

MEASURING EFFECTIVENESS:

Roadmap to Assessing System-level and SDG Investing

MARCH 2018

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Supplemental Appendices

Disclosures

Support for The Investment Integration Project (TIIP) research was provided by the Investor Responsibility Research Center Institute (IRRCi).

TIIP's mission is to help investors understand the feedback loops between their investments and the planet's overarching systems – be they environmental, societal or financial – that make profitable investment opportunities possible. TIIP also aims to provide these investors with the tools to manage the impacts of their investment policies and practices on these systems. Through this document and the *Measuring Effectiveness: Roadmap to Assessing System-level and SDG Investing* report it relates to, we hope to help those with a long-term investment horizon more consciously visualize and articulate how these systems-level considerations are being incorporated into daily practice.

The IRRCi is a nonprofit research organization that funds environmental, social and corporate governance research, as well research on the capital market context that impacts how investors and companies make decisions.

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Measuring Effectiveness: Roadmap to Assessing System-level and SDG Investing – Supplemental Appendices

This is a companion document to the report *Measuring Effectiveness: Roadmap to Assessing System-level and SDG Investing*. It contains a series of appendices that support and provide additional context for and information about the concepts discussed in the report.

Appendix A provides more information on system-level investing through listing and responding to frequently asked questions about the approach including “*How is system-level investing different from ESG integration and impact or responsible investing?*” and “*Who is currently engaged in system-level investing?*”.

Appendix B describes the tools of intentionality—investor approaches to generating system-level influence—and provides examples of real-life investor use of each tool to pursue system stabilization and influence goals.

Appendices C, D and E contain summary information on select of the various measurement frameworks, investor approaches, and related resources that TIIP examined to inform the roadmap presented in Section 1 of the *Roadmap to Assessing System-level and SDG Investing*. Appendix F addresses institutional investor skepticism about system-level investing raised during research interviews.




Appendix G provides details on the project this report relates to and information about the research methods.

APPENDIX A: SYSTEM-LEVEL INVESTING FREQUENTLY ASKED QUESTIONS

1. WHAT IS SYSTEM-LEVEL INVESTING? WHAT IS A “SYSTEM”?

System-level investors believe that the health of the world’s overarching environmental, social, and financial systems affects investment returns, and that investors’ actions can positively or negatively impact the health of these systems. They understand that they can adopt policies and practices that will help manage risks and rewards arising at system levels, and that successful management of these risks and rewards help enhance and preserve the well-being, reliability, and predictability of the environment, society, and financial system upon which their investments in large part ultimately depend in the long term.

“Systems” consist of those common-pooled environmental, societal, and financial resources on which investors depend. When healthy, systems facilitate long-term wealth creation; when unhealthy, they negatively affect long-term returns.

<p>Environmental system</p> 	<p>The ecosystems that make up the entirety of our natural world – for example, the oceans, the atmosphere, water, metals, minerals.</p>
<p>Societal system</p> 	<p>A series of societal constructs such as equality, well-being, knowledge, theories of law and other abstract elements that serve as the foundation for society.</p>
<p>Financial system</p> 	<p>The laws, contracts, technology, as well as the theoretical and political ideas around which our complicated financial systems have been built.</p>

2. WHY SHOULD INVESTORS ENGAGE IN SYSTEM-LEVEL INVESTING?

Systems are important, *really* important. Finance and investment are built on the predictability and reliability of the environment, society, and the financial system. Stable systems promote healthy market returns; unstable systems lead to reduced or negative or volatile market returns.

System-level factors can affect entire markets, and hence all portfolios, in substantive ways. Investors on the whole benefit from the performance of the overall markets, driven in large part by the performance of the economy. It is this market “beta”—swings in benchmark performance against which investors’ performance is often measured—that is the primary source of long-term returns, rather than the “alpha” that individual investors generate by outperforming benchmarks.¹ Alpha is a zero-sum game, difficult for any single manager to generate consistently and impossible for more than half of all managers to claim at any one time. Market beta represents an extra advantage to investors through the creation of long-term value and benefits them individually and collectively. Consequently, investors have a compelling reason to consider environmental, societal and financial systems-level issues as part of their investment processes while also grappling with the integration of ESG factors in portfolio management.²

Take climate change, for example. Researchers and industry organizations assert that there is considerable range of unhedgeable—that is to say, unavoidable—consequences for portfolios of climate change under various scenarios and that is a material sustainability performance indicator for nearly every single industry that makes up the economy (73 of 79).³ The long-term performance of investments in these industries is increasingly at risk as climate change accelerates. As one of the largest emitters of greenhouse gas, the coal industry has already paid a substantial price, which major coal mining firms having to seek bankruptcy protection. As another example, during the 2008 financial crisis, few investors understood how mortgage defaults in one country could, through collateralized debt obligations, wreak devastating effects on the global financial system. All asset classes suffered during the crisis, with losses across the board that were difficult for any investor to avoid.

