checks and balances in place to guide its adoption is key;</li> <li>• Given the global nature of the SDGs, governments play a critical role in connecting the dots and advancing shared agendas that are adjusted to local contexts but extend beyond (sub-) national borders;</li> <li>• Public sector entities across originating and destination regions play a critical role in de-risking SDG investment opportunities and catalysing SDGI. Ensuring that the right project financing and blending capabilities are in place across markets is key to achieving SDGI and ‘blending’ success;</li> <li>• Taking a portfolio approach to SDG investing is considered critical not only for private sector investors, but also for IFIs and DFIs that seek to advance development outcomes. Putting existing clusters of competitive advantage or existing ‘value chains’ at the heart of public sector SDGI agendas will help unlock greater market value and impact. Some have suggested the need for ‘global dealrooms’ where SDG (co-) investments can be made with greater ease;</li> <li>• Putting existing clusters of competitive advantage or existing ‘value chains’ of strength (e.g., agriculture, water, healthcare) at the heart of public sector SDGI agendas will help unlock greater market value and impact. Some have suggested the need for ‘global dealrooms’ where SDG (co-) investments can be made with greater ease;</li> <li>• Effective and ongoing governance of the 2030 Agenda is key in signalling the importance of the Agenda. Interviewees suggested the need for interim milestones, stronger national commitments, as well as information and data systems.</li> </ul>
<p>See Chapter 4: Public Sector Interventions to Maximizing SDGI &amp; Chapter 5: Conclusions &amp; Recommendations</p>	<p>See Chapter 5: Conclusions &amp; Recommendations</p>

## ABOUT THIS REPORT

### Context

This discussion paper is written in support of the implementation of paragraph 37 of the Addis Ababa Action Agenda and paragraph 67 of the 2030 Agenda, and in recognition of the acute need for greater private sector involvement to achieve the Sustainable Development Goals. The paper investigates the ‘SDG investing’ (SDGI) opportunity and reviews the landscape of key actors in the financial sector, investment types, and the investment nature of individual SDGs. The report builds on an extensive body of existing research efforts and recognizes the insights from these efforts throughout. In doing so, it reviews leading frameworks and illustrative examples for understanding sustainable investing and financing and complements these with quotes from interviews with leading investors in the space.

### Objectives

With the report, experts involved in both the FfD and SDG processes, hope to contribute to the ongoing and expanding discussion on ways to *maximize the role of the private sector in the 2030 Agenda*. For the purposes of this effort, SDGI success is defined as:

- Maximization of the **scale** of SDGI, i.e., the capital that is invested with active consideration of their environmental and social impact. Or in other words, the extent to which such considerations form a ‘material’ factor in investment decisions
- Maximization of the **effectiveness or impact** of SDGI, i.e., the extent to which development outcomes are achieved with every invested dollar. This includes the extent to which negative impacts are avoided and positive contributions achieved

Related outcomes of relevance involve:

- The establishment of **sustainable financial systems**, i.e., markets that are effective, efficient, and resilient<sup>3</sup>.
- Maximization of the **breadth and the depth of SDGI**, i.e., the extent to which SDGI is adopted across investor segments and geographies, and to which individual investor portfolios are reviewed for their sustainability
- Maximization of the **uptake of the Sustainable Development Goals (SDG) framework** in investment decisions, including the extent to which they contribute to the emergence of universal investment standards

The report seeks to offer a useful reference document to those government officials who seek to increase private sector action and SDGI in their geographies and domains of focus. Taking the perspective of the investor community as a starting point to its analysis, it seeks to provide government officials with necessary market context and an initial sense of mechanisms for action that can be considered as they develop and roll out their SDGI strategies.

### Defining ‘SDG Investing’

The emergence of the Addis Ababa Action Agenda and the pivotal role of the private sector in the realization of the global sustainable development agenda have materialized against a backdrop of a changing financial sector. With the financial crisis serving as a catalyst, the role of the financial sector in relation to society has become part of the public agenda. Investors are

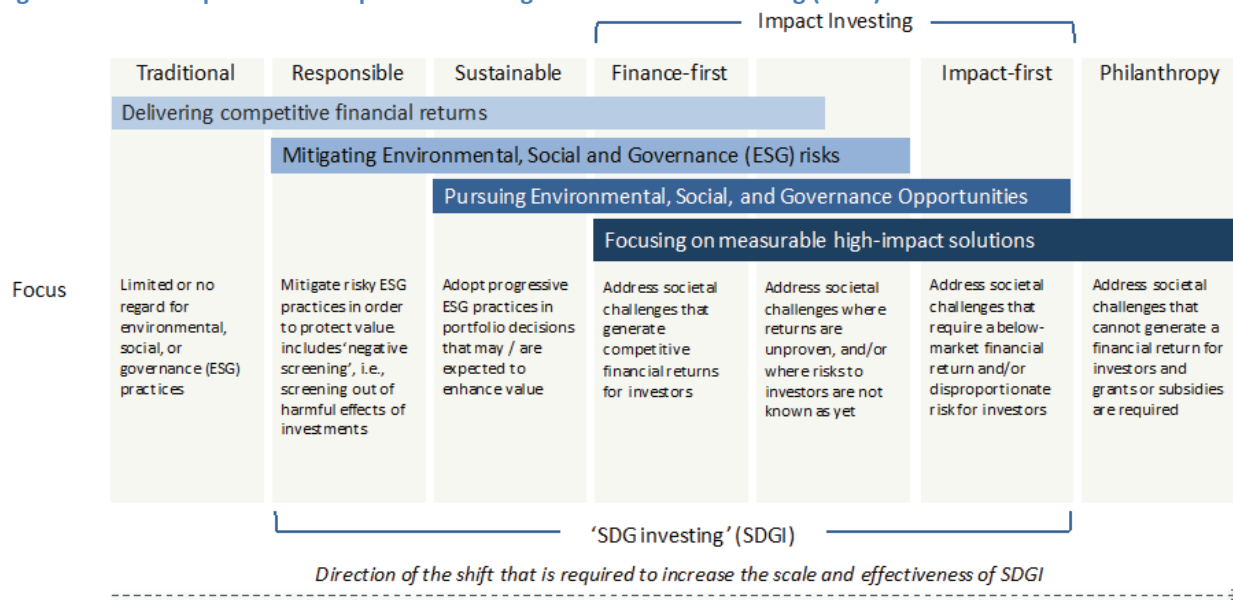
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<sup>3</sup> United Nations Environment Programme (2016): Effectiveness: The degree to which the market prices sustainability factors into financial asset values; Efficiency: The cost of running the financial system that delivers financial flows aligned with sustainable development; Resilience: The susceptibility of the financial system to disruptions related to unsustainable development, such as water scarcity, air pollution, including transition risks.

no longer merely required to show and account for the financial results that they achieve but are increasingly asked to indicate *how* they achieved these results in relation to societal impacts or non-financial aspects. Similarly, asset owners like pension funds and family offices are increasingly asking their asset managers to invest in a more responsible manner. This includes considering externalities, or the long-term environmental and social impact of capital allocations, in investment decisions. Traditionally this has entailed that managers consider a select set of environmental, social and governance (ESG) indicators in investment decisions.

The extent to which such ESG factors lie at the core of investor decisions and can justify short-term financial trade-offs has shifted in recent years, and resulted in the emergence of a range of ‘investment strategies,’ each representing a unique set of management responsibilities as it relates to their impact performance (See Figure 0-1).

**Figure 0-1 Spectrum of Capital & Working definition SDG investing (SDGI)**



Source: Bridges Ventures 2016, European SRI Study 2012, C-Change analysis

This report regards all investment strategies where sustainability factors play a material role – i.e., are actively considered - in investment decisions. It coins *SDG investing (SDGI)* as the umbrella term for sustainable, responsible, and impact investing.<sup>4</sup> The term and underpinning framework – which was adapted from that offered by Bridges Ventures – aligns with existing market definitions and terms, yet recognizes the connections between investment strategies and offers a way to depict the shifts that are needed in global capital markets to maximize the scale and effectiveness of SDGI. Furthermore, and as is described in subsequent chapters, the framework also enables a review of the unique trade-offs, impact reporting expectations, and the landscape of actors that is likely to play a role differs between investment strategies.<sup>5</sup>

<sup>4</sup> This term was first used by signatories of a Dutch ‘SDG investing’ or SDGI agenda in December 2016. The agenda was signed by 18 financial institutions, collectively representing 2,800+ Euros in Assets under Management (AuM)

<sup>5</sup> An often-used expression among impact investors is that ‘one day, all investments will be impact investments’. (Monitor research, Ford Foundation (2015)). This would imply that over time all investors and invested capital would shift towards the right of the spectrum of capital.

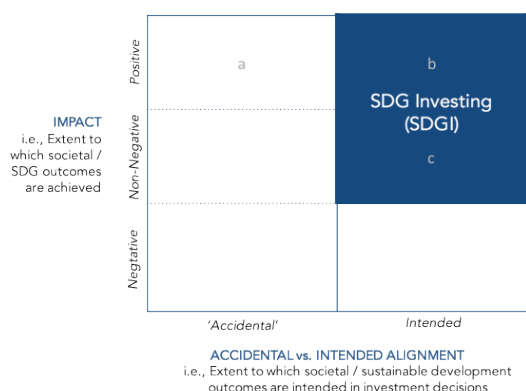
**Box 0-2 Defining SDG Investments: How to Deal with “Accidental SDG Alignment”**

A hotly debated topic involved whether investments can only be labelled an SDG investment if underpinned by an explicit intention to mitigate negative impacts and/or achieve positive outcomes. A number of interviewees challenged the authors’ definition of SDG investment which rules out investments where such impacts were ‘accidentally’ achieved, flagging that the contributions of such investments could not be underestimated.

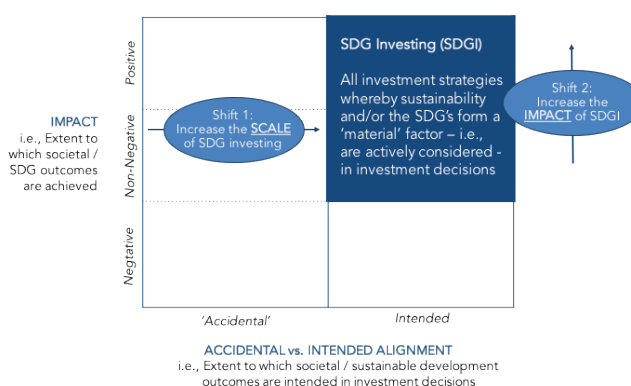
Recognizing that such accidental alignment – as well as accidental *misalignment* – to the SDGs is a market reality, it is important to flag this distinction upfront, ensure absolute definitional clarity, and explain our rationale further:

- The authors believe that truly sustainable financial systems and ‘markets for good’ can only be achieved when full transparency surrounding the negative and positive societal outcomes of *all* investments exists and where a review of such impacts becomes standard practice for all asset managers and wealth holders
- The authors have therefore chosen to maintain their initial definition of SDGI as all investment strategies whereby sustainability and/or the SDG’s form a ‘material’ factor in investment decisions, i.e., where an intention to mitigate negative and/or achieve positive impacts exists. See Figure A.
- Furthermore, and linking this to the abovementioned objectives for this report, the authors envision two critical shifts within this conceptual framework: First, a shift as part of which all investments are reviewed for their positive and negative impacts, and secondly, one where the net positive impact that is achieved with each dollar invested is maximized (within the risk-return parameters of the investor. See Figure B below.

**Figure A: Conceptual Framework SDGI**



**Figure B: Required Market Shifts to Achieve SDGI Success**



This report is mostly focused on a mainstreaming of SDGI among institutional investors and devotes less depth on impact investing, or social entrepreneurship. Similarly, while corporate sustainability – often referred to as corporate social responsibility (CSR) or ‘shared value’ – agendas, in many ways, form the opposite side of the same coin and constitute a critical dimension to the establishment of thriving private sector markets for sustainability that operate at scale, this segment of the market isn’t reviewed in-depth. And finally, the role of ‘shareholder activism’ is increasingly flagged as a critical strategy for the mainstreaming of ‘long-termism’ and SDGI in capital markets. Some have argued that this should be added as a cross-cutting strategy underneath the above-mentioned strategies. We have referenced and flagged the importance of proactive shareholder influencing on occasion, yet have not unpacked this phenomenon in depth.

### Research Methodology and Definitions

This report is based on extensive desk research, as well as over 20 expert and investor interviews to further test our hypotheses, and to bring in the voices of these investors. Guiding principle has been to produce a report that is practical and action-oriented, yet academically sound. The authors of the report have adopted academic research practices, yet have not sought to quantify or seek statistical significance for its findings. Before commencing on the actual research activities, a selection of research questions was devised and fine-tuned to guide the initiative. The fields of responsible investing, impact investing and therefore also of SDGI are currently subjected to fast moving changes. Interviews were conducted in the weeks between the 15<sup>th</sup> of November and the 20<sup>th</sup> of December, 2016. Of the 20 interviews, 4 were with asset owners; 9 asset managers; 3 public sector executives; and 4 sustainable and impact investing thought leaders.<sup>6</sup> Importantly: A skew towards investors whose capital originated in developed market did emerge, which would need to be addressed to validate global applicability.

### Reading guide

The main body of the report consists of **five chapters** followed by two appendix sections covering the interviews conducted on behalf of this report, leading knowledge hubs where relevant insights are aggregated on an ongoing basis, and a bibliography. Chapters are preceded by an executive summary and introductory section.

**Chapter 1: The Sustainable Finance & SDGI Landscape** review relevant market facts and dynamics that should be considered by readers as they determine their SDGI activation strategies. It provides estimates of the financing needs of the 2030 Agenda, explores the nature of SDGI, and offers a cursory overview of the various (potential) players in sustainable finance and SDGI.

**Chapter 2: The SDGI Market Opportunity** summarizes existing research into the value that can be unlocked by investing in the 2030 Agenda, complemented with a review of the SDGs that investors today consider more ‘investable’ SDGs. While not conclusive in nature, it offers readers an initial sense of where opportunities for the adoption of market-based solutions for addressing the SDGs may lie.

**Chapter 3: Drivers & Barriers to SDGI** details drivers and prevalent barriers to SDGI. Barriers are organized based on where they manifest themselves across a larger investment value chain, dividing this value chain into four market elements, i.e., supply of capital, intermediation, demand for capital, and infrastructural factors.

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<sup>6</sup> See the annex for an overview of full list of interviewees



**Chapter 4: Public Sector Interventions to Maximizing SDGI** looks at the mechanisms that are at the disposal of the public sector to mitigate each of the previously barriers to investment. While not a comprehensive overview, it offers concrete ways in which public sector entities can – and have been seen to – stimulate SDG investing and remove barriers that inhibit the scale and effectiveness of SDGI. Aim is to unearth the pathways for effective public sector to maximize SDGI success. Initiatives that were seen to be particularly innovative or effective were added throughout.

**Chapter 5: Conclusions & Recommendations** detail an initial overview of conclusions that can be drawn based on this research and highlight factors that emerged from our research as being of particular importance for achieving SDGI success. Importantly, and as noted before, this research does not seek to provide conclusive nor comprehensive recommendations for achieving SDGI success through public sector interventions. The conclusions and recommendations in this Chapter therefore need to be reviewed keeping the need for further validation, expansion, and deepening in mind.

## 1. THE SUSTAINABLE FINANCE and SDG INVESTING (SDGI) LANDSCAPE

This Chapter provides a short summary of notable Agreements that preceded or are highly related to the 2030 Agenda, reviews the nature of the sustainable development goals as well as the incremental capital that is needed to finance the agenda, and reviews the size of SDG investing today. Where deemed relevant, investor segments and/or regional comparisons were added.

### Looking Back: From Monterrey to Addis and beyond

As was reiterated by the experts we consulted for this effort, an important preface to this research is that the 2030 Sustainable Development Agenda is a recent milestone in a longer-running agenda. Notable agreements to consider in this context are detailed here.



In 2002, what became known as the Monterrey Consensus emerged during the **International Conference on Financing for Development (FfD)**. The final text of agreements and commitments includes a clear acknowledgement of the important role for private investments in furthering the cause of development around the globe: “Private international capital flows, particularly foreign direct investment, along with international financial stability, are vital complements to national and international development efforts.” (United Nations, 2003, p. 9). This acknowledgement indicated that a transition of development finance was well under way. No longer was this to be an area predominantly occupied by Official Development Assistance (ODA) or charitable contributions alone. The role of the private sector and private investors was welcome.<sup>7</sup>



The summer of 2015 saw the emergence of yet another important step in the space of development finance, namely the adoption of what has become known as the **Addis Ababa Action Agenda** (United Nations, 2015). This agenda outlines and thereby forms the foundation for the overall implementation of the global sustainable development agenda. In the agenda, and the title says as much, finance is presented as the key component and thus linchpin for the success of the realization of the SDGs. The Agenda offers a comprehensive set of policy actions that contribute to the realization of the SDGs and the contours of a new global framework for financing sustainable development (UN DESA, 2015). It lists 300+ measures touching on various sources of finance, covering priorities such as technology, science, innovation, trade and capacity building. The

document underscores the importance to align private investment with sustainable development and a need for public policies and regulatory frameworks that align incentives. (United Nations, 2015).

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<sup>7</sup> The subsequent UN Financing for Development Conference held in Doha in 2008 was arguably too much overshadowed by the global financial crisis to yield comparable results (Martin, 2015).



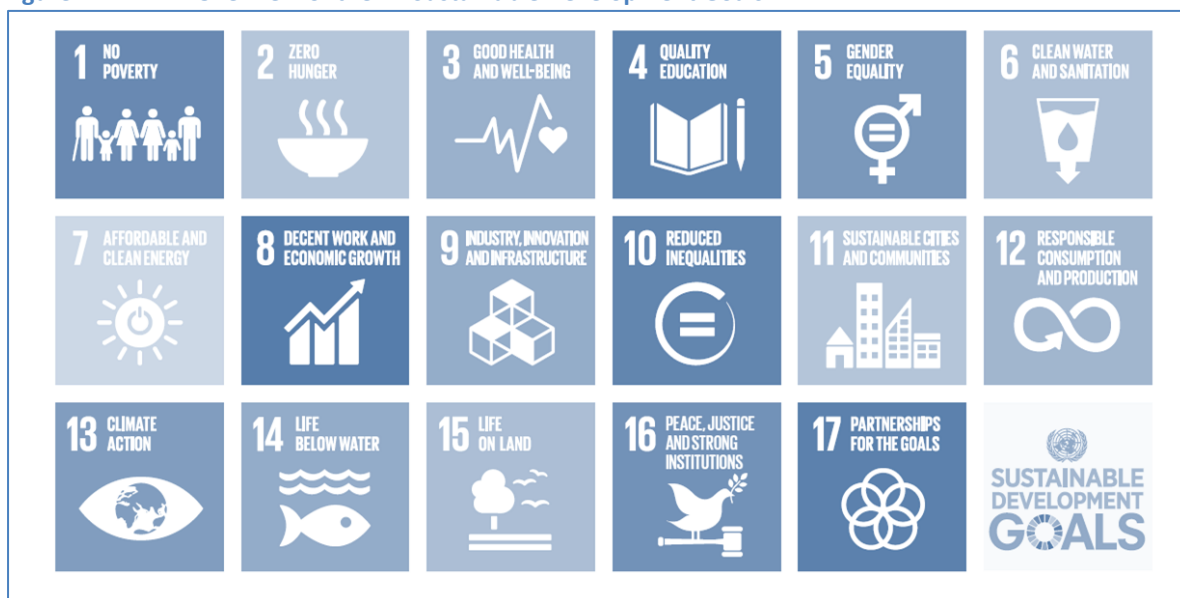


The **Paris Agreement on Climate Change**, as adopted by world leaders on 12 December 2015 at the conclusion of the COP21 Conference, formed a next milestone and – alongside the FfD meeting are the second of a total of three ‘2015 Agreements’. The Agreement included a commitment by developed countries to provide financial resources to assist developing country Parties with respect to both mitigation and adaptation of the effects of climate change. It also outlined their commitment to take the lead in mobilizing climate finance from a wide variety of sources, instruments and channels, while encouraging greater coordination of and support from, inter alia, public and private, bilateral and multilateral sources. The Agenda formed an important to the 2030 Sustainable Development Agenda that brought together a set of shared, global, environmental *and* social targets.