¹ James Hawley and Jon Lukomnik. “The Long and Short of It: Are We Asking the Right Questions? Modern Portfolio Theory and Time Horizons”. Unpublished working paper. May 2017.

² Ibid.

³ University of Cambridge Institute for Sustainability Leadership. *Unhedgeable Risk: How Climate Change Sentiment Impacts Investment*. November 2015; Lydenberg, Steve, Jean Rogers, and David Wood. *From Transparency to Performance: Industry-Based Sustainability Reporting on Key Issues*. The Initiative for Responsible Investment (IRI), a project at the Hauser Center for Non-Profit Organizations at the Harvard Kennedy School of Government.

3. HOW IS SYSTEM-LEVEL INVESTING DIFFERENT FROM IMPACT OR RESPONSIBLE INVESTING OR STRATEGIES SUCH AS ESG INTEGRATION?

An increasing number of investors integrate environmental, social and governance (ESG) considerations into their risk assessments and pricing valuation of individual securities to mitigate portfolio risks. Many socially responsible investors and impact investors understand the importance of the environmental and social consequences of their investment decisions and use various conventional investment activities to pursue related goals while also integrating ESG considerations into portfolio risk management.

Beyond managing non-financial portfolio-level impacts and using ESG factors to manage portfolio-level risk, system-level investors take additional action to generate measurable influence on the broader environmental, societal, and financial systems within which they operate; that is, to convince stakeholders that a system has a relevant impact on investment and that investors can act in discrete and tangible ways to determine that impact, or to alter prevailing financial community or societal norms in a way that promotes system health and resilience. These investors deliberately—or *intentionally*—employ a combination of conventional investment strategies and other system-level investing tools that embrace system-level investing to address big global problems or harness global trends while achieving competitive returns.⁴

4. WHO IS CURRENTLY ENGAGED IN SYSTEM-LEVEL INVESTING?

Institutional investors of all kinds, but namely those with long-term investment horizons, are engaged in system-level investing. In 2016 and 2017, TIIP conducted in-depth analyses of the investing strategies of a diverse set of 100 asset owners and managers and found that most of them integrate system-level considerations into their investment approaches to some extent. The analyses examined large and small investors of various types (e.g., pension plans, sovereign wealth funds, insurance companies, endowments, development finance institutions, diversified financial services providers, and responsible or impact investors), including boutique or lesser-known and emerging investors (e.g., Circularity Capital, Saron Fund, Arjuna Capital) and those well-known for their leadership in a variety of arenas (e.g., Allianz, Bank of America Global Wealth and Investment Management, BlackRock, CalPERS and CalSTRS).

⁴ William Burckart, Steve Lydenberg, and Jessica Ziegler. *Tipping Points 2016: Summary of 50 Asset Owners' and Managers' Approaches to Investing in Global Systems*. The Investment Integration Project. 2016.

APPENDIX B: THE TEN TOOLS OF INTENTIONALITY

Tool	Definition	Investors that use the tool:	Example
Additionality	(1) Adding to the value of the societal and environmental systems, while also creating economic value, in ways that would not otherwise be funded; (2) investing in underserved regions or populations; or (3) funding projects that are not currently being funded by any others and are in effect breaking new ground and creating new markets.	<ul style="list-style-type: none"> • Primarily using holdings activities (e.g., security selection and portfolio construction and targeted investment programs), address social and environmental capital needs that might otherwise go unfulfilled to reduce economic instabilities and promote "healthy" growth • Diminish economic inequalities and fund a diversity of enterprises that serve a broad spectrum of societal needs • Cultivate new markets and fill gaps in addressing social and environmental needs in economies • Recognize the market potential of underserved regions and segments of the population • Promote healthy growth by identifying a diverse array of unrecognized and underfunded social and environmental challenges that fill capital gaps in the marketplace • Understand how these markets and opportunities have the potential to produce competitive returns 	Bridges Funds Management: intentionally targets opportunities that create jobs, improve skills and promote healthcare in historically underserved communities while emphasizing sustainable living; invests in companies that provide skills training for disadvantaged youth, energy services for low- and moderate-income communities, and programs that promote healthy lifestyles and obesity reduction.
Diversity of Approach	Developing of a diverse set of investment products or services to serve clients with differing ESG concerns (asset managers). Utilizing a diverse range of investment tools to address complex system-level social or environmental concerns (asset owners and managers).	<ul style="list-style-type: none"> • Recognize complexity within and between systems that are relevant to investment and acknowledge that it is not sufficient for all investors to focus on a single systems-level challenge while ignoring all other systems and their interrelationships • Seek to maximize their positive influence by adopting a diverse range of initiatives to help manage risks and rewards at the systems level, including holdings-related (e.g., security selection, portfolio construction, corporate engagements, targeted investment programs, and manager selection) and non-holdings related initiatives • Seek impact across a range of systems by serving a variety of clients with a diverse set of systems-level concerns and offering varied approaches to addressing these concerns 	New Zealand Superannuation: adopted a diversity of approaches to address the complex challenges of climate change, including: integrating climate-related factors into investment risk assessments; directing investments in alternative energy, sustainable agriculture and infrastructure; sponsoring of financial industry research on climate-change scenarios; producing of white papers on the topic; and engaging with corporations to improve their climate-related policies.
Evaluations	Valuing difficult-to-price aspects of environmental, society and financial systems that generate potential long-term investment opportunities	<ul style="list-style-type: none"> • Uses investment beliefs statements to assert that systems-level sources of long-term wealth creation and societal and environmental value often cannot be easily assigned a price • Identify the systems-level characteristics that generate the stability necessary for successful long-term investment • Adopt within security selection and portfolio construction evaluation techniques that might not be as easily quantifiable as price or as in making an immediate business case • Value investee ability to provide sources of systems-level stability and predictability that can enhance long-term wealth creation • Develop measurement tools to capture the long-term value of systems-level characteristics 	California Public Employees' Retirement System (CalPERS): believes that three forms of capital create long-term value and are the source of investment opportunities—physical capital (environmental), human capital (social), and financial capital (governance)—and that the sustainability of each is directly related to, and critical for, the long-term sustainability of its funds.

<p>Interconnectedness</p>	<p>Increasing the flow of information and communications about environmental, societal and financial systems peers, clients, and the public at large.</p>	<ul style="list-style-type: none"> • Share mutually beneficial base-line knowledge helpful in preserving and enhancing systems fundamental to the success of all investors • Promote forums for communications among peers on issues with systems-level implications • Provide leadership in recognizing the importance of this mutually beneficial systems-level knowledge for all investors 	<p>Northwest & Ethical Investments (NEI): publishes and posts on its website occasional papers providing background on the ESG issues on which it focuses and that outline the its perspective on the issues and related investment risks, detail firm engagement activities and partnerships, and outline its views on future trends.</p>
<p>Locality</p>	<p>Strengthening the environmental, societal and financial systems within a geographic region—be that a city, state, region or country, with an attempt to create a series of interrelated investments that address sustainability issues and support and enhance each.</p>	<ul style="list-style-type: none"> • Consider regional dynamics, trends, and opportunities, which is necessary for investments to be sustainable in today’s increasingly interrelated world • Cultivate a deep understanding of a specified geographic area, including the issues and themes that are crucial to local sustainable development, and develop forward-looking scenario analyses involving difficult-to-anticipate risks or rewards. • Identify security selection and targeted investment opportunities for promoting local prosperity and strengthening local economies, culture, and ecology, while generating competitive returns • Consider both the short-term and long-term implications of a project itself and the implications for the broader community within which it takes place 	<p>Caisse de dépôt et placement de Québec: mandated by enabling legislation to achieve “optimal return on capital within the framework of depositors’ investment policies while at the same time contributing to Québec’s economic development”; among other things, purchases Québec goods and services and promotes sustainable development and has invested in a diverse set of inter-related office buildings, convention centers, and public transportation systems in Montreal.</p>
<p>Polity</p>	<p>Substantially engaging in public policy debates—directly with governmental bodies and regulators or less directly through collaboration with civil society organizations or peers in the investment community—to create a stronger, more resilient financial, environmental or societal system on which long-term investment can build.</p>	<ul style="list-style-type: none"> • Understand that as the world has grown sufficiently complex it is naïve to assume that the roles of government and finance can easily be disentangled • Promote the creation of a limited number of governmentally mandated levers that can help investors support the sustaining of environmental, social and financial systems vital to their long-term returns • Communicate clearly about the public policy considerations of systems-level issues such as climate change, financial system reporting, and mandated disclosure of environmental, social and governance data • Take a leadership role in promoting public policy reform • Recognize that resources allocated to polity have the potential to alter the basic “playing field” on which investment is conducted in ways that can benefit all asset owners and managers 	<p>Aviva Investors: believes that its fiduciary duty includes “putting pressure on policy makers to address key sustainability challenges within our capital markets and our broader economy” and describes itself as “tireless advocates for new policy measures that support more sustainable capital markets”; called for collaborative action in developing suggestions on “how public policy makers could move the capital markets onto a more sustainable basis” and recommending a series of capital market reforms in 2017 publication A Roadmap to Sustainable Public Markets.</p>