### The 2030 Sustainable Development Agenda & Sustainable Development Goals (SDGs)

In December 2015, global leaders signed off on the third of the *2015 Agreements*, the **2030 Sustainable Development Agenda**. The seventeen Sustainable Development Goals embody the aspirations of global leaders across sectors for a sustainable world for future generations, and offer a single, shared global development agenda that cuts across issue areas, sectors, and geographies. (see Figure 1-1)

**Figure 1-1 Overview of the 17 Sustainable Development Goals**



Importantly, the 2030 Agenda was signed off by global leaders from the public, private, and social sector alike. Underpinning the seventeen SDGs reside 169 sub-goals, and 230 concrete targets. (Sub-)goals include outcome orientated and process orientated goals. For instance, the goals of eradicating poverty and hunger are clear examples of outcome orientated goals. In contrast goals sixteen and seventeen (“Peace, Justice and Strong Institutions” and “Partnerships for the goals”) are more process orientated and form prerequisites for the realization of the other goals. And while the framework was not developed as a “MECE” (i.e., mutually exclusive, collectively exhaustive) framework for evaluating development outcomes, it offers a reasonably complete overview of the biggest challenges that need to be tackled to achieve social and environmental progress for all. Challenges to the framework itself are reviewed in greater detail later in this report. An important dynamic that all those adopting the framework – including the investor community – should be aware that specific interventions or

investments may influence one SDG in a positive way, yet have a negative impact on the other. To illustrate this point, one of the interviews painted a situation wherein investment in agriculture can contribute to *SDG 2: Zero Hunger*, yet in the process might overuse existing water supplies putting *SDG 6: Clean Water (and Sanitation)* under pressure. Such negative and positive correlations need to be given sufficient attention to maximize the impact contributions to the SDG agenda, a challenge and contextual consideration that was flagged by multiple interviewees, and which is further described in *Chapter 3: Drivers & Barriers to SDGI*.

### Financing the SDGs: How Much Capital Is Needed to Finance the SDGs?

Achieving the 2030 Agenda requires an unprecedented level of resources, technical assistance, and effort from all sectors (Martin, 2015) (United Nations, 2015, p. 8). Investments are needed in enterprise financing, but also the financing of social goods (e.g. education, health), and infrastructure. The 2015 Agreements and the launch of the 2030 Agenda was accompanied by various attempts to assess the exact financing that is needed to realize the SDGs. And while consensus is that the annual financing gap – i.e., the amount by which existing capital flows and/or investment falls short in financing the goals – is not a matter of billions but rather of trillions of dollars, there is no consensus on the exact size. Most recent estimates involve those by the Business & Sustainable Commission (2017) which estimates the financing gap to amount to US\$2.4 trillion of additional investment. The report reinforces that a large share of this amount relates to infrastructure and other projects with long payback periods<sup>8</sup>. This number is in line with previous estimates by DFI and Oxfam International (2015), while UNCTAD (2014) in their World Investment Report 2014 come with a comparable outline. In their contribution to the debate on financing for development, a collective of MDBs headed by the World Bank published a report that echoes the message from the Addis Agenda: “From Billions to Trillions: MDB Contributions to Financing for Development” (World Bank, 2015). Extensive analysis by Schmidt-Traub (2015) outlines the logic of the ‘price tag’ (i.e. financing needs) for various individual SDGs.

As will become clear in subsequent Chapters, to address the SDG financing gap requires a substantial increase in private sector investment. On this topic, one of our interviewees commented: *“The gap in funding is so large, that we need fundamentally new and different solutions and ways to channel investment capital towards the Agenda.”*

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<sup>8</sup> By comparison, the annual infrastructure gap in developing countries is estimated at \$1-1.5 Trn (United Nations, 2015, p. 8). Related, the SDG Philanthropy Platform ([www.sdgfunders.org](http://www.sdgfunders.org)) calculated that between 2010 and 2015 the total SDG funding from foundations equalled an est. \$140 billion. In order to put that in perspective the Net ODA disbursed during that same period amounted to 871 billion dollar, totals that only reinforce the scale of the financing needs of the 2030 Agenda.

### Box 1-1 From MDGs to SDGs: What Did We Learn?

In September 2000, the UN Millennium Declaration was adopted during the Millennium Summit bringing into existence the Millennium Development Goals or MDGs. These goals that are tied in with the reduction in extreme poverty constitute a series of eight time-bound targets with the objective to achieve the realization of these goals by 2015. The MDGs encompassed the following goals: (1) Eradicate Extreme Hunger and Poverty; (2) Achieve Universal Primary Education; (3) Promote Gender Equality and Empower Women; (4) Reduce Child Mortality; (5) Improve Maternal Health; (6) Combat HIV/AIDS, Malaria and other diseases; (7) Ensure Environmental Sustainability; (8) Develop a Global Partnership for Development. (UN, 2006).

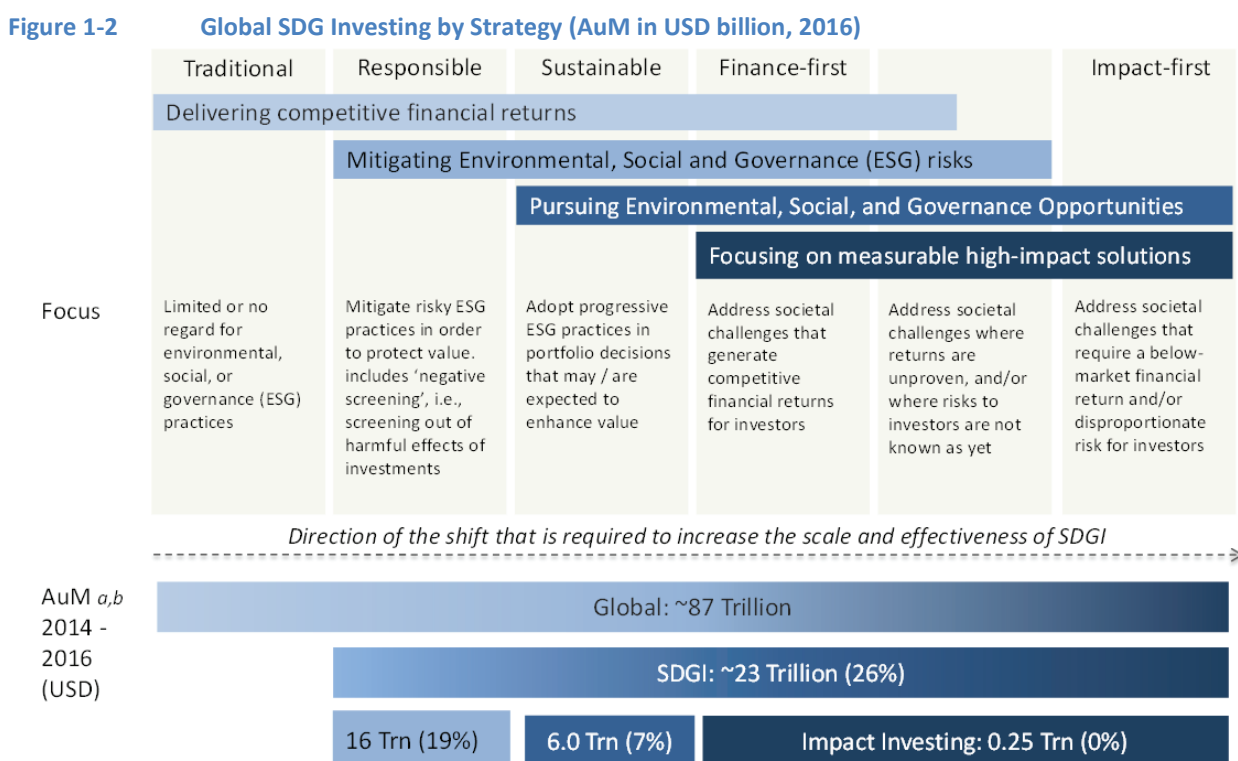
For each of these goals, specific indicators were adopted which were to be used to assess whether the realization of these goals was on track. For instance the metric “Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day,” was one of the metrics used to measure the advancements regarding the first of the MDGs (OECD, 2012). Here we find one of the key differences compared to the SDGs in that the latter are not only greater in number (17 versus 8), come with a larger array of statistical indicators (169 versus 60) but more importantly aims at the eradication of particular occurrences (aka “zero objectives”) rather than halving or ensuring a significant reduction (Coonrod, 2014). This in turn brings increased clarity (to the SDGs) which helps in paving the way for more private sector involvement which—as stated above—is also a key difference between MDGs and SDGs.

Just like the fact that this agenda is more holistic, it acknowledges a greater interconnectedness with the various issues in development while at the same time being a truly universal agenda, meaning the goals are applicable to every country regardless of income-levels. In that sense the SDGs may also contribute to what one commentator called increasing engagement and “getting people around the world to think a little bit more as global citizens and think about poverty, inequality, sustainability, consumption and discrimination, and do something” (Sandler Clarke, 2015).

From a financing perspective, a few lessons stood out as well: First, ensuring broad-based awareness of and support for the Agenda is a fundamental underpinning requirement for success (SDGI Signatories / C-Change (NL), 2016). Related, translation of global goals to local and sectoral contexts is critical. As one interviewee noted, “*the MDGs were never translated into ‘investor ready’ indicators. This meant that it continued to feel as an aid rather than an investment agenda*”. And finally, cross-sectoral collaboration where the characteristics of capital (in terms of risk-return-impact expectations) can be blended into a joint financing strategy where each is able to reach their own return expectations and mandates, turned out to be critical. SDG 17 specifically addresses the notion of cross-sector collaboration and partnerships explicitly.

## Current Investment in Sustainability Across Investor Segments

As noted earlier, the authors define SDG investing as all investment strategies – excluding philanthropy – that consider the social and environmental impact of investments material in shaping their portfolios. As was outlined a well, SDGI success not only requires an increase in the scale at which such factors are considered in investment decisions. It also requires a shift from the left of the SDGI investment framework, where investors focus on screening out possibly harmful impacts of their investments to the right of this spectrum, where investors seek to derive positive social or environmental results. Figure 1-2 both the shift that is needed to maximize ones’ SDGI success, and offers a high-level indication of the current size of each investment strategy. As can be seen, most recent indicate SDGI across developed markets added up to be well beyond US\$ 23 trillion, or ~26% of global Assets under Management (AuM). The majority of these assets were located in Europe followed by North America. Important to note is that African, Latin American, and Middle-Eastern AuM estimates are not currently available.<sup>9</sup>



Source: (a) GSIA (2016); (b) see Annex 3, C-Change Analysis

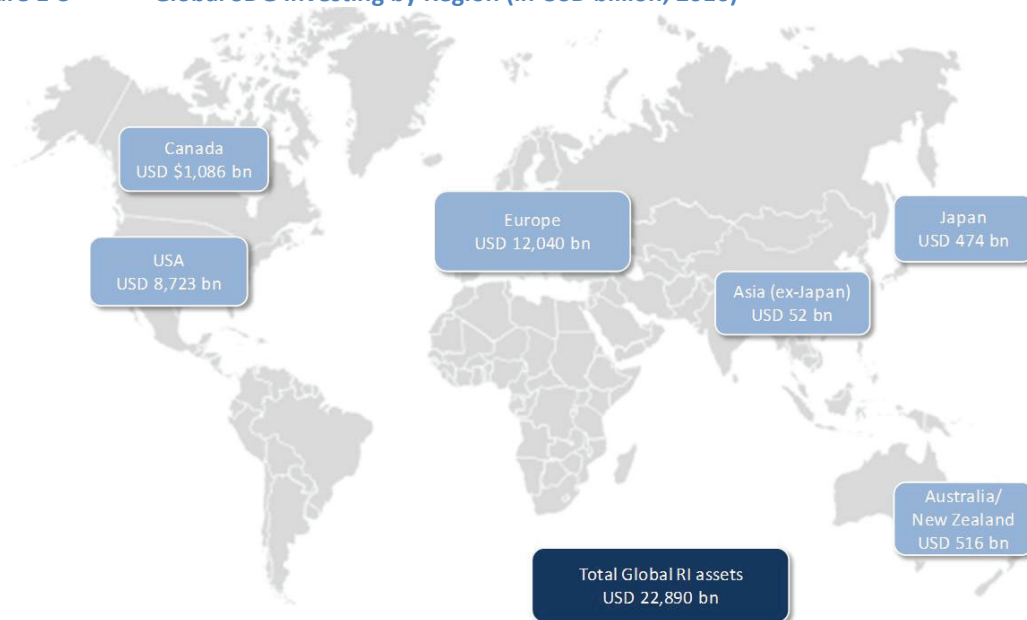
An important conclusion from this analysis signals that the current playing field is quite substantial, indicating that an important shift in the broader ‘SDGI conversion’ challenge lies both in achieving a shift from responsible to sustainable investing, and from sustainable to impact investing. Separately, worth flagging is the negligible size of impact investing, i.e., those investments that seek to finance measurable high-impact solutions<sup>10</sup>, today.

<sup>9</sup> 2015 total AuMs for the Middle East, African, and LATAM were estimated at 1.3 and 1.9 US\$ trillion (BCG, 2016) See annex A3; According to J.P.Morgan, the profit opportunity for investments in housing, rural water delivery, maternal health, primary education, and financial services for the portion of the global population earning less than \$3,000 per year will total from \$183 billion to \$667 billion.

<sup>10</sup> A more common definition of impact investing is as follows ‘investments made into companies, organizations, and funds with the intention to generate social and environmental impact alongside a financial return’ (GIIN, 2016)

Although the level of insight to the size of the various investment strategies is limited and shows gaps, most notably exhibited through its omission of developing and emerging markets from its scope, available figures do provide some insight to the extent to which private capital is directed towards SDGI. Figure 1-3 provides an overview of available data. Interestingly, when reviewing regional SDGI estimates to overall AuM levels, considerable differences become apparent in terms of the level of penetration in each region.

**Figure 1-3 Global SDG Investing by Region (in USD billion, 2016)**



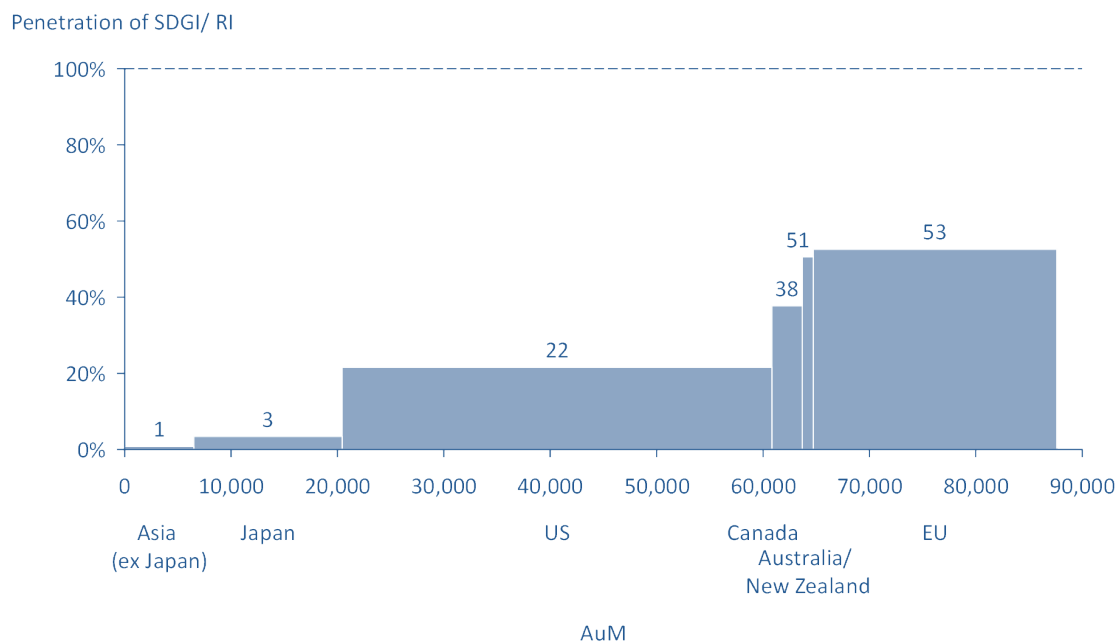
Source: GSIA (2017); C-Change Analysis (multiple sources, see annex)

Figure 1-4 depicts SDG investments as a percentage of the total Assets under Management (AuM) in a particular country or region (vertical axis). The horizontal axis shows the sizes of total AuM in a given geography as an indication of the share of global AuM each region represents, leaving the white space between the 100% line and the coloured bars to reference the amount of investments that at the moment appear to fall outside the SDGI universe.<sup>11</sup> The highest penetration of capital that is subjected to one form of RI strategy or another is in Europe (well above 50%) whereas the lowest penetration is to be found in Asia. The largest gap in absolute terms is currently in the US because of the overall size of the assets that are being invested. The chart reinforces both the significant conversion challenge that resides in achieving “100% SDGI penetration” and signals the impact any meaningful shift by the United States would imply for the evolution of SDGI in a developed market context. And while SDGI has more than doubled in the last four years

Figure 1-5) indicating significant regional uptake, it remains to be determined if this trend will continue given recent political changes in country.

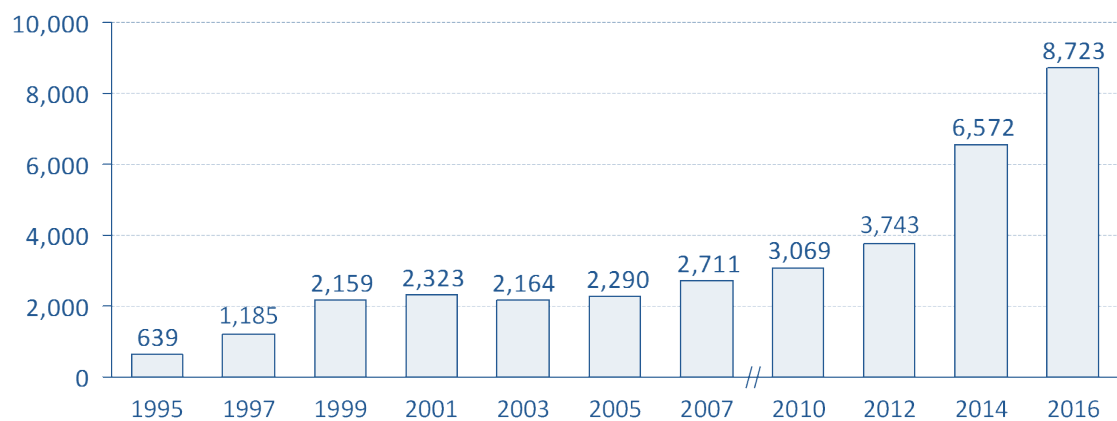
<sup>11</sup> There are various approaches to determine the overall global size of AuM. The study published by the GSIA (2017) found an AuM for the regions covered of USD 87 trillion. A recent study by BCG (2016) however calculated that global AuM stands between USD 70 and 75 trillion. Differences in the exchange rates that were used in the different studies contributed to the variations in the estimates.

**Figure 1-4 SDG Investing as a percentage of total AuM by Region (in USD billion, 2016)**



Source: C-Change analysis based on GSIA (2017)

**Figure 1-5 Development of Responsible Investing in the United States (in USD billion, 1995–2016)**



Source: USSIF (2016)

As noted earlier, most of the surveys done on the actual manifestations of responsible and sustainable investing – defined by the authors of this report as SDGI – distinguish different market definitions as those offered by Bridges Ventures a.o. Most of the research of the magnitude of responsible investing – most notably those conducted by member institutions of the Global Sustainable Investment Alliance (GSIA), such as US SIF’s Forum for Sustainable and Responsible Investment” and EuroSIF – use a methodology whereby the investment activities are categorized into seven groups, ranging from negative screening of investments to impact investing (see Box 1-2).