<p>Self-Organization</p>	<p>Leading the creation and management of on-going organizational structures that build the capacity of the investment community to address system-related considerations and strengthen the overall resilience of the financial system.</p>	<ul style="list-style-type: none"> • Understand that no one investor can effectively impact these complex environmental and societal systems alone and that collaborative efforts are essential • Recognize the need for investors' concern with the stability and resilience of environmental, societal and financial systems to participate in industry-led capability-enhancing organizations • Understand the long-term rewards that accrue to members and their portfolio from these organizations' activities • Take a leadership role in the creation and management of such organizations 	<p>Trillium Asset Management: has played a leading role in the founding of organizations that have contributed to the advancement of incorporating systems-level considerations into investment, e.g., US SIF (originally the Social Investment Forum, which became the model for other Social Investment Forums around the world) and the Ceres Principles (which led to the creation of environmental advocacy organization Ceres and the Global Reporting Initiative).</p>
<p>Solutions</p>	<p>Pursuing initiatives to resolve system-level societal and environmental challenges.</p>	<ul style="list-style-type: none"> • Seek to resolve, rather than profit from systems-level challenges • Work to build a solid foundation from sustainable systems that will provide a long-term source of future investment opportunities • Acknowledge the need to contend with the greatest systems-level challenges of the day • Seek investments (through security selection and portfolio construction, targeted investment programs, and manager selection) that are not only profitable, but can also positively change the dynamics of systems • Have a clear vision of the most important aspects of alternative systems 	<p>PGGM: has an "investing in solutions" portfolio that focuses on "one or a cluster of issue areas where social or environmental need create a commercial growth opportunity for market-rate or market-beating returns"; portfolio intended to achieve regular risk/return expectations and "to support positive impact on at least one of the selected [environmental or social] themes".</p>
<p>Standards Setting</p>	<p>(1) Setting absolute standards for the inclusion of securities (primarily public and private equities or fixed income) based on widely accepted norms or standards, or (2) leading the setting of standards for conduct by corporations in areas of social or environment concern for specific industries or issues</p>	<ul style="list-style-type: none"> • Align investments with certain standards while managing the risk and reward characteristics of investment portfolios; dually align standards and financial goals • Communicate broadly on issues they believe are fundamental to system stability • Avoid issues that violate broadly accepted norms and favor those that support them • Establish positive environmental or social standards for industries that promote informed discussion and that support the health of systems • Create a "level playing field" of normative behavior that encourages competition based on a "race to the top" rather than to the bottom • Seek to build trust between finance and society (e.g., forgoing short-term profit by avoiding investment in questionable industries or activities) 	<p>Norges Bank Investment Management: incorporates "internationally recognized standards" into its investment process, which have led it to divest from companies in the tobacco and weapons industries, and those causing severe environmental damage; participated in OECD standard-setting initiative relating to the extractives industry and the stability of the financial markets.</p>
<p>Utility</p>	<p>Maximizing alignment of specific asset classes with the societal functions that the asset classes were designed to serve.</p>	<ul style="list-style-type: none"> • Choose securities within asset classes that align with their societal purposes (vs. trusting in the forces of competition to produce societally beneficial outcomes) • Align systems-level issues with the unique societal functions of individual asset classes to enhance their systems-level impacts. • Understand the utility of asset classes to allow for the creation of benchmarks relating to environmental, societal and financial systems • Understand the differing social and environmental ends for which various asset classes are designed • Select investments that are aligned with asset class-specific purposes • Benchmark investment performance against the social and environmental functioning of the asset class 	<p>Think Outside of the Box Asset Management (TOBAM): advocates for an "anti-benchmark" approach to investment and asserts that active management's benefit to society arises through its intentional allocation of assets to productive purposes that contribute to long-term value-creation—in effect, a systems-wide benefit.</p>

APPENDIX C: MEASUREMENT FRAMEWORKS

This appendix—Appendix C: Measurement Frameworks—contains summary information on select measurement frameworks that TIIP examined to inform the *Roadmap to Assessing System-level and SDG Investing*.