**Box 1-2 GSIA Investment Categories (2016)**

**Negative/ Exclusionary Screening:** Excludes particular holdings from the investment universe, e.g. specific industries or sectors are excluded given the negative social or environmental impact of the underlying asset(s)

**Norms-based Screening:** An extension of exclusionary screening. Here a predefined set of values and norms guides decision making, allowing for a greater degree of granularity (e.g. company level) compared to excluding an entire industry or sector

**ESG Integration:** Integrates ESG factors in ones' financial analysis meaning that the investment decision is also determined by non-financial information and/ or data

**Positive / Best-in-Class Screening:** Applies a 'best-in-class investment selection', identifying those stocks that outperform on a pre-determined metric vis-à-vis its peers

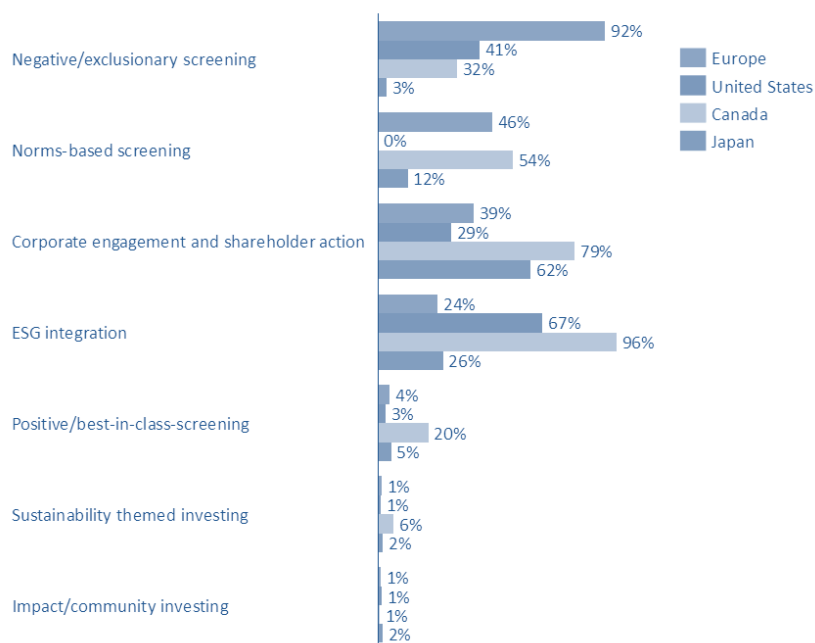
**Sustainability themed Investing:** Identifies specific outcomes areas and/or market segments (e.g., financial inclusion, renewable investing) in which it will seek to deploy capital

**Impact Investing:** Invests with the intention to generate positive social or environmental returns alongside financial returns

**Shareholder Engagement and action:** Proactive influencing of company decisions with the intention to improve its social and/or environmental performance

Figure 1-6 shows to what extent the different SDGI strategies are applied in the United States, Europe, Canada and Japan. This figure clearly shows that the dominant strategy in Europe is still based on exclusionary investment, reinforcing the need for a stronger shift towards investments that seek to generate positive societal returns.<sup>12</sup>

**Figure 1-6 SDGI Strategies in Europe, USA, Canada, and Japan (Share of total AuM, 2016)**



Source: C-Change Analysis; GSIA (2017); Multiple strategies can be pursued in parallel

<sup>12</sup> Further review would be required to provide greater insight into the causes of such differences.

Much can be said in reviewing the role of individual investor segments in SDGI. As previously indicated, the extent to which each segment is likely to apply to each investment strategy (i.e. responsible, sustainable, and impact investing) will differ significantly across segments. This is a function of factors such as a segment’s financial hurdle rates, risk appetites, scale, and capabilities.<sup>13</sup> Table 1-1 offers a high-level overview of the landscape of investors and their relative exposure and potential contribution to SDGI. The table only lists the supply side of the market, i.e. asset owners and managers, rather than those who are in search for capital (e.g. business organizations, infrastructure projects, etc.), or other possible stakeholders. For each, we provide an indication of the overall size measured in Assets under Management, AuM or in terms of total assets found on the balance sheet. In addition, context to their exposure to responsible investment, a starting point for SDGI (see also Figure 0-1) and whether development is an explicit part of their mission is highlighted.<sup>14</sup>

**Table 1-1 Overview of Relevant Types of SDG investors**

	Size (Trill. US\$)	Remarks
<b>Large Institutional Investors</b>		
- Pension Funds	35	Largest distinct group of investors (based on AuM) many of these institutions have been at forefront of the global RI integration developments (see also box below); financial returns play a key role
- Insurance companies	14	Substantial players and likewise active in RI but on the whole with less visibility compared to pension funds; financial returns play a key role
- SWF	7	Sovereign wealth funds are in ownership of national governmental entities. In hands of ; financial returns and strategic considerations/ national interest play important roles in the investment process
<b>Development Finance Institutions</b>		
- National DFIs	0.06	Semi-public institutions that supply capital to the private market in order to finance projects and enterprises in developing countries; development concerns are at the heart of the investment process in addition to financial returns
- MDBs	1.1	International organisations, founded to make capital available for development related projects (Inter-American Development Bank/ EBRD/ ADB/ etc.); here too the missions are often closely connected to development and the SDGs
<b>Other</b>		
- Foundations	0.5	Increasingly foundations and endowments not only want to do good with the financial returns of their investments but also want to steer on the societal dimensions of their investments
- Family Offices	0.2	The recent rise in impact investing was to a large extent driven by foundations and family offices.

Source: Desk research/ Annual reports/ Interviews and C-Change Analysis; see annex A3 for further estimates.

The qualitative assessments presented in Table 1-1 are based on the nature of the institutions themselves as well as expert opinions. What is clear from this overview is that pension funds and insurance companies are by far the largest private investors. The Development Finance Institutions (DFIs) have an explicit mandate to achieve development outcomes. This cannot be said for most other types of investor that although they may have an interest in development as a theme, they are ultimately ‘finance first’ institutions. That these types of investors are nevertheless open to SDGs is clear when looking at their

<sup>13</sup> A hurdle rate is the minimal acceptable rate of return for an investor and this exemplifies the predetermined level of compensation given the level of risk involved.

<sup>14</sup> See also PRI - Martindale, Sullivan, & Fabian (2016)



level of investment in SDGI. Many *pension funds* (especially the larger ones in Europe and in Oceania) are quite active. Box 1-3 provides additional insight into the role of pension funds in SDGI as pioneers for long term perspectives. *Insurance companies* – possibly because of differences in regulatory frameworks – are currently less active in SDGI. Important to consider however, is that these firms do not only play a role as investors but also in reducing risk and in increasing the resilience of systems and economies.

### Box 1-3 A Deep Dive on Pension Funds

Pension funds are especially relevant in the discussion on SDGI as they have been at the forefront of many of the responsible investment developments, e.g. most of the founding signatories of the Principles of Responsible Investing came from this group. In addition, this group of investors is often found in areas that have direct link to SDGs, namely those that include largescale infrastructure project finance. Pension funds are concentrated in advanced economies. The tables below provide an overview of the geographical distribution of the assets tied in with pension funds as well as the ranking of the 20 largest pension funds in the world today. These lists not only mirror overall wealth in a country but are also the different evolutionary trajectories in legislation and/or pension regulations.

**Distribution of Pension Funds by Geography and by Individual size (US\$ million, 2015)**

Country	Total Assets	Rank/ Fund	Market	Total Assets	Rank/ Fund	Market	Total Assets
Australia	1,484	1 Government Pension Investment	Japan	\$1,163,203	21 Boeing	U.S.	\$101,931
Brazil	180	2 Government Pension Fund	Norway	\$865,943	22 New York State Teachers	U.S.	\$101,828
Canada	1,525	3 Federal Retirement Thrift	U.S.	\$443,328	23 Pension Fund Association	Japan	\$97,757
Chile	159	4 National Pension South	Korea	\$435,405	24 IBM	U.S.	\$96,382
France	151	5 ABP	Netherlands	\$384,271	25 Wisconsin Investment Board	U.S.	\$94,794
Germany	427	6 National Social Security	China	\$294,939	26 North Carolina	U.S.	\$94,228
Hong Kong	123	7 California Public Employees	U.S.	\$285,774	27 Employees' Provident	India	\$93,743
India	94	8 Central Provident Fund	Singapore	\$211,373	28 Alecta	Sweden	\$86,806
Ireland	128	9 Canada Pension	Canada	\$201,871	29 Future Fund	Australia	\$86,314
Japan	2,746	10 PFZW	Netherlands	\$186,471	30 Ohio Public Employees	U.S.	\$86,259
Malaysia	190	11 California State Teachers	U.S.	\$181,875	31 Washington State Board	U.S.	\$85,269
Mexico	177	12 Local Government Officials	Japan	\$176,160	32 AT&T	U.S.	\$83,414
Netherlands	1,378	13 New York State Common	U.S.	\$173,541	33 General Motors	U.S.	\$82,427
South Africa	181	14 Employees Provident Fund	Malaysia	\$161,707	34 New Jersey	U.S.	\$76,389
South Korea	545	15 New York City Retirement	U.S.	\$155,120	35 Universities Superannuation	U.K.	\$72,197
Spain	41	16 Florida State Board	U.S.	\$147,819	36 National Wealth Fund	Russia	\$71,717
Switzerland	804	17 Texas Teachers	U.S.	\$125,327	37 Bayerische Versorgungskammer	Germany	\$71,281
UK	3,204	18 Ontario Teachers	Canada	\$123,985	38 California University	U.S.	\$70,818
US	21,779	19 ATP	Denmark	\$106,640	39 General Electric	U.S.	\$70,566
<b>Total</b>	<b>35,438</b>	20 GEPP	South Africa	\$103,147	40 Oregon Public Employees	U.S.	\$69,726

Source: Willis Tower Watson (2016)

## 2. THE SDGI MARKET OPPORTUNITY

*Chapter 1* signalled the critical role of investment capital in achieving the 2030 Agenda, and showed how that the amount of capital committed to some forms of SDGI is on the rise. *Chapter 3* will take a closer look at the various barriers that exist to maximize scale and effectiveness of SDGI. Before going into an in-depth evaluation however, it is important to pause with the actual SDGI market opportunity. This Chapter reviews existing research into the *value that can be unlocked* by investing with impact and/or with the SDGs in mind, the *intrinsic ‘investability’* of individual development outcomes as well as the 2030 Agenda as a whole, and finally *investor perceptions* related to the added value of the SDG framework and the SDGI investment opportunity. While these three concepts are highly related, each offers a different perspective on what the SDGI market opportunity entails:

‘*Value*’ – a term that was deliberately used by the Business & Sustainability Commission in their 2017 report – captures both the financial gains that can be achieved by investing with impact, and the costs that can be avoided by doing so. Especially longer term costs, such as those related to the effects of climate change, play a role in capturing the ‘true value’ of SDG investments and business opportunities.

The term ‘*investability*’ pauses with the intrinsic ability of capital seeking impact initiatives to generate immediate revenues and operate in a market-based context. Such initiatives may include projects, social goods, or enterprises seeking investment and can vary in scale. It follows a logic model whereby, certain sustainable development goals or targets are assumed to predominantly require grants or subsidies, while others can be addressed (in part) through market mechanisms and private sector interventions.

To accelerate investment, asset holders and managers need to recognize the relevance, value, and investability of the SDGs in their decisions. The last section of this Chapter summarizes their perceptions about SDGI, the added value of the SDG framework, as well as how they perceive the investability of each of the goals.

Finally, it is important to note that the urgency to address certain Sustainable Development Goals combined with the relative investability of such goals raises a question around the relevance of a private sector agenda in the immediate term for some goals. This report does not actively address this question, yet recognizes the importance of this debate.

### Unlocking the ‘True Value of the SDGI or Business Opportunity’

The actual size of the SDGI “opportunity” is not easily assessable. This has multiple reasons, including that the negative effects of investments are oftentimes not transparent, let alone the value that is destroyed as a consequence – in the short, medium, and longer term. Separately, as noted by the Business & Sustainable Development Commission (B&SDC) in their 2017 report, areas where subsidies are currently priced into items would need to be removed, *and* interventions would need to occur across the 17 SDGs and a larger economic system to capture the true value of the SDGI or business opportunity (Business & Sustainable Development Commission, 2017, pp. 34-36). This, also given the fact that – as was indicated earlier – the SDGs are highly linked and are likely to reinforce each other, or conversely, may be negatively correlated. With these reservations in mind, the Business & Sustainable Development Commission concludes that sustainable business can unlock at least US\$12 trillion in new market value. In their report, the Business & Sustainable Development Commission (B&SDC) looked specifically

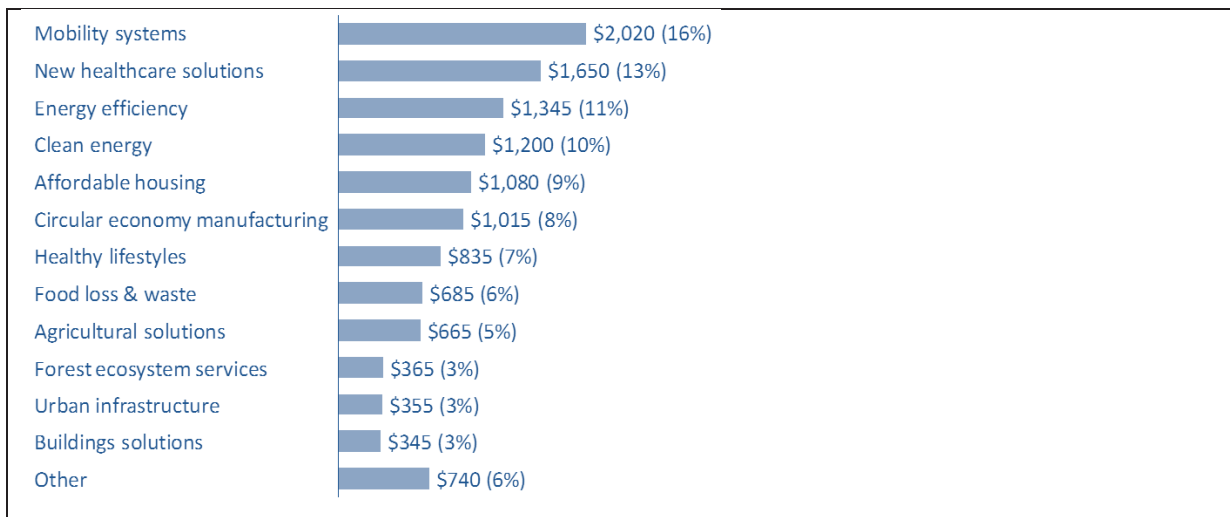
at four sectors, namely Food and Agriculture, Cities, Energy and Materials and Health and Well-Being. Some of these identified categories cut through different SDGs, such as the food and agriculture sector which is directly related to environmental and various social goals of the SDGs. Figure 2-1 lists 60 of the largest identified business opportunities for these four sectors. Importantly, estimations are based on the realized savings as well as projected revenue opportunities.

**Figure 2-1 The SDG Induced Market Opportunities as captured by the B&SDC**

	 Food and Agriculture	 Cities	 Energy and Materials	 Health and Well-Being
1	Reducing food waste in value chain	Affordable housing	Circular models - automotive	Risk pooling
2	Forest ecosystem services	Energy efficiency - buildings	Expansion of renewables	Remote patient monitoring
3	Low-income food markets	Electric and hybrid vehicles	Circular models - appliances	Telehealth
4	Reducing consumer food waste	Public transport in urban areas	Circular models - electronics	Advanced genomics
5	Product reformulation	Car sharing	Energy efficiency - non-energy intensive industries	Activity services
6	Technology in large-scale farms	Road safety equipment	Energy storage systems	Detection of counterfeit drugs
7	Dietary switch	Autonomous vehicles	Resource recovery	Tobacco control
8	Sustainable aquaculture	ICE vehicle fuel efficiency	End-use steel efficiency	Weight management programs
9	Technology in smallholder farms	Building resilient cities	Energy efficiency - energy intensive industries	Better disease management
10	Micro-irrigation	Municipal water leakage	Carbon capture and storage	Electronic medical records
11	Restoring degraded land	Cultural tourism	Energy access	Better maternal and child health
12	Reducing packaging waste	Smart metering	Green chemicals	Healthcare training
13	Cattle intensification	Water and sanitation infrastructure	Additive manufacturing	Low-cost surgery
14	Urban agriculture	Office sharing	Local content in extractives	
15		Timber buildings	Shared infrastructure	
16		Durable and modular buildings	Mine rehabilitation	
17			Grid interconnection	

Across these investment opportunities, the authors identified a select set of investment ‘themes’ (See which the top two themes account for more than a quarter of the projected new market value. See Figure 2-2. Under the heading of mobility systems fall issues like “public transport, circular economy in automotive and electric and hybrid vehicles” while the new healthcare solutions include “remote patient management and low-cost surgery”. (2017, p. 31)

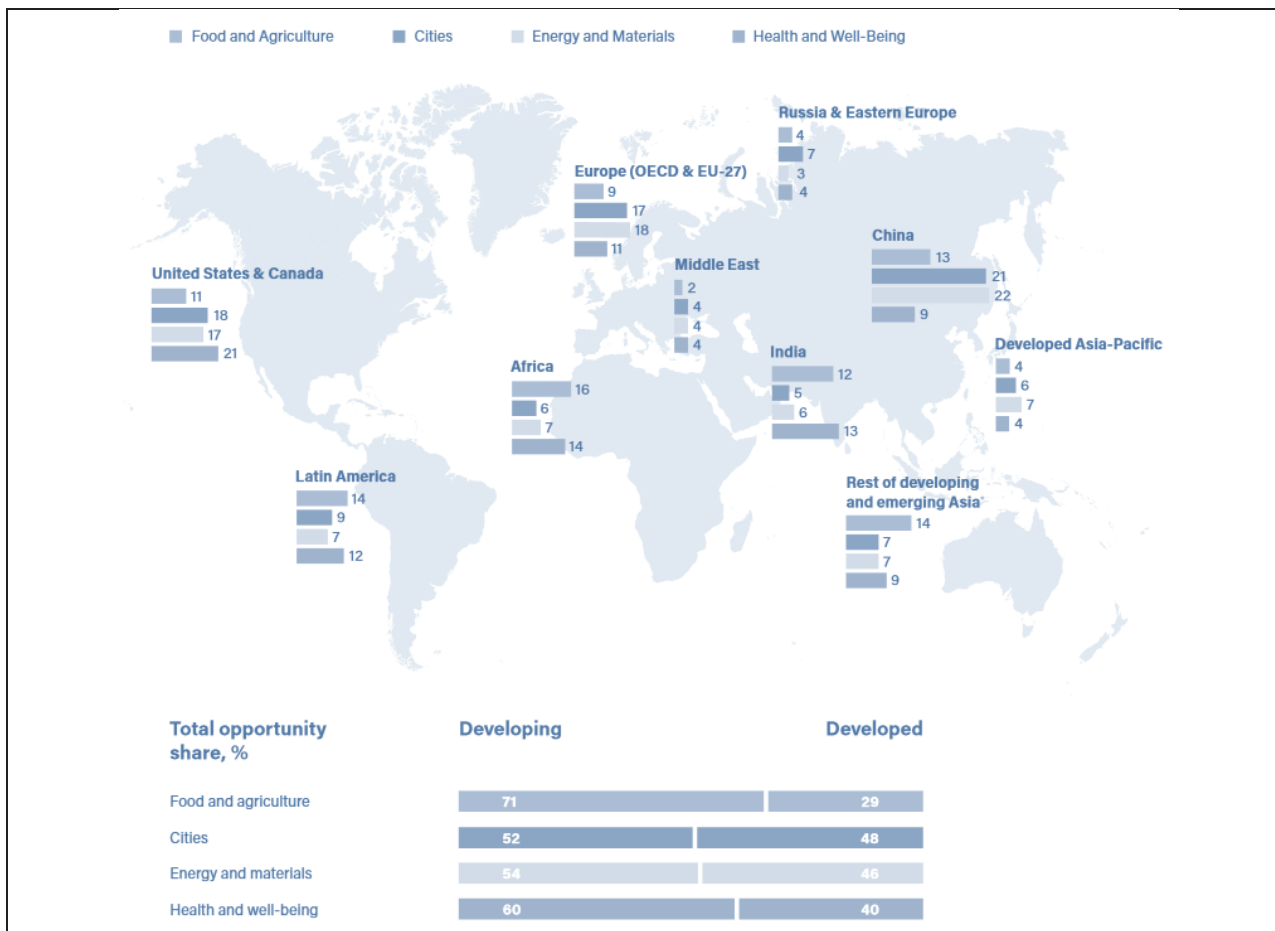
**Figure 2-2 Largest SDG & Business Investment Themes by Size in 2030 (in USD billions: 2015 values)**



Source: Business & Sustainable Development Commission (2017, p. 29)/ "Based on estimated savings or project market sizing in each area. Rounded to nearest US\$ billion."

Importantly, B&SDC report’s sizing of opportunities is based on current prices. However, these largely do not reflect the cost of a range of externalities, in particular energy-related emissions, and include various unpriced resources, including water, fossil fuels and food. The value of these resource subsidies globally is estimated to be over US\$1 trillion a year. To understand the impact of removing subsidies and properly pricing resources, the research took a subset of the top opportunities and repriced three components for which reliable data is available: carbon, water and food. This ‘true pricing’ methodology increases the overall value of opportunities by almost 40 percent. The effects are most striking in the food system, where pricing of externalities almost doubles the total value of opportunities to reduce food waste. Impacts on energy and materials opportunities are also significant: the size of the opportunity in renewables rises by 46 percent, driven by carbon pricing and by a similar amount in energy efficiency in non-energy intensive industries. Separately, authors note that the extent to which value can be derived is highly dependent on local contexts including the level of development of regions. Figure 2-3 visualizes the expected value that can be derived across geographies, half of which is expected in the developing world.