TIIP defines a “measurement framework” as any established guidance for how investors and other stakeholders should approach generating and assessing positive non-financial impact on the planet (environmental system), people (societal system), or the financial system.⁵ In some instances, these frameworks prescribe impact goals and measurement indicators, in others they provide guidance for establishing impact approaches, and in others still they do a combination of the two.

TIIP curated information from each resource to include in this appendix that is *particularly relevant to this report’s audience*; readers should visit the sources listed below the descriptions to learn more.

⁵ TIIP’s definition might not align with that of the developers of each of the described frameworks. For example, curators of the Impact Management Project do not consider the Project as offering a framework, rather it describes the Project as a convention and refers users to apply the convention.

Impact Management Project
Purpose
<ul style="list-style-type: none"> • Establish a convention for discussing, measuring, and managing impact (a set of generally agreed upon principles and procedures, a shared understanding) • Enable stakeholders across various groups to limit their negative impact on people and planet and increase their positive impact • Help enterprises to: communicate and understand each other’s impact goals; collect and share data; and partner effectively • Provide investors with fundamentals for understanding how enterprises effect people and the planet (akin to established fundamentals for understanding financial performance); help them to create and buy products to help them realize related intentions and goals
Primary audience/users
<ul style="list-style-type: none"> • Anyone with an interest in limiting negative—and increasing positive—impacts on people and the planet or who is otherwise involved with impact discussions, measurement, and reporting; including investors, grant makers, businesses, non-profits, social scientists, evaluators, academics, wealth managers, policymakers, standards and accounting bodies, and others • Applicable for discussions, measurement, and management of already-established enterprises or portfolios of enterprises, or of start-up enterprises • Free resource available at www.impactmanagementproject.com
Development
<p>Developed via a series of virtual and in-person meetings conducted around the world with representatives from 1,000 organizations of various kinds (see “Primary audience/users” above)</p>
Framework highlights
<p>The Impact Management project establishes four areas of impact management and provides examples of ways to chart and otherwise organize thinking within and across each area to inform decision making. Those areas are:</p> <p>1. Understanding impact. There are five dimensions of impact that: when assessed, help in understanding how people and the planet experience impact and provide the foundation for impact management; and when managed, help achieve impact objectives.</p> <p>They are: (a) What (the outcome that the organization intends to effect and whether it is important, or material, to the people who are experiencing it); (b) How much (the depth, reach, and duration of the organization’s effect); (c) Who (who experiences the organization’s effect and whether they are underserved in relation to the outcome); (d) Contribution (the organization’s effect compared to what would have happened anyway, without the organization’s intervention); and (e) Risk (threat that the organization’s effect differs from expectations and the likelihood of that happening).</p> <p>The Impact Management Project distinguishes investor contribution from additionality and attribution and notes that among investors’ possible contributions to impact is signaling that it matters, generally speaking, and in more targeted ways: engaging actively; growing new or undersupplied capital markets; or providing flexible capital.</p> <p>2. Defining intentions and constraints. Organizational intentions, derived from values and motivations, guide and inform impact and financial goals. There are four types of intentions for impact: (a) Don’t consider; (b) Avoid harm; (c) Benefit people/planet; and (d) Contribute to solutions. Constraints are legal, organizational (e.g., type of organization), based on wealth and profitability, and on location and demographics.</p> <p>3. Setting goals. To set goals for established enterprises or portfolios, organizations should collect and assess data across the five dimensions of impact; set goals to prevent material negative effects; and decide whether to set goals for positive effects. To set goals for new enterprises, organizations should identify and be guided by their intention and analyze data on the five dimensions of impact.</p> <p>Considerations for goal-setting include:</p> <ul style="list-style-type: none"> • Determining if an action will simultaneously cause positive and negative impact and assessing whether achieving the positive is worth the negative. • Collecting information used to set goals directly from affected persons, or scientists in the case of the planet, and should be informed by front line experience (e.g., enterprises’ experience), expertise, and publicly-available information; being transparent about information sources. • Setting specific targets to gauge performance against benchmarks and to establish a shared understanding of “good” performance. • Being transparent about financial performance expectations given impact goals and vice versa. <p>4. Delivering and improving impact. Organizations should: (a) select approaches that align with the goals established across the five dimensions of impact, and that focus on outcome not sector; (b) establish governance and systems to enable action in line with financial and impact goals and otherwise ensure that necessary organizational conditions for effective impact management are in place; (c) conduct ongoing assessment of people and planet’s experiences; and (d) involve entire organization in impact management, create a culture of data analysis, and establish leadership that sets the tone, inspires teams, and demands accountability.</p>

Notes: The Impact Management Project does not consider its work as a framework, standard, or measurement approach; rather, it defines the Project as a convention and refers users to apply the convention in their use of existing frameworks, standards, and approaches.