**Figure 2-3 Share of Value of SDG Business Opportunities by Region & System (Percent)**



Source: Business & Sustainable Development Commission (2017, p. 36)

### ‘Investability’ of the 2030 Agenda & SDGs

In our research, a few interviewees remarked that not every area where value can be unlocked in the long term converts into immediate investment opportunities. They commented that the large numbers that are often cited in publications on private investment opportunities of SDGs often give a wrong impression: “Everybody reads these grandiose figures, and then they are held up as massive opportunities. But on close inspection, they really are not, because you cannot possibly derive a market rate of return on them today. There is a fundamental misconception about the role normal private investors can have in this debate and in advancing the SDGs.”

Although an unequivocal answer to the question how investable each of the SDGs truly are today does not exist, various research efforts were conducted to address this question. And while different reports reach slightly different conclusions, infrastructure, energy, and waste – or the ‘circular economy’ – related investment opportunities are consistently surfaced as having disproportionate potential. For example, UBS (2015) finds that the underlying agenda and its 15-year lifespan give rise to a number of SDG investment clusters (See Figure 2-4). This assessment is highly aligned to market segments that emerged from the B&SDC report.

**Figure 2-4 Translation of SDGs into investment opportunities**

Long-term investment theme	Associated SDGs	Investment opportunity
<b>Water Scarcity</b>	2, 6	Water Infrastructure, Treatment and management agricultural
<b>Energy Efficiency</b>	7, 12, 13	Building systems, industrial processes, transportation infrastructure, technology/ software
<b>Waste management and recycling</b>	6, 12	Waste management (especially EM exposure)
<b>Clean air and carbon reduction</b>	3,11,13	Renewable energy, energy efficiency & storage, clean
<b>Agricultural yield</b>	2, 15	Agricultural equipment, biotech, irrigation technology, fertilizer producers
<b>Emerging Market healthcare</b>	3, 10	Healthcare providers active in EM
<b>Obesity</b>	2, 3	Consumer (food, health, wellness), healthcare (treatment of obesity & related diseases)
<b>Access to education</b>	4, 8, 10, 16	Direct participation or through intermediaries
<b>Gender lens investing</b>	5, 10, 16	Listed or private companies with commitment to gender diversity

Source: UBS (2015)

### A Review of Investor Perceptions & the Value of the SDG Framework

In 2016, ShareAction together with the PRI and Baring Foundation released the findings of a survey among 52 institutional investors related to the SDGs (Ivanova & Mountford, 2016). The report started by noting that just over 60 percent of the respondents (with an AUM of \$5.9 trillion) believed that including the SDGs in their investment decisions and practices did not conflict with their fiduciary duty, a positive progression from historical barriers to impact – and hypothetically, SDG – investing.

Despite a relatively positive picture emerging from the ShareAction survey however, there is a need for some caution. The SDGS are not yet considered critical by a fair share of the investors surveyed. This is confirmed by our qualitative research. Investors note that impact reporting is rarely asked by investors and struggle to see the SDGs and the underpinning framework as a useful input to investment decisions. They warn that the SDGs were not developed as an investor framework, yet are focused on achieving

*“I can see how ideologically it is helpful, but at the end of the day, very few investors ask about impact metrics today. It is more a matter of the size of the investment and the financial returns that are involved, so the framework is nice, but definitely not needed for me to do business.” - Asset manager*

development outcomes, flagging that significant effort is deemed necessary before the framework can serve as a reliable, material, and universal set of standards for the investor community. See also (SDGI Data Working Group (NL), 2016). Related, critics noted the high number of goals, sub-goals, and indicators the framework proposes, expressing fear that the framework would only add to the ‘alphabet soup’ of existing standards. Especially those investors with responsible investing portfolios and evaluation frameworks already in place, flagged the complexity of integrating yet another framework and standards.

Despite these concerns, the majority of interviewees, when probed, welcomed the 2030 Agenda as a valuable contribution to the space. They flagged the role the SDGs can play in creating a sense of urgency surrounding the topic of sustainability in capital markets. One investor remarked that by reviewing investments against the SDGs, both their positive and negative impacts surfaced, which helped his team to raise awareness of and consideration for the sustainability of their investments. Separately, interviewees suggested that the framework will add credibility, adding that current strategies and mandates formulated under the RI umbrella at times suggest (rightly or wrongly) being subjective and arbitrary. The fact that the SDGs were signed off by global leaders and were derived from concrete societal needs can provide resolve. Furthermore, despite previously mentioned concerns, the SDGs and the associated framework are seen to offer a line of sight for establishing universal development standards and performance measures, enhancing market transparency and accountability. And finally,

investors emphasized the SDG framework as a credible frame of reference across actors, emphasizing the role it can play in increasing collaboration and co-investment between parties, whether public, private or non-governmental.

As it relates to areas where investors see opportunities today, the ShareAction survey offers some insight. When asked which SDGs they perceived as being best situated to help in meeting their investment objectives, a similar picture emerged to the earlier made assessment: Top four SDGs included infrastructure (goal 9), economic growth (goal 8), tackling climate change (goal 13) and sustainable energy (goal 7).<sup>15</sup>

*“Sustainable development is an economic necessity. The SDGs address risks that threaten our ability to meet our liabilities as pension funds. They also present the opportunity to generate the returns that pay the pensions of the people whose assets we were entrusted.” - Pension Fund, North America*

In summary, the SDGI market opportunity is gaining in recognition, yet a critical challenge remains to capture the value that is expected in the long-term in today’s markets. We shall return to this question in subsequent Chapters. Here we include the assessment of the B&SDC that the pricing of externalities in today’s markets appears to be a fundamental driver to SDGI success.

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<sup>15</sup> In the Annex of this report an overview is reproduced of the SDGs whereby the institutional investors surveyed indicated to what extent there was a good fit with their investment objectives.

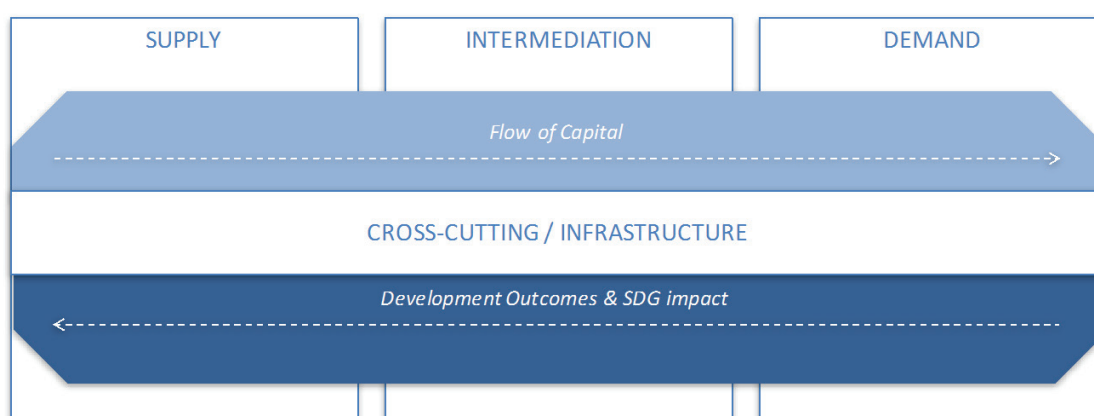
### 3. DRIVERS & BARRIERS TO SDG INVESTING

Previous chapters showed that SDGI has taken off in recent years, yet that its size remains modest, and perhaps more importantly, that the extent to which positive SDG and/or development outcomes is limited. For SDGI to reach its required scale – as stipulated by the Addis Agenda, barriers that inhibit this growth need to be addressed and drivers to SDGI reinforced.

Numerous studies were conducted regarding the prevalent barriers to integrating sustainability related factors in one’s investment decisions. While the relevance of each barrier will vary, research shows that their nature tends to be similar across investor segments, asset strategies, and geographies.<sup>16</sup>

A frequently used categorization of such barriers (See Figure 3-1) distinguishes between multiple ‘market elements’ those that relate to (A) the *supply of investment capital*, to the extent to which (B) *demand exists*, to the effectiveness and efficiency of (C) *intermediaries / intermediation*, and (D) *cross-cutting or infrastructural* barriers capturing market-level factors that play a dominant role across each of the previously mentioned barriers.

**Figure 3-1** Four ‘Market Elements’<sup>17</sup> to SDG Investing



*Supply* signifies to what extent capital is available for investment opportunities, specifically, the extent to which capital is available to positively contribute to the SDGs. This supply of capital will be looking for projects, goods, services, or enterprises to invest in. The extent to which demand exists for capital from investment opportunities that generate positive societal returns is therefore described as the *demand* side of the market. To ensure that capital can flow towards investment opportunities that match their criteria, *intermediation* – i.e., efficient and effective channels and entities that connect the dots and align supply and demand – is needed. This might be through direct linking of two (introducing capital owner to capital seeker) but might also be in an indirect way of changes in regulation making it easier for the two to find each other. And finally, a fourth market element is added which captures *infrastructural factors* that play a role that cut across previously identified market elements, yet are critical to establish strong financial systems and scale SDGI.

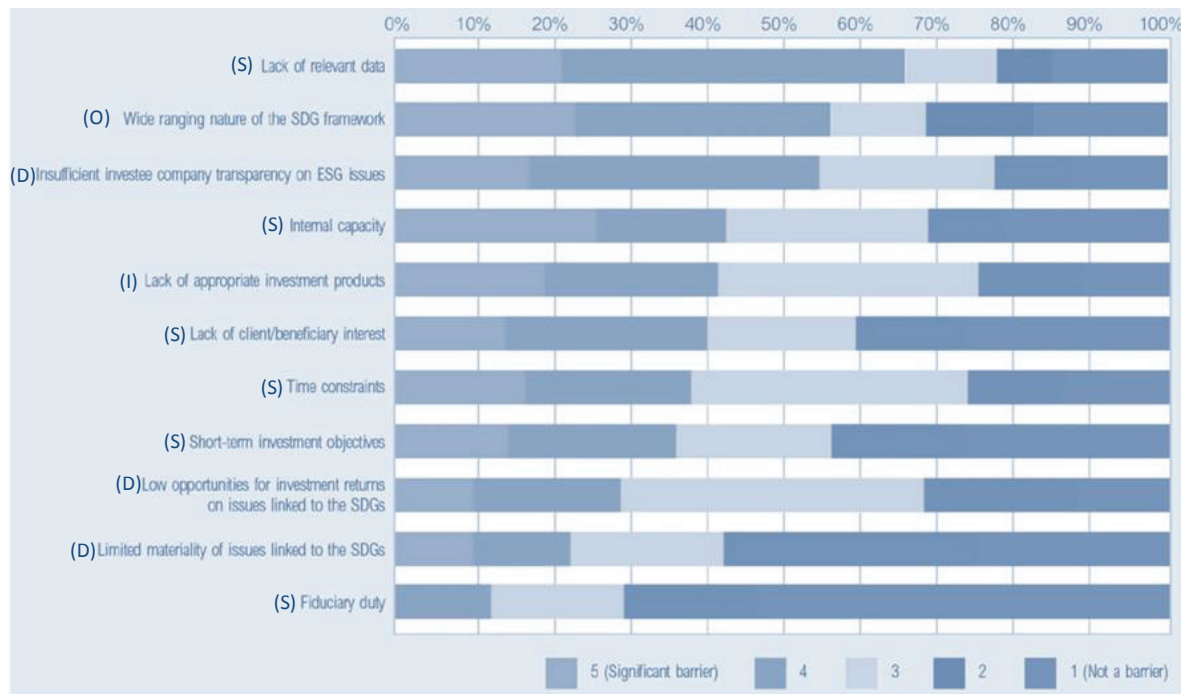
<sup>16</sup> E.g., In LCDs most of the financing need for achieving the SDGs will come via the route of official development assistance rather than the private sector. (Hurley & Voiturez, 2016)

<sup>17</sup> The term ‘market element’ was used by the UK National Advisory Board to the G8 Social Impact Investing Taskforce. This report recognized 3 market elements, supply, intermediary, and demand, which was complemented by a fourth element in this report. (UK National Advisory Board SIIT, 2014)



In their 2016 publication, Ivanova and Mountford asked their sample of *institutional investors* to score eleven hypothesized barriers to SDGI.<sup>18</sup> Among those surveyed a lack of relevant data is at the top of the list with more than 60 percent citing this as a significant barrier. The second barrier involved the wide-ranging nature of the SDGs, which presumably makes the incorporation of the SDGs more challenging.<sup>19</sup> See Figure 3-2 for an overview. Listed barriers were mapped against relevant market elements for reference.

**Figure 3-2 Barriers to SDG Investing Among Institutional Investors (2016)**



Legend: (S) Supply, (D) Demand, (I) Intermediation, (O) Overarching, infrastructural side of the market

Source: Ivanova & Mountford (2016)/ C-Change adaptation

Apart from this work, other noteworthy research efforts on the barriers to SDGI include two surveys among self-defined *impact investors*, i.e. a 2016 Impact Investor Survey, 2015 by UNCTAD<sup>20</sup>, as well as regional surveys such as Bridges Ventures' 2014 review of hurdles to impact investing in Africa. Manifested barriers were similar in nature across regions.

Research efforts to date, combined with our qualitative interviews have resulted in twenty barriers to investment, organized by market element. This overview, captured in Table 3-1, serves as a guiding framework for the remainder of this report. Additional detail with each of the barriers as well as illustrative investor quotes are added throughout.

<sup>18</sup> The survey was conducted among 64 signatories of the PRI (asset owners and asset managers)

<sup>19</sup> Note that this was also mentioned as an advantage by some interviewees. Further analysis of this theme might help in uncovering why these opposing outcomes occur. In all probability, the degree to which an investor is already active in fields related to the SDGs will have a significant impact – also the degree of knowledge about the SDGs and how they can be applied will play an important role in this.

<sup>20</sup> Impact Investing Survey (GIIN, 2016); Action Plan for Private Investment in the SDGs (UNCTAD, 2015)

**Table 3-1** Frequently Mentioned Barriers to Invest with Impact

**OVERARCHING, CROSS-CUTTING BARRIERS**

- O1 – Lack of awareness with the SDGs and/or with the need (and urgency of) SDG investing
- O2 – Lack of a common language for investing with impact, including a lack of an impact taxonomy
- O3 – Lack of market standards, including insufficient uptake of externalities in decision-making
- O4 – Lack of market data on investments’ financial / impact / risk performance
- O5 – Regulatory barriers to invest with impact, including fiduciary duty, prevalent risk / investment models
- O6 – Insufficient capabilities among investment professionals, incl. a lack of project structuring expertise
- O7 – Limited learning, innovation, and experimentation

**SUPPLY SIDE BARRIERS**

- S1 – Limited capital that is evaluated for their negative and positive impact contributions
- S2 – Lack of available risk capital to crowd in investment
- S3 – Misaligned risk / investment models that underpin investment decisions
- S4 – Lack of incentives for asset managers and/or owners to invest with impact
- S5 – Lack of appropriate investment instruments and/or products, including achieving liquidity

**INTERMEDIATION BARRIERS**

- I1 – Lack of a shared agenda, collaboration, and integrated financing and delivery across actors
- I2 – Lack of effective intermediaries / inability to align sources and uses of capital
- I3 – Lack of systems and platforms to facilitate and broker deal-making, including exchanges

**DEMAND SIDE BARRIERS**

- D1 – Limited inherent investability of impact areas / individual SDGs
- D2 – Insufficient ability to absorb capital given scale / level of maturity of businesses
- D3 – Disproportionate country and/or market level risk, including prevalent entry barriers
- D4 – Lack of consumer / end user insight to facilitate rapid scaling and impact success
- D5 – Limited available scaling ‘power’ and support to facilitate maturation of SDGI markets

Source: Interviews, Desk Research, C-Change Analysis

## Overarching, Cross-Cutting Barriers

Establishing strong and sustainable financial systems requires all market elements and actors to come together. Market values, insight, regulations play a significant role in accelerating – or conversely, inhibiting – effectiveness and scale. This cross-cutting set of barriers highlight such cross-cutting barriers for building thriving SDGI markets.

### (O1) Lack of awareness with the SDGs and/or with the need (and urgency of) SDG investing:

Multiple surveys cite high awareness of the SDGs and compared to the MDGs, the SDGs received considerably more press coverage (See Box 3-1). Notwithstanding, interviewees signaled limited awareness with the SDG framework, let alone with the investment possibilities that are associated with them. This is true among institutional investors, yet even more so among retail investors or the general public. Not surprisingly, this awareness gap is even more apparent outside of developed markets. Related, the urgency of building sustainable financial system and to advance SDGI is only beginning to be recognized, while ‘SDGI’ a remains niche.

*“Many European investors talk about the SDGs, but outside of the region, people don’t really.” – Institutional investor*

*“There is an institutional fear of being too progressive and another fear that we are not doing enough.” – Institutional investor*

### Box 3-1 SDG Uptake Today: How Popular Are the SDGs?

Measuring the acceptance of the SDG agenda by the general public as a task wrought with difficulties. Given the intrinsic importance of the SDG agenda and the need for the buy-in of a multitude of stakeholders, determining to what extent the SDGs have landed in the public domain is of importance. In their preliminary analysis by McArthur & Zhang (2015) on the public discussion of the MDGs, the authors noted that the “SDGs will require more intensified public and academic debates than the MDGs, since they entail more complexity.” Although it was still early days their analysis indicated that the introduction of the SDGs was accompanied by a richer discourse compared to the MDGs. In the figure below an updated part of this analysis is presented which clearly shows that the uptake of the SDGs in the public debate (using this micro observation) has already surpassed the MDGs.

#### Number of articles/ blogs in the NY Times on MDGs and SDGs (2002-2016)



Source: nytimes.com/ C-Change Analysis; Articles containing “Millennium Development Goals” or “Sustainable Development Goals”

### (O2) Lack of a common language or taxonomy for investing with impact:

The notion of impact investing lacks a coherent, broadly shared definition which has led to the emergence of plethora of approaches each with their own taxonomy, meanings and definition. (Eurosif, 2014, p. 23) Having a common language – a factor which many interviewees cite as a plus of the SDG Agenda – doesn't mean that people will either start using the SDGs or align to the framework. Indeed, one interviewed asset manager remarked: "SDGs are not part of our reporting framework. We are very pragmatic about our reporting. [Our LPs] are more interested in good stories. I guess they feel that the impact side is in good hands."

**(O3) Lack of market standards, including insufficient uptake of externalities in decision-making:**

A priority barrier to SDGI that was previously identified is a lack of market standards. This includes the establishment of 'consistent, positive SDG/ESG filters' (Kharas & McArthur, 2016, p. 12) The past decades have seen significant growth in disclosure of corporate performance on sustainability. Now 92 percent of the world's 250 largest companies report on sustainability, while a myriad of firms advancing ESG analysis or 'true cost' solutions have emerged (e.g., EIRS, MSCI, RobecoSam, Sustainalytics). However, reliable, comparable, and universal standards have not emerged as yet (Taskforce, 2013). As one interviewee noted, the lack of a comparable, universal investment standards is a challenge however, a set of development goals that are broad and nature, and too complex to concretely evaluate investment decisions, creates the risk of a rise in "SDG(l)-washing". To which was added that this risk should be top of mind for those seeking to advance the SDG agenda through investment.<sup>21</sup> One way that was suggested as way to counter this is to make parties accountable for the claims they make and see to it that some form of tracking, monitoring and reporting on results and impacts of the SDG orientated investments are in place. In the next chapter, we revisit the status of various reporting initiatives and the extent to which these incorporate references to the SDGs. Finally, and related, limited integration of environmental and people related externalities limit the uptake of these factors by investors.

**(O4) Lack of market data on investments' financial / impact / risk performance:**

Reliable, comparable market data is not accessible as the data is not available. The statistics that were shared above illustrate this. Consequently, a study shows that as many as 82% of CEOs are unhappy with the information that is available to them to compare their performance versus their peers. Secondly, even when such data exists, it is not available to the vast majority of investors and most importantly the general public or retail investors (Business & Sustainable Development Commission, 2017, p. 71). Although every investment presentation highlights the clause that past results are no guarantee for future results, these past results are often a crucial ingredient for the investment decision on how to move forward. Past performance will help investors make better judgements about the risk/ return profile of a particular investment. Likewise, for SDGI there is a need for historical data to make decisions about the possible impact as well as the risk-return profile of their investments.