Source: www.impactmanagementproject.com. Accessed between September 27 and 28, 2017.

IRIS - Global Impact Investors Network									
Purpose									
<ul style="list-style-type: none"> • Establish a catalog of metrics that investors can use to measure social, environmental, and financial performance • Provide investors with a common language for discussing performance • Enable investors to compare their performance with peers and to provide information to stakeholders using standardized metrics that they can adapt to align with their goals and needs • <i>Not intended</i> to help firms to determine impact goals or establish impact measurement programs, collect and analyze data, or use results in decision-making and reporting; not intended to provide a certification or score; but does direct firms to guidance on all the above 									
Primary audience/users									
<p>IRIS users include:</p> <ul style="list-style-type: none"> • Investors, to compare the environmental or social performance of prospective funds with similar returns to determine alignment with their priorities • Fund managers, to measure the environmental or social performance of portfolio companies with similar returns to determine alignment with fund goals and assess individual investments and aggregate portfolio performance, and to report to stakeholders • Entrepreneurs, to provide investors with information about the expected environmental or social impacts of potential investments <p>GIIN categorizes users into the following groups: Affinity group; Capacity builder; Company/enterprise; Direct investor; Incubator; Investor in funds; NGO; Partner; and Other</p> <p>Free resource available at iris.thegiin.org</p>									
Development									
<ul style="list-style-type: none"> • Launched in 2008 by the Rockefeller Foundation, Acumen, and B Lab (with support from Hitachi, Deloitte, and PricewaterhouseCoopers); operated by the GIIN since 2009 • Advisory board and its working groups oversee ongoing development and refinement of the framework; includes representatives from such companies as Acumen Fund, International Finance Corporation, Inter-American Development Bank, Harvard Business School, Deloitte, Bill and Melinda Gates Foundation, Tideline, B Analytics, among others • Comprised of metrics from various industry sources • Updated every two years; updates are informed by stakeholder input (investors, investees, topic experts, representatives of other standard-setting bodies, others with relevant expertise) and a public comment period 									
Framework highlights									
<p>IRIS includes both qualitative and quantitative metrics that investors use to measure and provide context for performance, alone or alongside other metrics. Investors use the metrics to measure the following:</p>									
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="padding: 2px;">Financial performance</th> <th style="padding: 2px;">Operational performance</th> </tr> <tr> <td style="padding: 2px;">Includes standard financial reporting metrics such as current assets and financial liabilities</td> <td style="padding: 2px;">Includes metrics to assess investees' governance policies, employment practices, and the social and environmental impact of their day-to-day business activities</td> </tr> <tr> <th style="padding: 2px;">Product performance</th> <th style="padding: 2px;">Sector performance</th> </tr> <tr> <td style="padding: 2px;">Includes metrics that describe and quantify the social and environmental benefits of the products, services, and unique processes offered by investees</td> <td style="padding: 2px;">Includes metrics that describe and quantify impact in social and environmental sectors, including agriculture, financial services, and healthcare</td> </tr> </table>	Financial performance	Operational performance	Includes standard financial reporting metrics such as current assets and financial liabilities	Includes metrics to assess investees' governance policies, employment practices, and the social and environmental impact of their day-to-day business activities	Product performance	Sector performance	Includes metrics that describe and quantify the social and environmental benefits of the products, services, and unique processes offered by investees	Includes metrics that describe and quantify impact in social and environmental sectors, including agriculture, financial services, and healthcare	
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="padding: 2px;">Social and environmental objective performance</th> </tr> <tr> <td style="padding: 2px;">Includes metrics that describe and quantify progress towards specific impact objectives such as employment generation or sustainable land use</td> </tr> </table>		Social and environmental objective performance	Includes metrics that describe and quantify progress towards specific impact objectives such as employment generation or sustainable land use						
Social and environmental objective performance									
Includes metrics that describe and quantify progress towards specific impact objectives such as employment generation or sustainable land use									
<p>Metrics are organized into the following groupings:</p> <ul style="list-style-type: none"> • <i>Product/service sector</i>: describe and quantify product or service performance by the social and environmental sectors in which they are classified • <i>Beneficiaries</i>: address who or what an enterprise's or organization's activities are intended to support • <i>Operations and financials</i>: measure standard financials and those that capture internal governance policies, employment practices, and the social and environmental performance of day-to-day activities • <i>Investment lens</i>: specific investment considerations such as gender or poverty levels <p>The GIIN provides guidance on how to create an impact metrics framework using IRIS, which instructs users to:</p> <ul style="list-style-type: none"> • Define motivations for tracking impact data (e.g. to communicate with stakeholders, to measure progress toward an environmental/social goal, gather basic data on investee performance); • Determine what data is needed and available; • Determine how to use (analyze) the data (i.e. same metrics for entire portfolio, different metrics for different parts of portfolio, or a combination of the two); and • Identify IRIS metrics. <p>It otherwise advises investors to: ensure that investees can produce the data needed to inform the metrics and analysis; convey the value in tracking the data; ensure that metrics are practical and useful to investees; and establish realistic data collection plan and staff accordingly.</p> <p>The GIIN designed IRIS as a "meta-standard" that aggregates and otherwise builds on metrics from the investment, development, and nonprofit fields, and that leverages 3rd party standards when possible. It is formally aligned with or otherwise complimentary to numerous of such standards, such as: B Analytics B Impact Assessment; Global Reporting Initiative G4 Sustainability Reporting Guidelines; Harmonized Indicators for Private Sector Operations; among others.</p>									