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<sup>21</sup> The term "SDG-washing" alludes to the notion of whitewashing and the more recent incarnation of "green washing" - a practice whereby a company acts to be more sustainable or "green" than they are;

**(O5) Regulatory barriers to invest with impact, incl. Fiduciary duty & prevalent risk models:**

*“More sustainable regulations would reduce systemic, financial risk”* (Business & Sustainable Development Commission, 2017, p. 79). Yet, current international rules and regulations for financial institutions, on the whole are not designed to optimize for sustainability factors or externalities, or – in reality or following investor perceptions, constraining<sup>22</sup>. For example, “Basel III” – i.e., a regulatory framework developed by the Basel Committee on Banking Supervision for the banking sector, or Solvency II, which outlines the parameters by which insurance companies in Europe are to be assessed, constrain investors’ exposure to emerging markets and set liquidity requirements. Given that SDG investments – and particularly sustainable and impact investments – often require longer investment horizons and extend across borders, such agreements can be highly constraining. Similarly, regulation that binds (large) financial institutions to a particular way of operating, involves the notion of the fiduciary duty of investors. This is legislation that limits investors in the way they invest, for instance by indication that only financial return can play a role in the investment decision. For example, US foundations for a long time were restricted in using their capital for investment products.

**(O6) Insufficient capabilities among investment professionals:**

SDGI markets can only become mainstream, if all actors across the investment value chain have the capabilities they need to play their role. For example, asset owners and managers, are capable of integrating sustainability related factors in their due diligence. Similarly, as noted earlier, given that the 2030 Agenda requires far-reaching collaboration between sectors as well as financing structures that crowd in investors with different risk-return-impact profiles, investment professionals need a whole new skillset to succeed. A lack of knowledge on the *modus operandi* of this type financing is itself a barrier to a blending of capital sources, and securitization – two ingredients to SDGI success. Clark, Emerson, and Thornley refer to this in their 2014 publication, *The Impact Investor: Lessons in Leadership & Strategy for Collaborative Capitalism*, as the need for a ‘multilingual or blended skillset’.

*“Scaling impact and/or SDG investment takes time, and we need to take the team to build these markets.” – Asset manager*

**(O7) Limited learning, innovation, and experimentation:**

One of key challenges in SDGI is that there is much new ground that needs to be covered. Significant resources are needed to experiment with new solutions, new business models, and previously non-existing markets (Koh, 2012). A frequently mentioned barrier to learning and innovation is a lack of insight to such models, while technologies that enable the exchange of knowledge and collaboration opportunities are expected to provide resolve. Separately, investment in the development and scaling of such solutions is critical, and although increasingly happening, e.g., as done with the launch of the Vaccine Alliance, GAVI, needed more.

**Supply Side Barriers**

*These are barriers associated with the limit flow towards and provision of capital for SDG investing, as well as increasing the ‘materiality’ or relevance of sustainability factors. Barriers are especially relevant for asset owners and asset managers.*

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<sup>22</sup> A review of regulatory barriers in The Netherlands showed that the majority of the perceived regulatory barriers among institutional investors were in fact not imposed, yet related to internal investor mandates ( C-Change and Dutch SDG Charter signatories, 2016)

**(S1) Limited capital that is evaluated for their negative and positive impact contributions:**

The SDGI market is growing yet minor compared the entirety of the capital markets. Furthermore, when the numbers are contrasted with the various estimates of the annual sums that could be absorbed by the SDG agenda its scale is marginal. Especially with a significant intergenerational wealth transfer emerging, getting to a point where all portfolios are, and can be, evaluated for their negative as social and environmental returns is key. As will be discussed further in the next Chapter, greater integration of environmental and social factors in credit ratings, or the roll out of sustainability league tables to investors (B&SDC, 2017) may offer resolve.

**(S2) Misaligned risk / investment models that underpin investment decisions:**

Related, typical risk models among investors have strict restrictions related to the liquidity, size, and emerging market exposure of their investments. While often for good reason, constraining risk models are a significant barrier to ensuring capital flows towards sustainability. Many SDGI opportunities are small in size, or have long capital outlays and the returns. Although competitive, they take a longer period to come to fruition (e.g. infrastructure projects). This means that a lot of capital that is being steered by the aforementioned models will less likely become involved in SDGI (also ties in with the regulatory issues noted below in O5)

*“When push comes to shove, we will drag those SDG opportunities through exactly the same process as any other investment. If you look harder, we believe there is no need to do any concessions.”*  
– Institutional investor

**(S3) Lack of available risk capital to crowd in investment:**

As signaled by many leading reports and agendas on financing the 2030 Agenda, having access to risk capital is a primary driver for crowding in or ‘catalyzing’ investment capital (Kharas, 2016; B&SC, 2017). This capital is critical for early stage financing, to cover off risks that stand in the way of SDGI such as political or currency risks. Beyond the availability of capital, a barrier that emerged in a review among institutional investors in The Netherlands showed that many struggled to identify relevant facilities of the national government, while conversely, these facilities struggled to achieve uptake. Such disconnects are further unpacked in the section “I”, Intermediation.

*“We need a ‘one-stop-blending-shop’ that will allow us to allocate our capital leveraging available risk-capital where it is available. We struggle to do that today”* – Asset owner

**(S4) Lack of incentives for asset managers and/or owners to invest with impact:**

Insofar that SDGI is a new form of investing it requires an effort on the part of the asset managers and owners to go about differently in their investment strategy and practices. If there are no incentives or are discouraged to consider atypical deals or adjust their methods, this forms a barrier to the supply of capital for SDGI. This barrier became apparent inside institutions but also between asset owners and asset managers, where both would need to adjust and/or push for a new way of working to include sustainability factors and/or the SDGs in their investment strategy and associated reporting requirements. Similarly, during a 2017 CGDEV panel, Philippe Le Houérou, CEO at the International Finance Corporation (IFC), confirmed that – even for investors with an explicit mandate to achieve development outcomes through their investments, tensions exist between this mandate and prevailing incentive systems inside the organization. (Morris, 2017)

*“We could start using [the SDGs] but aren’t at the moment – I guess that also has to do with where your money originates from. We don’t have any government money but for those who do it seems like a requirement.”*  
– Asset Manager

## **S5) Lack of appropriate investment instruments and/or products, including achieving liquidity:**

Barrier (S3) already noted that the capital markets harbor different types of investors, each with their own risk-return-impact guidelines. One element that is closely associated with this, has to do with the desired level of liquidity, i.e., how fast an investor can sell his/her stake in a company or project to other investors. The speed with which an investor can sell its stake will influence the perceived risk and hence desired return. To illustrate this, while in listed equity, liquidity is high while, liquidity in infrastructural is normally very low, meaning that the investor has only limited options to sell their stake at a competitive price. One way in which to remedy this is by introducing securitization, which we will review further in the next Chapter.

### **Intermediation barriers**

*A key challenge in SDGI, regardless of its size, is to connect capital to investment opportunities. This can include projects, products, goods, and enterprises. Many investors struggle to connect with the right parties that are seeking capital, while interestingly – many of those seeking capital indicate struggling to find investors. The barriers listed in this section are associated with this challenge.*

#### **(I1) Lack of a shared agenda, pooling of resources & collaboration:**

The 2030 Agenda offers a global strategy for achieving a sustainable future. Yet, despite a mushrooming of initiatives, coalitions, and platforms, getting to concrete action SDGI action agendas – at a local, regional, and global level, and across outcome areas is proving complex. Finding ways to get to shared action agendas and to pool resources more efficiently and effectively is mentioned by multiple

interviewees as a critical ingredient to SDGI success. In addition, ways to leverage and pool local sources of capital were broadly considered table stakes in getting SDGI markets ‘unstuck’. (FMDV, 2015)

*“The SDGs are more of a philosophical framework that makes it possible to build bridges between sectors. As an evaluation framework, one can argue that it is just another framework that is adding to the fragmentation and complexity of the space, and definitely not the answer to all questions at this point.” – Institutional investor*

#### **(I2) Lack of effective intermediaries / inability to align sources and uses of capital:**

Many asset owners make use of consultants to help them select investment managers to manage their assets. For the growth of SDGI it is therefore of importance that these advisors to the asset owners are aware and are inclined to present SDGI related options. A reality however is that very few intermediaries can offer such services and/or

have the pipeline to be able to connect the demand for capital to those seeking to invest. A related barrier is that few intermediaries today have experience building portfolios that consider SDG related factors right alongside their financial considerations, and that when they do, the margins or management fees which they are can charge do not cover their costs. As stated earlier, the absence of regional or domestic development finance institutions, financial institutions, and corporations in developing investment opportunities and facilitating SDGI is considered a major gap. A concerted effort to truly leverage – but also enhance – local funds, delivery capacity, insight, and expertise, is considered key to building thriving SDGI markets. (FMDV, 2015)

*“To unlock investment, we need a marketplace that is focussed on the project development process (i.e., not the end project). Focusing on end projects assumes there are pipelines of bankable projects which they are not.” – Expert Perspective*



### **(I3) Lack of systems and platforms to facilitate and broker deal-making, including Exchanges:**

As already noted the fact that many SDGI opportunities are often illiquid forms a barrier for SDGI in itself. Similarly, and as noted above, many interested investors – also at a retail level – struggle to find SDGI opportunities. Online platforms and/or a portal where suppliers of capital can find sufficient, high quality investment opportunities are emerging, as exhibited by the numerous Social Stock Exchanges that have emerged global. Yet – most investors argued, current intermediary platforms are not there sufficiently. Meanwhile, the opportunity to co-invest with large investors and/or corporations is not self-evident (See also I1) which limits market growth. Related, some have argued the incentive systems of DFIs do not encourage sharing of pipeline opportunities, insights that they argue would unlock considerable deal flow.

#### **Demand side barriers**

*The absorptive capacity of SDGI markets many have argued is not efficient, especially not at the scale, size, and with the risk-return profile that is required for institutional investors to come in. Finding and determining new paths to increasing the absorptive capacity of the SDGI market is mentioned by many as a prerequisite to SDGI success.*

### **(D1) Limited inherent investability of impact areas / individual SDGs:**

In the previous Chapter, the inherent investability of the 2030 Agenda and the SDGs was reviewed. Not all of the goals are easily translated into business cases let alone compelling and competitive investment cases. While to a high extent a ‘fixed variable’, concerted efforts to maximize the ‘risk-return-impact’ frontier in all settings and all SDGs will be important to leave no SDG behind and realize all dimensions of the SDG Agenda. Enabling broad-based knowledge sharing and innovation (barrier O7) is highly linked to this barrier.

### **(D2) Insufficient scale / level of maturity of businesses:**

An often mentioned barrier to mainstreaming impact and SDG investing, involves a shortage of businesses that operate at scale. This barrier was reinforced by our interviewees. Multiple SDGI orientated investors indicate struggling to develop a strong pipeline of fundable projects. This challenge appears particularly acute

*“Money is awash, but always the same story that the projects aren't there.”  
– Institutional investor*

among institutional investors that require market-rate returns on their investments, and typically have multi-million threshold investment levels – i.e., minimum absolute investment levels, alongside maximum ownership levels in a given business – immediately ruling out many medium-sized corporations. Given this tension, increasingly, attention has shifted back to large national or multinational corporations and their role in maximizing the scale and effectiveness of SDGI. Examples are efforts to improve the business case for sustainability (Business & Sustainable Development Commission, 2017), as well as efforts to integrate SDG positive initiatives and social ventures into corporate delivery platforms and supply chains. Such efforts help to accelerate their path to scale and lower risk perceptions associated to such ventures.

### **(D3) Disproportionate country and/or market level risk, including prevalent entry barriers:**

As noted earlier, half of the SDG value that can be unlocked according to the Business & Sustainability Commission resides in developing markets. Investments in these markets are usually confronted with a higher institutional risk compared

*“In private markets, it is finance first. Not impact first. Every impact investment in private markets is finance first and accounting for impact second.”  
– Institutional investor*



to investments in high income countries. Risk perceptions are determined by a range of factors, including variations in quality and stability of the institutions, prevalent economic policies (incl. monetary requirements), all of which can have a significant influence on the ultimate return on investment. Effectively covering off such macro and meso-level risk factors is a critical ingredient to SDGI success. Not surprisingly, the role of governments, IFIs, and DFIs can play in doing so is frequently mentioned.

**(D4) Lack of consumer / end user insight to facilitate rapid scaling and impact success:**

Consumers are investors. Consumers are buyers of goods and services. Consumers are also oftentimes the producers of these items. They are the real economy in which values need to shift to achieve a new normal. One of the key bottlenecks is the speed and intensity by which the end-user or consumer will pick up on what is offered. In some cases, depending on the type of market and geography this may be fast. Yet, in most it will stand in the way to enable a rapid scaling. In their report *From Blueprint to Scale*, the Acumen Fund and Monitor Group (Koh, 2012) speak of the need to build (and invest in) markets, not products. This sentiment is reinforced in the CGDEV panel which was held in February 2017 by a number of development experts (Morris, 2017). Deepening one's understanding of the needs, behaviors, and perceptions of those living at the 'Base of the Pyramid' is critical in achieving the inclusive growth that the 2030 Agenda calls for.

**(D5) Limited available scaling 'power' and support to facilitate maturation of SDGI markets:**

To effectively scale social enterprises and other SDG positive interventions require a systematic approach, time, and resources. Effective accelerators with proven models for driving scale are often lacking, and greater insight is needed to uncover what it takes to effectively scale high-impact solutions, including for example the use of those delivery platforms and supply chains of corporations that already operate at scale (See also barrier D2).

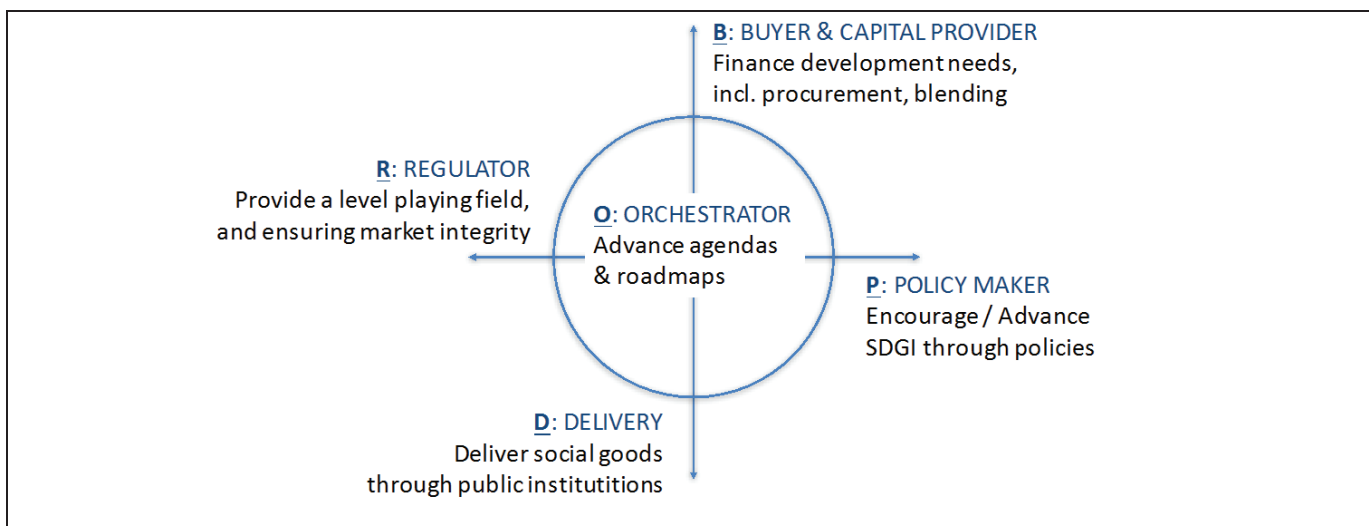
The next Chapter focuses on the instruments available to the public sector to mitigate the above mentioned barriers and thereby maximize SDG investing.

#### 4. PUBLIC SECTOR INSTRUMENTS FOR MAXIMIZING SDGI

As noted in Chapter 3, there are various barriers to increasing SDGI success. In this chapter, leading public sector mechanisms for accelerating and enabling SDG investment are reviewed. The Chapter seeks to provide a reference document for governments as they determine their strategies for maximizing SDGI in their domains of focus. Interview insights as well as inventories from a range of publications informed these tables.

Building on Jackson and Associates (2012) distinction between the application of influence and direct participation, the authors recognize five different roles that government entities can play (see Figure 4-1). While not systematically mapped against each of the mechanisms that are listed in our review of possible mechanisms, we added this distinction to flag the range of roles that governments can – and are increasingly asked to – play.

**Figure 4-1** Five Likely Roles of Government Institutions & Actors

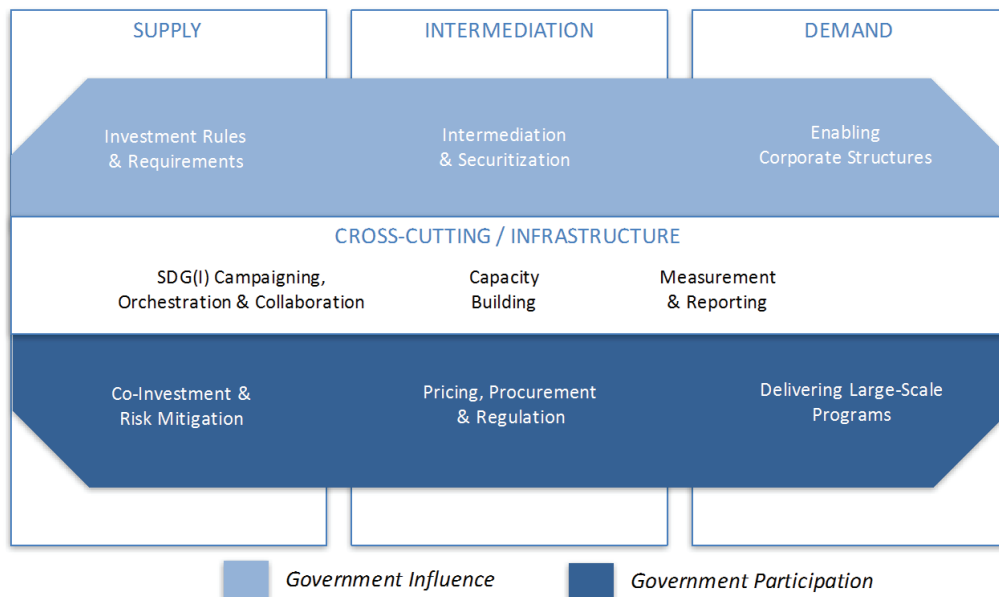


Source: C-Change Analysis, 2017

In subsequent sections an overview of relevant public sector mechanisms are offered to address supply, demand, intermediation, and infrastructure related barriers. The framework offered by E.T. Jackson and Associates Ltd. (2012) in their review of public policy mechanisms for increasing impact investing was loosely applied to categorize the various instruments. See

Figure 4-2. Notable sources for the compilation of public sector mechanism include Bridges Ventures, AVCA (2014); (SDGI Signatories / C-Change (2016); DFI, Oxfam International (2015); Hurley & Voituriez (2016); (Samuels, 2016); Thornley, Wood, Grace, & Sullivant (2011); UNEP Inquiry (2016); UNDP (2016); UNCTAD (2015). For each mechanism, the likely role government entities will take, illustrative examples, the level of resources and expertise that is estimated to be required for adoption, and an indication of the 'time to impact' were added. Throughout proven, particularly innovative, and/or bold mechanisms for accelerating SDGI that surfaced from our research were added.

**Figure 4-2 Visualization of Available Public Sector Mechanism by Market Element**



Source: E.T. Jackson and Associates (2012) for the Rockefeller Foundation; Adapted by C-Change for this research

A few considerations need to be kept in mind with the upcoming sections:

- The applicability and effectiveness of the listed instruments depends on the context in which they are applied and are strategically applied and adopted as part of an integrated portfolio of interventions;
- Whether an instrument is appropriate depends on the extent to which a certain barrier exists in the geography or domain of focus, their level of sophistication and the capital that is available to engage;
- The overview is purely meant as an indicative overview of mechanisms and should not be seen as a comprehensive toolkit for public sector intervention;
- Recognizing that instruments often help to address multiple barriers at any given time, reference is given to multiple barriers that cut across the supply / demand / intermediation spectrum;
- In recognition of the fact that instruments require varying level of capital and/or implementation capacity, the second half of the assessment is added to give readers a first sense of their ability to adopt an instrument with success. Scores were assigned based on expert interviews and desk research;
- Recognizing that the time horizon by which the effect of policy instruments can be observed, an instruments’ relative ‘time to impact’ is estimated using expert interviews and desk research;

Importantly, when asked about the optimal level of involvement of (semi-)public institutions interviewees perspectives varied and were at times appeared to align to interviewees’ political leanings. Also perspectives on the right balance between the use of ‘sticks’ (taxation, compliance, etc.) and ‘carrots’ (provision of risk capital, awareness raising, etc.) differed. Some suggested that ideally (semi-) public institution should help in managing macro and meso-level risks (e.g. country risk) but leave the project risk to the private investors. Others argued that IFI’s and DFI’s should refocus their activities as “Some DFIs are acting as normal investors and are disrupting the market.”

### Mechanisms for Addressing Overarching, Cross-cutting Barriers to SDGI

In our interviews, experts and investors flagged the responsibility government institutions as market builders, shepherds and orchestrators of the wider 2030 agenda. Mechanisms that were mentioned and that are cross-cutting in nature involved ways in which governments could raise awareness surrounding the SDG(I); contribute to the establishment of an ‘enabling data environment’; and ensure market transparency and accountability. Worth noting is that especially as it relates to ensuring market accountability, covering off the negative effects of doing business (e.g., impacts such as waste, human slavery, CO2 emissions) were often mentioned a first responsibility for the public sector. Table 4-1 describes these mechanisms further, while Box 4-1 until Box 4-4 describe a number of interventions that were mentioned as being particularly effective or innovative.

**Table 4-1** Prevalent Public Sector Mechanisms: **OVERARCHING**

Type	Barrier(s)	Instruments & Illustrative Example	Capacity Requirement	Capital Requirement	Time Horizon
<b>OVERARCHING / CROSS-CUTTING</b>					
<b>SDG(I) Campaigning, Orchestration &amp; Collaboration</b>	All – especially O1 & I1	Awareness Raising & A New ‘Social Contract’: While multiple studies have appeared signalling global citizen interest in the SDGs (Pricewaterhouse Coopers, 2015; SDG Action Campaign My World Survey, 2016), reality remains that few citizens are familiar with the Agenda – let alone, would connect their role as consumers, professionals, and investors to the sustainability agenda. Awareness raising campaigns related to the need for a new ‘social contract’ (Unilever (2016); B&SC (2017) and the existence and importance of the 2030 Agenda, such as those by Global Citizen and Project Everyone, as well as (sub-)national campaigns on the topic form an important backbone to ‘activating’ economic activity. While generally citizen-led, government resources can help catalyse such action. Examples include SDG ‘Charter’ initiatives across Europe, including in Belgium, The Netherlands, and Italy.	Med	Low	Long
	All	<b>Agenda Setting &amp; Roadmap Initiatives:</b> Many experts and interviewees called for the need to overcome persistent silos between actors and sources of capital, and the importance of concerted efforts to build markets and remove roadblocks to SDGI. A UNEP Inquiry found over 70 such national efforts. Brookings called for the creation of national sustainable financial roadmaps, including the establishment of time tables for implementing SDGI consistently across markets. An example SDGI initiative involved the launch of a national SDGI agenda in The Netherlands that brought 18 leading banks, insurance firms, and pension funds – collectively representing E2,800+ in Assets under Management (AuM) – together around a shared agenda for the financial sector, government, and Central Bank alike. A global effort that is worth noting is a recent GreenInvest Platform that was launched as part of the German G20 Presidency in January 2017 with the goal to engage developing countries in the mainstreaming and mobilisation of green finance.	Med	High	Med

Measurement & Reporting	[O4, O7]	<p><u>Building the 'SDGI Business Case'</u>: While a global market for sustainability related outcomes is rapidly emerging, the underpinning 'risk-return-impact' data that is needed to build a water tight business case is often not available. To achieve an ecosystem where such data is consistently available, deep and rigorous analytical research is required – an area of work in which government funding and expertise can play an instrumental role. An illustrative initiative is the Business &amp; Sustainable Development Commission, which published a seminal report in January 2017 in which it quantified the SDGI opportunity as being able to unlock at least US\$12 Trillion in new market value. This global initiative included coalitions a range of Northern European governments, corporates, and large foundations. Regional and/or national chapters of such efforts would help advance the evidence base for investments in the SDGs.</p> <p><u>Innovation Centers</u>: As flagged in UNEP Inquiry's report, taking advantage of new technologies, and experimentation with new products, services, and business models is critical to shifting financial systems. Example initiatives that come to mind are Prizes (e.g., Xprize) or other challenges where new solutions are surfaced and brought to fruition. Linking such technology centers and initiatives to existing areas of competitive advantage will be important.</p> <p><u>Taxonomies &amp; Indicators</u>: The SDG framework offers a concrete set of indicators that entities across sectors can reference and consider in their strategies, actions, and reporting practices. For the private sector to be able to adopt such metrics however, conversion and alignment to an already existing ecosystem of indicators and standards is table stakes. Noteworthy taxonomies include those developed by GRI as well as the Impact Reporting &amp; Investment Standards (IRIS) offered by the Global Impact Investing Network (GIIN), but also existing development taxonomies like the IFC's Development Outcome Tracking System (DOTS). To facilitate this process of integration, the World Business Council for Sustainable Development (WBCSD) in collaboration with the Global Reporting Initiative (GRI) and UN Global Compact developed an "SDG Compass" a repository of metrics, taxonomies, and systems that companies and investors can use. Governments can play a role in advancing the emergence for tracking progress against the SDGs by funding such efforts, but also in aligning its own investments and expenditures to these language systems.</p>	Med	Med	Med
	07		Med	High	Med
	[O2, O4]		Med	High	Long
	[O2, O3, O4]	<p><u>Reporting Standards &amp; Protocols</u>: Reporting on environmental and social performance is needed to monitor progress in the SDG area. The introduction of reporting standards introduces the necessary focus and harmonization improving the comparability of outcomes. The Carbon Disclosure Project (CDP) backed by investors (holding \$95 trillion in Assets) has been motivating (largest 500 listed companies) companies and municipalities to disclose their environmental impacts (esp. on water and carbon); The Integrated Reporting (IR) Framework of the International Integrated Reporting Council (IIRC), a private initiative that supports integrated thinking, decision-making and actions that focusses on the creation of value beyond the mere short-term by providing insight to the resources and relationships ('the capitals') used and generated by an organization. ISO Social Responsibility Standards (incl. ISO 26000, ISO 20400 is a private an independent, non-governmental international standard setting organization. Early 2016, ISO published a report outlining a high number of ISO standards that can be applied to track contributions to the SDGs, specifically mentioning impact areas such as sustainable communities and measurement of greenhouse gases; Meanwhile, the Sustainability Accounting Standards Board (SASB), including Standards for 79 industries in 11 sectors, has developed and disseminate sustainability accounting standards that help public corporations disclose material, decision-useful information to investors.</p>	High	Low	Mid

<p>[01, 03, 04, 07]</p> <p><u>Ratings, Indices &amp; Benchmarks:</u> Ratings and benchmarks form important enablers of impact-based decision making. Many benchmarks have emerged over the last decades. A notable example is the Corporate Human Rights Benchmark which is backed by various institutional investors and ranks the top 100 globally listed companies on 100 criteria on their human rights policy, process and performance. In 2016, the benchmark ranked 100 global corporates in the agricultural products, apparel, and extractive industries on 100 human rights criteria. The initiative is co-funded by multiple governments. While not explicitly using the SDGs as a framework, the benchmark clearly hits on a sub-set of the sustainable development goals. Another example involves MSCI's Sustainable Impact Data Sets (incl. ACWI Sustainable Impact Index, Sustainable Impact Metrics, and Sustainable Impact Snapshot) are used by institutional investors to measure their alignment with the SDGs. MSCI ESG Research grouped the 17 SDGs into five actionable themes: basic needs, empowerment, climate change, natural capital and governance. The index identifies companies that derive at least 50% of their revenues from products and services that address environmental and social challenges as defined by the themes outlined above. The index excludes companies that fail to meet minimum ESG standards and weights securities by the share of revenue derived from relevant products or services. Finally, the BCSD (2017) recommends the creation of transparent, consistent league tables to shift market dynamics.</p>	High	Mid	Short
<p>[04, 07]</p> <p><u>Sustainable Development Needs Data:</u> Globally, concerted efforts are ongoing to map global sustainable development needs, both to enable a channelling of funds towards hard pressed areas, but also to be able to track our progress against the Goals. The SDG Index &amp; Dashboards of the Sustainable Development Solutions Network (SDSN) &amp; Bertelsmann Stiftung provide a report card for tracking SDG progress and ensuring accountability across the world. The report shows how public leaders can deliver on their promise and it urges countries not to lose the momentum for important reforms; The People's Report Card by the Social Progress Imperative (SPI) utilises the assessment and analytics tools of the Social Progress Index. The report cards capture benchmark data that shows progress against the SDGs and it shows (sub-)national performance against baseline trends and changes.</p>	High	Mid	Short
<p>[04, 07]</p> <p><u>Sustainable Development Spending Data:</u> The IATI Standards, (incl. ~4700 data sets) of the International Aid and Transparency Initiative (IATI) which is formed by 491 institutions based in 40+ countries aims to help improve the transparency of aid, development, and humanitarian resources in order to increase their effectiveness in tackling poverty. IATI is a voluntary, multi-stakeholder initiative. IATI standards offer a format and framework (which no incorporates the SDGs) for publishing data on development cooperation activities, for use by all organizations in development, including government donors, private sector organizations, and national and international NGOs; The Total Official Support for Sustainable Development (TOSSD), incl. Revamp of OECD-DAC Reporting Directives of the OECD facilitates the monitoring of financial resources (volume and type) that are spent to support the SDGs across sectors. TOSSD complements ODA by increasing transparency and monitoring important trends in development such as impact investing, blended or 'catalytic' finance, and the use of risk mitigation instruments. It ultimately seeks to trigger greater private sector investment in development. The effort is linked to a broader effort by the OECD to expand its existing online development database – containing 20 years+ of development assistance data – to include private sector development contributions. The Addis Ababa Action Agenda (AAAA) reaffirmed the OECD DAC proposal by calling for the development and operationalization of TOSSD in a transparent and inclusive manner. The measure seeks to help strengthen efforts to mobilize additional financial resources for developing countries the private sector (SDG17.3).</p>	High	Mid	Short



[01, 06, 07, 11]	<p><u>Relevant Data Platforms:</u> The establishment of the financial technology to support accelerated alignment of financial systems with the SDG / ESG agenda is of the utmost importance, yet also highly complex. Relevant entities other than large technology firms that can play a role includes the Global Partnership for Sustainable Development Data (incl. the UN Data4SDGs Toolbox) was launched with the mission to strengthen global data ecosystems to address the world’s sustainable development efforts. The Partnership involves a global network of governments, international organizations, companies, civil society groups, and statistics and data communities across sectors and regions that collaborate on advancing the best data, analytical skills, and ideas to solve data problems related to the SDGs with dissemination through its ‘Data4SDGs Toolbox’.</p> <p>Separately, the UN Global Pulse is an initiative for on-the-ground data collection with the explicit aim to accelerate discovery, development and scaled adoption of big data innovation for sustainable development. The Sustainable Stock Exchanges (SSE) Initiative (set up by private and international public institutions, incl. UNCTAD, UNGC, UNPRI, UNEP-FI) explores how exchanges, in collaboration with investors, regulators, and companies, can enhance corporate transparency – and ultimately performance – on ESG (environmental, social and corporate governance) issues and encourage sustainable investment.</p>	High	High	Med
[01, 06, 07]	<p><u>Relevant Data Coalitions:</u> The Financial Stability Board (FSB)’s Taskforce on Climate Related Financial Disclosures pushes for greater environmental disclosures; Measure What Matters (MWM), set up by various NGOs and Research institutes aims to contribute to data harmonization as well as support social progress measurement and data aggregation for the embedding of the SDGs by research and convening dialogues between national statistical agencies, the private sector, civil society, (inter)national public bodies, academia to integrate sustainability Goals into decision making. Similarly, the Social Impact Investing Initiative/ Impact Measurement Expert Group works towards a global social impact investing (SII) reporting framework that will provide social impact investing evidence, and ultimately provides the transparency that is needed to mainstream SII; while the UNPRI SDG Taskforce helps to understand the investment implications of environmental, social and governance (ESG) factors and to support its international network of investor signatories in incorporating these factors into their investment and ownership decisions. Part of this Taskforce’s mandate is to come to review the role the SDGs can play in shifting reporting practices “from process to outcomes”.</p>	Low	High	Long



<p><b>Box 4-1 Case Study: A Dutch SDG Investing Agenda</b></p> <p>Recognizing the need for greater collaboration between the Dutch government, Central Bank, and financial sector, a collective of 18 pension funds, insurance firms, and retail banks worked together to identify priorities for increasing SDGI in context of Dutch 'investment value chains' and areas of competitive advantage. The Agenda was presented to the Dutch Minister for Development and Executive Director of the Central Bank at the end of 2016.</p> <p>Signatories of the Agenda recognized four dominant areas of priority for advancing SDGI in The Netherlands: (1) A need for a forward-looking 'blending' agenda between government and the sector; (2) An opportunity to crowd in retail investment capital towards the SDGs; (3) The importance of an enabling data environment to support SDGI; and (4) A removal of actual and perceived regulatory barriers to SDGI in conjunction with the Central Bank.</p> <p>A global first, the Dutch SDGI Agenda was lauded as offering a shared point of reference and starting point for conversation in The Netherlands. Signatories flagged the capacity that was created to unpack barriers and solutions between sectors, and the 'honest conversation' that followed as being of particular value.</p> <p><i>Learn More?</i>  <a href="http://www.sdgi-nl.org">www.sdgi-nl.org</a></p>	<p><b>Box 4-2 Case Study: Global Reporting Initiative &amp; the SDG Compass</b></p> <p>The Global Reporting Initiative or GRI seeks to help organizations with their reporting on any ESG-related issues and/or corporate impact activities. GRI invites companies that use the framework to submit their documentation online. In 2016, it launched an 'SDG Compass' in collaboration with UN Global Compact and the WBCSD, providing guidance on ways in which businesses can internalize the SDGs in corporate strategies and reports. While not designed for investors, the Compass is expected to facilitate to uptake of SDGs in the capital markets.</p> <p>Since its launch in 1997, GRI has seen a large increase in the number of organizations using its methodology for reporting, particularly in Europe. Close to 6000 companies submitted their report in 2015.</p> <p>To help further ESG and SDG investing, GRI has committed to continue to engage it community stakeholders, and collectively further an evolution from 'process to outcomes' in their reporting practices. It has identified collaboration with government entities that are responsible for determining and furthering insight to private sector contributions to development / the SDGs as a priority.</p> <p><i>Learn More?</i>  <a href="http://www.globalreporting.org/">www.globalreporting.org/</a> <a href="http://www.sdgcompass.org">www.sdgcompass.org</a></p>
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<p><b>Box 4-3 Case Study: Financial Stability Board’s Task Force for Climate Disclosure</b></p> <p>Building on nearly 20 years of climate disclosure and growing mainstream recognition of the importance of improved transparency, the Task Force combines the authority of a leading international financial policy institution with a composition of private sector experts with a mandate to develop “voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to investors, lenders, insurers, and other stakeholders.” Launched in December 2015, the Task Force moved quickly to produce a first report that made clear that “enhanced disclosures on climate-related risks that are used by investors, creditors, and underwriters can improve market pricing and transparency and thereby reduce the potential of large, abrupt corrections in asset values that can destabilize financial markets.” The Task Force outlined a set of fundamental principles for effective disclosure – that it is relevant, specific, complete, clear, balanced, consistent over time, comparable, reliable and timely. Over 200 responses were submitted, highlighting a range of technical (e.g. short-comparability), policy (e.g. inconsistency of standards) and behavioral (e.g. short-termism) barriers to disclosure. The Task Force will deliver its Phase 2 report to the FSB and for public consultation late 2016. Recommendations are voluntary, but could have profound implications for financial and other regulations.</p> <p><i>Learn More?</i>  <a href="http://www.fsb.org">www.fsb.org</a></p>	<p><b>Box 4-4 Case Study: China Green Credit Guidelines</b></p> <p>In the face of urgent environmental challenges, policy and regulatory weaknesses in the real economy and longer term economic opportunities, China has seen the potential for embedding environmental considerations in its financial market development. Initial developments focused on improving the environmental impact of bank lending through the Green Credit Guidelines of the China Banking Regulatory Commission.</p> <p>In 2014 The People’s Bank of China established a Green Finance Task Force co-convened with the Inquiry, to develop recommendations for a comprehensive program of reforms to enhance market information, strengthen legal frameworks, strengthen fiscal incentives and institutional design.</p> <p>Some of these proposals are now being further developed under an expanded Green Finance Committee.</p> <p>China’s central bank, the People’s Bank of China (PboC), has co-convened with the Inquiry a Green Finance Task Force involving dozens of officials and market actors to draw up proposals for a green financial system. The Inquiry has also worked with the International Institute for Sustainable Development and the Development Research Centre of the State Council in research workshops and a study tour to bring Chinese and international experts together.</p> <p><i>Learn More?</i>  <a href="http://web.unep.org/inquiry">web.unep.org/inquiry</a></p>
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### Mechanisms for Addressing Supply-related Barriers to SDGI

As noted, to maximize the flow of capital towards SDG investment opportunities, asset owners above anything else need to consider the social and/or environmental impact of their investments relevant to their investment decisions: (1) Accept these factors as ‘material’ factors in their decision-making. The establishment of an enabling data environment – as outlined in the first paragraph of this Chapter – where such impacts are surfaced is important; (2) Align investor mandates and incentive systems; (3) Endeavour to align SDG products and investment opportunities with investors’ risk-financial return expectations, as well as constraints related to the liquidity, size, and emerging market exposure of their investments. Public sector interventions that were flagged most in our research related to ways in which government entities can co-invest, support capacity building efforts among investment professionals, and ways in which governments could influence investment decisions through regulations or ‘investment rules’. Box 4-5 to Box 4-6 offer illustrations.