Source: iris.thegiin.org. Accessed in August and September 2017.

Managing for Development Results (MfDR) - Joint Venture on Managing for Development Results					
Purpose					
<ul style="list-style-type: none"> • Guide development entities to use performance information to make decisions, and to structure their strategic planning, risk management, progress monitoring, and outcome evaluations • Help development entities respond to increasing pressure to provide good value for money, be transparent, and demonstrate results; improve the overall effectiveness of public management • Encourage development entities to think beyond inputs and outputs to outcomes and measurable results • Provide tools and frameworks for using evidence to track progress, manage business, and achieve maximum results 					
Primary audience/users					
<ul style="list-style-type: none"> • Governments and development organizations in developing and developed countries • Also used by civil society and the private sector 					
Development					
<ul style="list-style-type: none"> • Initially conceived at the International Conference on Financing for Development in Monterrey, Mexico (2002); developed at the Second International Roundtable on Managing for Development Results, in Marrakech, Morocco (2004); and refined at subsequent conferences and roundtables in 2005, 2007, and 2008 • Reflects input from representatives from partner countries, bilateral and multilateral development agencies, civil society, and the private sector • Not explicitly developed for, but often discussed as directly useful for, systematically managing progress toward achieving the Millennium Development Goals (MDGs) 					
Framework highlights					
<p>MfDR is a results management approach that provides development entities with strategies for effective management and results (outcome and impact) maximization. It is grounded in three underlying concepts and guided by five principles:</p>					
Underlying concepts					
<ol style="list-style-type: none"> 1. Goal-orientation: Setting clear goals provides targets for change and opportunities to assess if change has occurred. 2. Causality: Inputs and activities logically lead to outputs, outcomes, and impact. 3. Continuous improvement: Periodically measuring results provides the basis for adjustments needed to keep progress on track and to maximize outcomes. 					
Guiding principles					
<ol style="list-style-type: none"> 1. At all phases—from strategic planning through implementation to completion and beyond—dialogue should focus on results for partner countries, development agencies, and other stakeholders. 2. Programming, monitoring, and evaluation activities should align with expected results. 3. Results reporting system should be as simple, cost-effective, and user-friendly as possible. 4. Entities should manage for, not by, results, by arranging resources to achieve outcomes. 5. Results information should be used to inform management learning and decision making, and for reporting and accountability. 					
<p>Development entities should implement MfDR in five sequential stages:</p> <ol style="list-style-type: none"> 1. Set goals, agree on targets and strategies; 2. Allocate available resources to activities that will contribute to achieving goals; 3. Monitor and evaluate whether resources allocated are making the intended difference; 4. Report on performance to the public; and 5. Feedback performance information into decision-making. <p>It establishes the following as core considerations for results and performance management:</p> <ul style="list-style-type: none"> • Results-based management, which focuses on improving organizational operations to improve performance results and foster accountability. Results-based management emphasizes the use of a “results chain” to develop, execute, and assess investments, interventions, and programs, and to outline the cause-and-effect relationship between interventions and intended impacts. 					
How should the approach be implemented?	What should be produced?	What outcomes do we expect from this investment? How are outputs used?	Why should we do this?		
Inputs	Activities	Outputs	Short-term outcomes	Medium-term outcomes	Long-term impacts
<ul style="list-style-type: none"> • Logic models, which entities use to summarize all relevant information related to development assistance. There is no “correct” format to a logic model, though they typically include: objectives/results; inputs; indicators; means of verification; and assumptions/risks. • Results-based monitoring and evaluation, or the systematic collection of performance information to gauge progress toward results and to make management decisions. <p>The Joint Venture on Managing for Development Results, which includes representatives from multilateral development organizations, bilateral donors, and partner countries, provides MfDR implementation guidance.</p>					