**Table 4-2 Prevalent Public Sector Mechanisms: SUPPLY**

Type	Barrier(s)	Instruments & Illustrative Example	Capacity Requirement	Capital Requirement	Time Horizon
<b>SUPPLY DEVELOPMENT</b>					
<b>Co-Investment &amp; Risk Mitigation</b>	[O6, S1, S2, S4, S5]	<u>De-risking or Blending Instruments</u> : To trigger co-investment, governments have a wide range of instruments available to them such as provision of loan guarantees, taking first loss positions, or funding feasibility studies of investment opportunities that have yet to achieve scale. Examples of such structures are plentiful – e.g., the EU’s Jessica program, which uses a public-private partnership funding model to support large, integrated, sustainable urban development projects. Similarly, in Turkey interest-free loans were offered for renewable energy production and for projects. Illustrative facilities and investment vehicles where this approach was applied are mapped by the World Economic Forum’s Blending Toolkit. Importantly, the Business & Sustainability Commission announced advancement of a forward-looking blending agenda as one of its priorities in its 2017 publication <i>Better Business, Better World</i> .	High	High	Med
	[O3, S1, S4]	<u>Vertically Integrated Financing Facilities &amp; Fund of Funds</u> : Significant risk capital but also scaled opportunities to invest with impact are needed to mainstream SDGI. By rolling out dedicated mechanisms which allow multiple stakeholders (government, civil society, individuals and the private sector) to provide funding for pre-specified purposes, including in less investable SDGs – can help to unlock such capital and offer governments ways to trigger SDGI market growth. Notable examples are the Danish’ government and pension climate fund, and the Dutch Climate Investor 1 initiative.	High	High	Long
	[O5, I2, S2, D2]	<u>Pay-for-Success Structures</u> : In recent years, significant experimentation with so-called pay for success structures has taken place. Social Impact (SIBs) – where usually governments pay out only if interventions have been proven to be impactful. In addition, Development Impact Bonds (DIBs) were rolled out across the	High	Med	Med

	<p>world. Governments have played have stood up as 'payers', funders of SIB / DIB experimentation, sometimes even as delivery organizations. According to Social Finance, a UK-based organization, 60 impact bonds are up and running today, collectively raising \$216Mn in capital. For an overview of active SIBs/ DIBs: <a href="http://www.socialfinance.org.uk/database/">http://www.socialfinance.org.uk/database/</a>. For more on Pay for Success: <a href="http://www.payforsuccess.org">http://www.payforsuccess.org</a></p> <p><b>Insurance Products:</b> To cover off emerging market, political, or currency risk, a range of risk-management tools and insurance products can be of value. Governments – in particular given their oftentimes superior insight into the extent to which such risks exist. As an illustration, the <b>Overseas Private Investment Corporation (OPIC)</b> in the United States provides coverage of up to \$250 million for protection against some of the common risks associated with doing business in emerging markets.</p> <p><b>Capital &amp; Operational assistance grants:</b> This instrument would involve a mix of co-investment and capacity building. An example is the US Small Business Administration's new markets Venture capital Fund program, which led to the creation of six privately operated equity funds for investing in small companies in low-income communities using direct funding and operational assistance.</p> <p><b>Integration into Chartered Financial Analysts (CFA) Modules:</b> An often mentioned barrier to shifting investor decision-making is a lack of knowledge of sustainability among financial analysts. Some have suggested further integration into mandatory investor curricula is required. Exploratory efforts have been taken in the United States and Europe.</p> <p><b>Education &amp; Training:</b> Academic institutions and/or training institutions can play a meaningful role in triggering greater adoption of sustainability-focused investment practices. Programs that have received public support include Executive Impact Investing courses by the Bertha Centre for Social Innovation &amp; Entrepreneurship at the University of Cape Town which received EU funding, and the Aspen Network for Development Entrepreneurship (ANDE's) training for investment professionals which received DFI funding.</p> <p><b>Redefining Fiduciary Duty:</b> In many countries, institutional investors have a requirement to maximize financial returns in their investment decisions. For example, in the United States, the Employee Retirement Income Security Act of 1974 (ERISA) is a federal law that sets minimum standards for most voluntarily established pension and health plans in private industry to provide protection for individuals in these plans. Shifting such laws to allow for long-term risks and/or sustainability considerations in their decisions is an important factor in unlocking pension capital. In the US, an extensive lobby to change ERISA resulted in a redefinition of the legislation to manage both for profit and sustainability.</p> <p><b>Enabling Retail Investing:</b> In many developed markets, for crowd funding platforms to become an integrated part of SDG-related investments – particularly relevant in the earlier stages of enterprise financing - requires regulatory adaptation. Similarly, SDGI focused retail products are often marked as 'complex' and therefore highly burdensome to roll out to smaller investors. An example is Europe's Markets in Financial Instruments Directive (MiFID) which currently is considered restrictive as indicated by a consortium of Dutch financial institutions (2016). Proactively addressing such barriers at a regional – and as needed, national – level has the potential to increase the share of actors that invest with impact.</p>			
[O3, S4, D3]		High	High	Short
[S1, S2, S4, S5]		High	High	Long
[O1, O2, O6, I1]		Low	Low	Short
[O1, O2, O6]		Medium	Low	Med
[S1, S2, S3]		Medium	Medium	Long
[O4, O5, S2]		Med	Low	Short
<b>Capacity Building</b>				
<b>Investment Rules &amp; Requirements</b>				

<p><b>Box 4-5 Case Study: Laos Hydroelectricity from blended finance</b></p> <p>Today, the Nam Theun 2 (NT2) hydroelectric dam is generating electricity in Laos, one of Asia's poorest countries, and generating national income as well. On track to generate US\$2 billion in revenues over 25 years, the 1,070-MW plant could contribute significantly to development and poverty reduction in Laos. The US\$1.3 billion dam was jointly financed by a host of multilateral development banks, bilateral funding agencies and commercial banks from around the world. In all, 27 parties were involved, including the World Bank, Asian Development Bank and French Development Agency AFD to BNP Paribas and Fortis Bank. While a portion of the electricity generated stays at home, the bulk is exported to Thailand under a 25-year fixed-price power purchase agreement, meaning a big income boost for Laos.190 That revenue is largely reinvested in programmes to tackle poverty, boost health and education, and improve environmental management domestically. The Nam Theun 2 Power Company, whose owners include Electricité de France, the Laos government, the Italian-Thai Development Public Co Ltd. And Thai power producer EGCO, have also sought to mitigate environmental and social impacts, investing heavily in local conservation efforts as well as new housing and infrastructure on the Nakai Plateau.</p> <p><i>Learn More?</i>  <a href="http://www.report.businesscommission.org">www.report.businesscommission.org</a>, p. 79</p> <p><i>Note: Case study is a direct copy of the original case study</i></p>	<p><b>Box 4-6 Case Study: Climate Risk Pooling Mechanism: African Risk Capacity</b></p> <p>Beyond its role as a long-term investor, insurance is also being harnessed to deliver disaster risk reduction and resilience to climate shocks. The African Risk Capacity (ARC) was established as a Specialized Agency of the African Union (AU) to help Member States improve their capacities to better plan, prepare and respond to extreme weather events and natural disasters, therefore protecting the food security of their vulnerable populations.</p> <p>Many farmers in Sub-Saharan Africa, where 40pc of the economy is tied up in agriculture, cannot afford more traditional forms of insurance to cover losses if crops fail. Half the population of the V20 lacks access to external pooling mechanisms to manage disaster risks.</p> <p>Weather hedges are already offered by Axa, Swiss Re, and the state-backed African Risk Capacity which was created a parametric insurance pool to cover weather-related crises. Finance ministers from the Vulnerable 20 (V20) group of developing countries have now agreed to create a Climate Risk Pooling mechanism drawing on insurance sector expertise, pulling public sector and private sector interventions together to increase the resilience of its farmers and people.</p> <p><i>Learn More?</i>  <a href="http://web.unep.org/inquiry">web.unep.org/inquiry</a></p> <p><i>Note: Case study is a direct copy of the original case study</i></p>
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## Mechanisms for Addressing Intermediation-related Barriers to SDGI

A lack of intermediaries that can connect goods or services requiring capital to the right investors is a frequently mentioned barrier. While some interviewees noted that governments should take a back seat in addressing this barrier, a few mechanisms were flagged as possible value. Specifically, supporting the creation of intermediaries or products that connect supply and demand, using government procurement processes and pricing strategies to channel the flow of capital towards SDGIs, and ‘straight up’ regulations were frequently mentioned ways in which public sectors can play a role.

**Table 4-3** Prevalent Public Sector Mechanisms: **INTERMEDIATION**

Type	Barrier(s)	Instruments & Illustrative Example	Capacity Requirement	Capital Requirement	Time Horizon
<b>Intermediation &amp; Securitization</b>	[1, 12, 13]	<u>Investor Networks</u> : Globally, a range of networks have emerged that collaboratively identify, review, and/or deploy capital towards impactful investment opportunities. While these initiatives are infrequently public-sector led, DFIs or other government entities often provide financial support for the establishment and programming of such networks. Networks range have emerged across the spectrum of SDG investment strategies and across sub-segments of the investor landscape (e.g., Family offices, angel networks, institutional investor networks, or impact investing networks like the Global Impact Investing Network (GIIN)).	Med	Med	Med
	[1, 12, 13]	<u>Online Marketplaces &amp; Deal Platforms</u> : An often-mentioned barrier to unlock greater SDGI involves a lack of access to deals. Creation of platforms that inform investors about investment opportunities, stimulate business linkages, or create pro-poor business opportunities are often mentioned as being of value. Examples are the Social Stock Exchanges that are emerging globally, the Mission Investors Exchange, and Convergence (www.convergence.finance), a Canadian platform. Governments can play a role in feeding investment opportunities into such platforms and in funding and/or subsidizing the creation of such platforms. Both SSE and Convergence are co-funded by a number of Development Finance Institutions (DFIs).	High	Med	Med
	[1, 12, 13]	<u>Crowdfunding Platforms</u> : Crowdfunding platforms use the internet’s capacity to reduce transaction costs as a way to enable large numbers of people to invest small amounts of money (primarily through debt, but increasingly through equity as well). The website Kiva, for example, has matched 1.6 million lenders to 2.2 million borrowers since its launch in 2005, with a total of US\$949 million lent via the site. (Business & Sustainable Development Commission, 2017, p. 80)	Med	Med	Short
	[1, 12, 13]	<u>Wholesale Financing &amp; Investment Entities</u> : An often mentioned barrier to a mainstreaming of SDGI involves a lack of securitization or project structuring expertise. Some have suggested the establishment of investment entities that can play this role. Big Society Capital (BSC) – an independent social investment institution or ‘social investment wholesaler’ in the United Kingdom – is a noteworthy example. BSC was the	High	High	Med

[S4, D1, D2, I2]	<p>world's first social investment institution of its kind, established by the UK's Cabinet Office and launched as an independent organization with a £600m investment fund in April 2012. The investment fund comes from dormant bank accounts via an independent Reclaim Fund and four leading UK high street banks. BSC does not directly invest in frontline organizations, but in Social Investment Finance Intermediaries (SIFIs) which in turn invest in and support social enterprises. As can be seen with the case study in this section, ideas for the launch of an 'SDG bank' have emerged, calling both for greater involvement of local DFIs and regional banks, greater blending, and a bringing together of state of the art financial structuring expertise.</p> <p><u>Securitization (1/4):</u> Payment for Success Structures: In recent years, significant experimentation with so-called pay for success structures has taken place. Social Impact (SIBs) – where usually governments pay out only if interventions have been proven to be impactful – as well as Development Impact Bonds (DIBs) were rolled out across the world. According to Social Finance, a UK-based organization, 60 impact bonds are up and running today, collectively raising \$216Mn in capital. A repository of SIBs that are active or under development is available at <a href="http://www.socialfinance.org.uk/database/">www.socialfinance.org.uk/database/</a>.</p>	Med	High	Med
[O2, O3, S5]	<p><u>Securitization (2/4) Green and/or Corporate Sustainability Bonds:</u> Launched almost 10 years ago by leading development finance organizations (such as the EIB, the IFC and the World Bank) working with pioneering investment banks, the green bond market has expanded rapidly on the back of market-based principles and standards, strong investor demand and the introduction of regulatory frameworks in countries such as China and India. Total issuance of bonds with proceeds explicitly ring-fenced for green investment reached US\$42.9 billion in 2015 – with a further US\$34.6 billion issued in the first half of 2016. Experiments with other outcomes, e.g., Starbucks' inclusive supply chain bond, or the launch of a water bond are seen. Governments play an important role in setting appropriate standards to facilitate prudent development of these markets.</p>	Med	Med	Short
[D1]	<p><u>Securitization (3/4):</u> Development Focused Securities: This includes mechanisms as part of which aid expenditures are frontloaded (e.g., AAA-rated bonds are issued in capital markets which are backed by long-term donor government pledges, yet are used to finance aid or development programmes and outcomes), or where marketable financial instruments are secured against future revenue streams.</p>	High	Med	Med
[S2, I2, I3, D3, D5]	<p><u>Securitization (4/4):</u> Subnational Pooled Financing Mechanisms (SPFMs): SPFMs provide joint access to private capital markets (bank finance and bonds), as well as public sector funding at advantageous terms for borrowers (e.g., local and regional governments), sharing similar missions and credit characteristics, but lacking the financial scope and scale, expertise and credit history to access credit markets on their own. By providing credit enhanced financial structures, accountable management processes, and lower transaction costs, pooled financing facilities can serve as efficient, creditworthy links between small projects and sources of private capital. They mitigate debt service payment risk, diversify project risk, and provide the technical professional management required to enable sustainability and access to private finance. Critical success factor is that the composite subnational pooled financing facility is perceived as creditworthy and able to meet the investor requirements for debt service, based on the projected expenses, revenues from projects, and supplementary funds from the public sector. Towards this end, many subnational pooled financing structures include technical assistance and project preparation support. With regards to the finance of infrastructure and essential public services, sub-national pooled financing is a proven means of mobilizing private financing for local projects in developed and developing countries alike. Pooled financing has been used to finance capital expenditures of local governments related to essential public services, including water &amp; sanitation, energy, transport, telecommunications, and education. <i>Direct copy from (FMDV, 2015)</i></p>	Med	High	Short

Pricing & Procurement	[O3, I1, I3, D1]	<p><u>Procurement &amp; Pricing Social costs</u>: Governments can make and shape markets through their procurement activities. They are major purchasers of SDG-related goods and services. Black empowerment regulations as applied in South Africa – though not unequivocally considered an effective mechanism for change – are an illustration of this method. Incorporating sustainable development metrics into value-for-money assessments of public procurement can be a powerful signal of government commitment to sustainable development and a major opportunity to jump-start new markets for sustainable production. In the climate realm, countries are using different approaches to the problem of how to encourage firms to reduce carbon emissions. These include carbon pricing, cap-and-trade, feed-in tariffs, and other regulatory instruments. While progress may be slow, the issues are well understood. Consequently, many multilateral development banks, for example, have implicit carbon prices that they use for determining least-cost investments. Harmonizing these, making them transparent, and reviewing processes of consultation in setting the prices will help further the uptake of SDG factors in decisions. <i>Direct copy from Kharas &amp; McArthur (2016)</i></p>	Med	High	Med
Capacity Building	[O6, O7, D5, S2]	<p><u>Technical Assistance &amp; Advisory Services</u>: As noted earlier, many investment professionals lack the expertise needed to set up the right funds or structures to invest with impact. Technical Assistance to first time fund managers or asset managers – as is done by a select set of DFIs and development ministries can help to strengthen intermediation in the market.</p>	Low	High	Med
Regulation	[D1, D3, D5] [O3, S4, D1] [O1, O3, I1, S4, D1, D4, D5] [S4, I1, D1]	<p><u>International agreements on SDG investments</u>: Regional SDG investment compacts can help spur private investment in, for example, cross-border infrastructure projects and build regional clusters of firms.</p> <p><u>Regulations promoting broad economic inclusion</u>: The broad-based black economic empowerment Act in South Africa (see above) which mandates that all government procurement contracts give preferential treatment to black-owned businesses</p> <p><u>Political prioritization and commitment to specific targets</u>: To build a market requires confidence that the target is solid and will remain over time;</p> <p><u>Tax credits and exemptions</u>: Realigning rewards in financial markets to favour investment in SDGs; The green Funds scheme in the Netherlands, which provide a tax credit for investors in certified investment funds targeting environmental projects; The 5-10 year tax break in Indonesia is an example of such structures, as is the Low Income Housing Tax Credit (LIHTC) in the United States. See also the Ex Tax example below.</p>	Med	Low	Med

Source: This table is bringing together the insights from interviews and various publications, including Thornley, Wood, Grace, & Sullivant (2011) and UNCTAD (2014)



<p><b>Box 4-7 Case Study: Convergence: ‘Blending Global Finance’</b></p> <p>Convergence – a Canadian non-profit organization was set up in 2016 to offer a platform that would bring together public and private investors for blended finance deals in frontier and emerging markets. The idea is that by leveraging philanthropic capital and public funding, the private sector will be able to join and invest alongside. The potential of leveraging is thought to potentially increase overall investment tenfold. The platform allows investors to search for deals and/ or parties that they would like to team up with. In this way, the networks of SDG investors is broadened and the selection and screening process of credible potential partners simplified. In addition, it helps in structuring blended finance deals and helps with the overall investment process. Apart from serving as a matchmaker Convergence also wants to contribute to design and realization of innovative financial products that help in introducing a new set of investors to investments that they would touch under normal conditions because they are deemed too risky of complex for the investor. The funders of Convergence include the Canadian government, the Citi Foundation, and Ford Foundation. The platform has the potential to become a leading pipeline and marketplace for blending, an increasingly popular mechanism for accelerating SDGI. Challenges that lie ahead is the platforms to truly act as a matchmaker and connector between actors and sources of capital.</p> <p><i>Learn More?</i>  <a href="http://www.convergence.finance">www.convergence.finance</a></p>	<p><b>Box 4-8 Case Study: SDGI Wholesale Bank Idea</b></p> <p>The scale-up of private finance will only occur if SDG investments can achieve commercial, risk-adjusted returns. To date, the lack of such “bankable” projects/opportunities at scale has been a major impediment to greater investment. Against this background, the idea for an SDG intermediary has been proposed as a potential mechanism for scaling SDGI. For example, a version of the Aligned Intermediary (<a href="http://www.alignedintermediary.org">www.alignedintermediary.org</a>), an investment advisory firm focused on mobilizing large-scale institutional capital cost-effectively for climate change solutions, could be applied to a broader SDG context, i.e., to the establishment of an <i>SDG intermediary</i> that would address both institutional and operational barriers by developing and expanding bankable opportunities that address the SDGs. While operating within commercial norms, the new entity would look to identify, structure, and develop projects and investment opportunities that would otherwise not happen. The organization would look to (a) work under a robust governance structure that ensures the development impact of projects; (b) attract top talent employing a commercially self-sustaining business model; (c) leverage maximum private investment into critical SDG projects and issue areas; (d) serve as a trusted intermediary to both public and private sector clients, and across international and local projects; (e) develop blue-print transactions and standardized practices which can be replicated across geographies/issue areas avoiding the inefficiencies of “re-inventing the wheel”.</p> <p><i>Learn More?</i>  Further announcements will be made in due time.</p>
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<p><b>Box 4-9 Case Study: SDG Blockchain Lab &amp; ‘SDG Coins’</b></p> <p>Blockchain or mutually distributed ledger systems are creating new ways of keeping records securely and across multiple locations. All users “hold” the ledger in a distributed fashion, transforming the role of trusted third parties. Already, the technology is being used for applications as diverse as land ownership registries, individual identity records, and custody of natural assets like fish or forestry products. The great differentiator in these solutions is the integration of multiple outcomes of economic, social and alignment of values combined with impact measurement in a single intervention instrument; something only possible through the power of blockchain. This sits firmly in the exciting crossover between Social and Fintech innovations that is illuminating all aspects of our lives. In January 2016, an SDG Blockchain Lab was launched by universities from across the world, including the University of Northampton, John Hopkins University and Tsinghua University. The initial CCEG Blockchain Lab projects combine the United Nations Sustainable Development Goals (SDG), with Fintech solutions for <a href="#">Regional and City Impact</a>, Care Givers and <a href="#">Religious Beliefs</a>. The collective is working towards launching an ‘SDG Coin’. The coin would be designed to offer greater liquidity surrounding the broader SDGI agenda. While the solution is not up and running yet, finding ways to assign non-financial values to initiatives and investment would help to unlock greater amounts of private sector capital.</p> <p><i>Learn More?</i> Link <a href="#">HERE</a></p>	<p><b>Box 4-10 Case Study: Starbucks Inclusive Supply Chain Bond</b></p> <p>Starbucks is a global retailer and roaster of coffee. It has over 20,000 stores in operation. As part of its public engagement strategy the company raised \$ 500m with its first corporate sustainability bond in 2016. This capital will be invested in a way as to benefit the environmental sustainability and supply chain outreach programs. The overall aim of these programs is to target and actively improved the environmental but also the social circumstances of the raw materials sourcing for Starbucks. The capital is thus not only used to introduce certification schemes which guarantee environmentally and ethically sound production practices but also enables the distribution of short and long term farm financing loans. This was first corporate sustainability bond in the US. The bond was “significantly oversubscribed” signalling a large appetite for this type of financial product. (Chasan, 2016) For the validation of the impact component of the bond, the ESG research company Sustainalytics was brought on board. They will provide independent monitoring and verification of the (expected) social and environmental impacts generated via the capital raised through this sustainability bond. (Starbucks, 2016)</p> <p><i>Learn More?</i> <a href="https://news.starbucks.com/news/starbucks-issues-the-first-u.s.-corporate-sustainability-bond">News.starbucks.com/news/starbucks-issues-the-first-u.s.-corporate-sustainability-bond</a></p>
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**Box 4-11 Case Study: Ex'Tax, Shifting Taxation from Labour to Natural Resources**

The Ex'tax Project is an independent think tank focusses on the role of tax in the transformation to inclusive and circular economies. The latest study, in cooperation with Deloitte, EY, KPMG Meijburg, PwC, Cambridge Econometrics and Trucost, demonstrates that a tax shift from labour to natural resource use aligns fiscal systems with the SDGs. The study presents a fiscal strategy for inclusive and circular economies in the EU and demonstrates that switching taxes from labour to pollution and resource use could increase GDP levels by 2%, create 6.6 million more jobs and cut carbon emissions by 8.2% by 2020. The total value added of the scenario for the EU-27 in terms of financial capital, social capital and natural capital is estimated at over € 1,100 billion over five years. ([www.newernewplan.com](http://www.newernewplan.com))

With the World Business Council for Sustainable Development (WBCSD), CDP, Interface and other businesses, The Ex'tax Project is developing a tool that allows detailed analysis of the impact of a tax shift on sector and business level. Lower labour taxes boost business models that apply human capacities and talents, while taxation of pollution and consumption stimulates sustainable resource use and innovation. A shift in financial incentives enables growth based on human capital rather than the extraction of natural resources.

*Learn More?*

Link [www.ex-tax.com](http://www.ex-tax.com)

### Mechanisms for Addressing Demand-related Barriers to SDGI

A lack of investable opportunities is a frequently mentioned barrier to mainstreaming SDGI. Especially institutional investors have flagged this as their dominant concern. The intrinsic investability of individual investment clusters needs to be considered in understanding this barrier. A lack of social enterprises that operate at scale and are able to meet threshold investment levels is an area where interviewees do see a role for governments. Specifically, they flag Technical Assistance (TA), incubator, and accelerator programs as being valuable mechanism to support the emergence of markets for social good. Importantly, increasing attention is given to a pooling of acceleration resources (see

Separately, recognizing that country level and/or currency risks significant affect risk perceptions (and therefore return requirements) some flag the value of facilities and/or insurance schemes as part of which government entities or DFIs cover off such risks, thereby enabling a crowding in of capital that would otherwise be out of reach. Prevalent mechanisms to address these risks are described in previous sections. And finally, some interviewees flag the role governments can play in triggering demand for certain products or services. These mechanisms are outlined above with '*Procurement & Pricing*'.

**Table 4-4 Prevalent Public Sector Mechanisms: DEMAND**

Type	Barrier(s)	Instruments & Illustrative Example	Capacity Requirement	Capital Requirement	Time Horizon
<b>DEMAND DEVELOPMENT</b>					
Enabling Corporate Structures	[02, 03, 05, D1]	New corporate forms, e.g., <i>Benefit Corporations</i> : Enabling corporate forms that recognizes the dual purpose of companies maximizing for profit and purpose is frequently mentioned as a prerequisite for market maturation. By legally recognizing such entities, concerns related to investors' fiduciary duty (see SUPPLY) will be more easily addressed, while also from an intermediation perspective, investors will be more able to identify those companies that share their values and social mandates. It also helps to increase market standards and insight. Governments play a critical role in recognizing and rolling out such corporate forms. While the exact shape of such form will differ per country, "Benefit corporations" – an initiative by a US organization called B Lab – have emerged globally, while for example in the UK "Community Interest" companies are now recognized in the UK.	Med	Low	Long
Delivering Large Scale Local	[12, D2]	<u>Project Development</u> : Governments can also play a role as delivery organizations of products and services. This is true in delivering health services, or education. Programs can also relate to (semi-)government entities delivering large infrastructural programs. By becoming an active partner in the roll out and establishment of sustainable projects, the absorptive capacity of the market can be significantly increased.	High	Med	Med

Programs	[D1, D2]	<p><u>Origination &amp; Preparation</u>: Preparing and originating “bankable and sustainable” products, projects, and services can help increase the weighted average cost of capital, promote access to sustainable products locally, and increase the overall sustainability of markets. (Kharas &amp; McArthur, 2016)</p>	Med	Med	Short
	[D2]	<p><u>Education &amp; Job Creation Programs</u>: Although this mechanism includes a wide range of potential instruments for increasing the quality and effectiveness of one’s workforce, we did want to omit such programs in our list of increasing the absorptive capacity of markets and overall demand for capital. Examples include the ILO’s Better Work Programme (Business &amp; Sustainable Development Commission, 2017, p. 87)</p>	Med	Med	Med
	[O7, I1, D1]	<p><u>Research &amp; (Pre-) Feasibility Support</u>: Funding and/or investment targeted at stimulating innovation, research, and development, or at conducting feasibility studies. Particularly prevalent in renewable energy, infrastructural investment, yet flagged as a priority across earlier defined investment areas. Illustrative examples include a National High-tech R&amp;D (863) Program in China, focused on high-priority economic sectors for private capital, including in the areas of environmental protection and renewable energy.</p>	High	High	Med
Capacity Building	[O6, O7, D2]	<p><u>Incubators &amp; Accelerators</u>: Hundreds of accelerators around the world trying to grow early-stage ventures into growing businesses with the potential to scale, and helping these companies to become ‘investor ready’. Accelerators have some distinct characteristics: They tend to be limited in duration; work with cohorts of early-stage entrepreneurs; and aim to facilitate connections with potential investors. While rigorous research on the effectiveness of acceleration methods has not kept pace with the proliferation of these programs, investors, development agencies, and governments have signaled excitement with the prospects of these models to spur innovation, solve social problems, and increase employment opportunities in emerging economies. Ongoing research into the effectiveness of accelerators globally is available at <a href="http://www.andeglobal.org/accelerators">www.andeglobal.org/accelerators</a></p>	Low	Med	Short

Source: This table is bringing together the insights from interviews and various publications, including Thornley, Wood, Grace, & Sullivant (2011) and UNCTAD (2014)

<p><b>Box 4-12 Case Study: Benefit Corporations: Managing for Profit and Purpose</b></p> <p>Nonprofit organization B Lab has verified and certified over 2000+ companies or “benefit (B) corporations” – in over fifty markets – that meet the highest standards of social and environmental performance, public transparency, and legal accountability. An attractive part of the model is that companies can do a self-assessment – or ‘take the test’ to see where they stand in relation to the impact that their operations have on society. Interestingly, today, not only SMEs have gone through the assessment, a number of multinational corporations have begun to evaluate their operations against the B standards. The establishment of a corporate form that holds its shareholders and management accountable for their impact and financial success, has added legitimacy to a new way of doing business, and has helped to trigger a conversation around the role of capital markets and corporations in society. Other than having built a global community of certified B Corporations, B Lab also helps tens of thousands of businesses, investors, and institutions to manage their impact using the <a href="#">B Impact Assessment</a> and <a href="#">B Analytics</a> to manage their impact with as much rigor as their profits.</p> <p>Across the world, regulators have begun to formally recognize new corporate forms. This has helped to increase the legitimacy, create transparency around the intentions of a given business, and accelerate adoption and scaling efforts.</p> <p><i>Learn More?</i></p> <p><a href="http://www.bcorporation.net">www.bcorporation.net</a></p>	<p><b>Box 4-13 Case Study: Village Capital: Accelerating Social Enterprise Growth</b></p> <p>Village Capital is a seed-stage accelerator that runs programs for entrepreneurs in impact-oriented sectors. The organization finds, trains, and invests in social entrepreneurs using peer-selection, a method that offers an inclusive alternative to conventional due diligence.</p> <p>Since its launch, VilCap Investments is has made 67 investments and reached over 600 social ventures across six continents. VilCap portfolio companies have a 90% survival rate, raised over \$80 million in additional capital, generated over \$19 million in revenue, and served over two million beneficiaries, creating 7,500+ jobs. Village Capital has published a review of its model and activities online in collaboration with Emory University and the Aspen Network for Development Entrepreneurs (AND). Further evidence is needed to determine the optimal design of accelerator models (See also Box 6-14: IFC Startup Catalyst.</p> <p>The vast majority of VilCap’s partners and funders include foundations and civil society organizations, regional, national, and municipal governments. Large corporations have begun to play an active role in accelerating high-impact SMEs through their corporate venturing activities, while governments all over the world have begun to launch local startup environments and accelerators. Impact accelerators, especially if rolled out in partnership can be particularly effective.</p> <p><i>Learn More?</i></p> <p><a href="http://www.vilcap.com">www.vilcap.com</a></p> <p><a href="http://www.andeglobal.org/?page=Accelerators">http://www.andeglobal.org/?page=Accelerators</a></p>
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<p><b>Box 4-14 Case Study: IFC Startup Catalyst</b></p> <p>The IFC's Startup Catalyst (ISC) is designed to address ecosystem gaps in emerging markets. It seeks to (a) respond to the issue of underdeveloped ecosystems (since most gaps are evident at early- and mid-stage financing rounds), and (b) help emerging market economies position their entrepreneurial base for growth by enabling associated ecosystems. ISC – given its focus on scaling and increasing the effectiveness of accelerators globally, has a particular focus on technology investments, and ultimately takes a 'lifecycle' approach to its financing activities, facilitating connections to subsequent sources of capital. Since its launch in August 2016, it has \$7.2 million of approved capital, \$30 million envelope committed, and an additional \$11 million (for a combined \$18.2 million) anticipated by Q4 FY17. It has completed preliminary assessments of 100+ seed stage funding mechanisms since its launched, and indicates having a strong pipeline for further deals, including ~15 entities (translating to ~\$30 million investments) on radar. The ISC team engaged with multiple groups within IFC (e.g. Donor Partner Relations, Digital Financial Services, SME Ventures, Private Sector Window / Blended Finance, etc.) and across the World Bank Group (e.g. Innovation &amp; Entrepreneurship team within T&amp;C GP, F&amp;M GP, etc.) to deliver on ISC objectives. The programme gives national governments the opportunity to collaborate with a global community of venture capital specialists, and contributing to the establishment of a venture ecosystem.</p> <p><i>Learn More?</i>  <a href="http://www.ifc.org">www.ifc.org</a> (search: Startup Catalyst)</p>	<p><b>Box 4-15 Case Study: Sustainable Production Through Supply Chain Finance</b></p> <p>The Rockefeller Foundation (RF), in partnership with the Initiative for Smallholder Finance (ISF), intends to create a sustainable supply chain financing facility that will align incentives for suppliers around the environmental, labor, and safety standards that are increasingly being required by multinational buyers. The initiative takes advantage of the delivery capacity of MNC supply chains, targeting specific needs that surround these supply chains.</p> <p>The key characteristic of the financing model is a pricing scheme that is tiered to align with a sustainability standard, such as those used by the Better Cotton Initiative, FairTrade, or the Higg Index. The concept is akin to Levi's partnership with IFC, in which the cost of factoring financing is tiered according to the sustainability ratings of suppliers.</p> <p>The Rockefeller Foundation is interested in how this concept could be extended deeper into the supply chain, beyond first-tier suppliers, and ideally in support of smaller enterprises. The model will initially be piloted in the cotton and apparel value chain, where a number of leading apparel brands are struggling to meet commitments to ambitious sustainable cotton sourcing targets. Over time, the model could be expanded or replicated in other global commodities—including crops that smallholder farmers focus on, such as palm oil, rubber, dairy, fruits, soya—and potentially other supply chains, like electronics.</p> <p><i>Learn More?</i>  <a href="http://www.rockefellerfoundation.org">www.rockefellerfoundation.org</a></p>
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As noted earlier, governments are considered critical shepherds, orchestrators, and accelerators of SDGI action, and are looked at to play an active role in determining effective roadmaps towards sustainable financial systems and SDGI.

Mechanisms that are flagged as being of particular importance, involve general awareness raising; proactive de-risking or blending strategies by the public sector; ensuring regulatory alignment with the SDGs, in particular as it relates to private sector infrastructure investment; and the role governments have in ensuring market accountability and appropriate pricing of externalities into goods and services.

Bold ideas for government intervention included a global push to surface the 'true cost' of externalities using big data technologies (supply / cross-cutting); the establishment of an 'SDG wholesale bank' that would provide risk capital as well as a mix of asset management and product structuring capabilities (intermediation); and the origination and roll-out of 'investible and sustainable' projects surrounding specific outcomes at scale (demand).



## CONCLUSIONS AND RECOMMENDATIONS

“We live in tumultuous times. Now, more than ever, embracing a shared agenda that will lead towards a sustainable future for all should be a priority – for citizens, institutions, and the economic system we are part of”. This is how one of our interviewees underlined the need for and urgency of a forward-looking SDG investing agenda. Yet, achieving a new normal in capital markets by shifting towards sustainability oriented financial systems requires exactly that: A systems approach, where every node and every lever that is available in the toolkit of public sector institutions should, at a minimum, be considered.

The business case for considering sustainability and the Sustainable Development Goals (SDGs) is becoming increasingly clear. In January 2017, the Business & Sustainable Development Commission (2017) concluded that sustainable business and investment can unleash at least twelve trillion dollars in new market value while also repairing today’s economic system. A growing number of investors and corporations recognize a market opportunity for SDG investing.

The added value of the SDG Framework in maximizing investment in social and/or environmental outcomes remains to be proven. When probed, interviewees remarked that the 2030 Agenda, above anything else, will help create a sense of urgency around sustainability. They added that the framework forms a powerful lever for improving communication, coordination, and collaboration across sectors, geographies, and impact domains, and ultimately generate greater transparency and accountability.

Furthermore, while investors welcome mechanisms and innovative interventions for stimulating SDGI, they also flag the importance of stable and sustainable financial systems as a precondition to SDGI success. Ensuring stable local markets and minimizing the (perceived) risks of investing – most notably in emerging and developing markets – should therefore take a dominant role in any public sector SDGI activation agenda;

Barriers to SDGI success were large in number, and ranged from a lack of awareness or a shortage of risk capital, to the need for a more ‘connected’ marketplace, capability gaps, and a lack of insight into the inherent negative and positive contributions associated to investments.

Not every barrier or mechanism for triggering greater SDGI requires government involvement. As a number of interviewees highlighted, concerted industry level or civil society action can oftentimes work just as – if not more – effectively. A few key success factors for public sector interventions emerged from our research:

- Taking advantage of the 2030 Agenda as a shared framework, making sure checks and balances are in place to guide its adoption, yet taking a practical stance in adopting the SDGs as a framework of choice is critical. Many warn against a too rigid application of the framework which could limit market growth, yet warn for the risk of ‘SDG washing’ or an SDGI bubble if positive contributions to the SDGs fail to be validated on transactions;

- Given the global nature of the SDGs, governments play a critical role in connecting the dots and advancing shared agendas that are adjusted to local contexts but extend beyond (sub-)national borders. This is particularly true for priorities related to the establishment of an enabling data and regulatory environment, where experts flag that rapid progression towards a single measure for development impact would greatly help the mainstreaming of SDGs (Morris, 2017);
- Public sector entities – both in originating and destination regions - play a critical role in de-risking SDG investment opportunities and thereby catalysing greater SDGI. However, integrating approaches and sources of capital is complex. (Morris, 2017). Ensuring that the right project financing and blending capabilities are in place across markets is key to achieving SDGI and ‘blending’ success (Samuels, 2016);
- Taking a portfolio approach to SDG investing is considered critical not only for private sector investors, but also for IFIs and DFIs that seek to advance the SDGs and/or development outcomes. This allows investors to make trade-offs across a larger number of investments and more effectively optimize their ‘risk-return-impact frontiers’.
- Putting existing clusters of competitive advantage or existing ‘value chains’ of strength (e.g., agriculture, water, healthcare) at the heart of public sector SDGI agendas will help unlock greater market value and impact. Some have suggested the need for ‘global dealrooms’ where SDG (co-)investments can be made with greater ease;
- Effective and ongoing governance of the 2030 Agenda is key in signalling the importance of the Agenda. Setting clear interim timetables for action is mentioned by a few experts and policy makers as being critical to ensure sufficient progress against the 2030 Agenda is made. (Kharas & McArthur, 2016) Some suggested extending the Nationally Determined Contributions (NDCs) that were made related to the Climate Change agenda to include social outcomes as well. Many flag that today’s information systems and the data that is needed to establish a thriving SDGI market are lacking today and that further improvements are needed;

As for the United Nations, many flag its role in raising the Agenda’s profile Agenda as well as in ensuring appropriate governance mechanisms and milestones are in place in support of SDGs. They commend its convening power and the contributions the UN can make in forging new norms, and triggering action at a (sub-)national, regional, and global level.

## APPENDIX 1 | MARKET CONSULTATION & INTERVIEWEE OVERVIEW

This research is generated based on secondary research as well as a consultation with over 30 investors and experts operating in the SDG investing market. Interviews were conducted to be able to add investor voices to our research and did not seek statistical significance. To achieve greater representation across investor segments, geographies, and impact areas further research is needed.

Organization	Name	Position
<b>Abraaj Group</b>	Pradeep Ramamurthy	Managing Director
	Saqib Rashid	Principal
<b>Anthos Asset Management (Formerly) Children's Investment Fund Foundation (CIFF)</b>	Margot Quagebeur	Impact Investing Manager
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<b>Brookings Institute</b>	John McArthur	Author and expert
<b>Impact Investing Australia</b>	Rosemary Addis	Chair & Founder
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<b>SIFEM</b>	Julia Balandina-Jaquier	Expert
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<b>United States Council for International Business (USCIB)</b>	Norine Kennedy	VP Strategic International Engagement, Energy & Environment
<b>World Economic Forum</b>	Philip Moss	Head of SDIP & Blended Finance

## APPENDIX 2 | LEADING TOPICAL KNOWLEDGE HUBS

While not comprehensive in nature, the authors of this report benefited greatly from the aggregated perspectives and content of the following entities and institutions:

- **Business & Sustainable Development Commission (BSDC)** – <http://businesscommission.org> – The Commission was launched with leadership from within the UN and by companies like Alibaba, Merck, Safaricom, Temasek, and Unilever. Its 2016 publication *Better Business, Better World* signified a considerable contribution to the SDGI agenda.
- **Centre for Global Development (CGDEV)** – [www.cgdev.org](http://www.cgdev.org) - Leading global institution as it relates to the developing finance agenda. Publishes reports and organizes events frequently.
- **Brookings Institute** – [www.brookings.edu](http://www.brookings.edu), and the **Center for Global Development (CGD)** – [www.cgdev.org](http://www.cgdev.org) - Experts at these institutions have published multiple reference publications related to the Sustainable Development agenda, which can be useful for government entities determining their public sector roadmaps for maximizing SDGI.
- **UN Global Compact (UNGC)** – [www.unglobalcompact.org](http://www.unglobalcompact.org) - UNGC has been helping companies, investors and stock exchanges to integrate ESG issues into their business practices, including through the launch of the Global Compact 100 index of responsible companies.
- **UN Environment Program (UNEP) Finance Initiative & Inquiry** – [www.unep.org/inquiry](http://www.unep.org/inquiry) - UNEPFI has partnered with the private sector since 1992. Its recent Inquiry into the Design of a ‘Sustainable Financial System’ provides a wealth of insights and concrete examples of sustainable development initiatives and government interventions.

## APPENDIX 3 | DETAILED REVIEW OF THE SDGI MARKET

Data for market estimates originated from the 2016 Global Sustainable Investment Review of the GSIA (2017) which in turn is based on the annual reports of the SIFs, i.e. Eurosif (2016), USSIF (2016), JSIF (2015, 2016), RIA (2015), RIAA (2016a) and (2016b) as well as ASRIA (2014). The data from these sources were complemented by data from BCG (2016) on the size of total AuM across the globe. Please note that the influence of changes in the exchange rates can have significant influence on the estimation of SDGI initiatives when viewed in US\$. This also explains in part the large differences in the estimations on current global AuM.

The estimation of Responsible Investment in figure 1-2 is based on the activity in negative/exclusionary screening, norms-based screening, and corporate engagement. Sustainable investing is captured by the activities in the positive/best-in-class-screening, ESG integration and sustainability themed investing.

Estimation of size of private investors can be summarized as follows: The size of pension fund sector was derived from Willis Tower Watson (2016), The estimation of the insurance companies is based on Aschkenasy (2014), the SWF Institute (2016) is the source of the size of SWFs and UBS and Cambden Wealth (2016) and DHR (2012) form the basis of the estimations for family offices and Endowments. Please note that the later is a really rough estimate as clear data is currently missing. The data on DFIs (left) originate from the annual report of the EDFI and OPIC. For the MDBs (right) data originates from annual reports – FX rates originate from IMF and Federal Reserve of St Louis.

	Total portfolio	(x million US\$)
BIO	622	
BMI-SBI	22	
CDC	5,998	
COFIDES	865	
DEG (KFW)	7,191	
FINNFUND	602	
FMO	9,256	
IFU	572	
NORFUND	1,573	
OeEB	973	
PROPARCO (AFD)	5,623	
SIFEM	555	
SIMEST	2,097	
SOFID	11	
SWEDFUND	376	
EDFI (EU)		36,336
OPIC (USA)		21,500
<b>Total</b>		<b>57,836</b>

	Year	Local Currency	FX	Total Assets (x million US\$)
IFC	2016	US\$ 90,434	1.00	90,434
ADB	2016	US\$ 132,500	1.00	132,500
IDB	2016	US\$ 122,616	1.00	122,616
AFDB	2015	UA 25,347	1.40	35,528
EBRD	2015	€ 55,026	1.10	60,529
IsDB	2015	ID 16,097	1.39	22,307
EIB	2015	€ 570,617	1.10	627,679
<b>Total</b>				<b>1,091,592</b>

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