Sources: Emerging Good Practice in Managing for Development Results. Sourcebook. 2nd Edition. September 17, 2007. Retrieved from: http://www.mfdr.org/Sourcebook/2ndEdition/SourceBook_2E_17_Sept_07_EN.pdf.
Emerging Good Practice in Managing for Development Results. Sourcebook. 3rd Edition. Summer 2008. Retrieved from: <http://www.mfdr.org/Sourcebook/3rdEdition/SourceBook3FINAL.pdf>.
OECD (2008). Managing for Development Results: Information Sheet. Summer 2008. Retrieved from: <http://www.mfdr.org/About/Final-MfDR-information-sheet.pdf>.
OECD and the World Bank (2006). Emerging Good Practice in Managing for Development Results. Sourcebook. 1st Issue. February 16, 2006. Retrieved from: <http://www.mfdr.org/Sourcebook/1stEdition/MfDRSourcebook-Feb-16-2006.pdf>.
<http://www.mfdr.org>. Accessed between September 27 and 28, 2017.

Sustainable Development Goals (SDGs) - United Nations

Purpose

Intended to build on its predecessor, the Millennium Development Goals and to:

- Address the root causes of poverty and the dimensions of sustainable development (economic growth, social inclusion, and environmental protection); the U.N. defines sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs
- Help all countries, not just developing countries (rich countries, poor countries, and in between)
- Facilitate the mobilization of financial resources, capacity-building and technology, and data and institutions
- Address climate change and its impacts

The goals are not legally binding

Primary audience/users

- Governments should lead and otherwise “take ownership” in meeting the goals, including: establishing national frameworks (policies, plans, programs) and tracking progress (collect data)
- Civil society, the private sector, and others, should also contribute toward achieving the goals

Development

- Adopted in September 2015 at the Addis Ababa Action Agenda and Third International Conference on Financing for Development as part of the 2030 Agenda for Sustainable Development; officially launched in January 2016
- Goals and their commensurate recommended targets and indicators were developed by the Inter Agency and Expert Group on SDG Indicators and associated working groups and confirmed by the U.N. Statistical Commission; the group includes member states and representatives from international organizations, civil society, academia and the private sector

Framework highlights

There are 17 SDGs that the U.N. aspires for all countries to achieve by 2030:

1. End poverty in all its forms everywhere
2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
3. Ensure healthy lives and promote well-being for all at all ages
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
5. Achieve gender equality and empower all women and girls
6. Ensure availability and sustainable management of water and sanitation for all
7. Ensure access to affordable, reliable, sustainable and modern energy for all
8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
10. Reduce inequality within and among countries
11. Make cities and human settlements inclusive, safe, resilient and sustainable
12. Ensure sustainable consumption and production patterns
13. Take urgent action to combat climate change and its impacts
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
17. Strengthen the means of implementation and revitalize the global partnership for sustainable development

The U.N suggests a total of 169 targets for the goals and recommends a framework of global indicators. It otherwise expects governments to develop national indicators and monitor progress toward targets and goals.

The High-level Group for Partnership, Coordination and Capacity-Building (HLG-PCCB) provides strategic leadership for the SDG implementation process as it concerns statistical monitoring and reporting.

Source: sustainabledevelopment.un.org/sdgs. Accessed in August and September 2017.

APPENDIX D: INVESTOR MEASUREMENT APPROACHES

This appendix—Appendix D: Investor Measurement Approaches—contains summary information on the investor-specific measurement approaches that TIIP examined to inform the *Roadmap to Assessing System-level and SDG Investing*.

These “investor measurement approaches” represent how individual investors consider and assess their non-financial impact on the planet (environmental system), people (societal system), or the financial system. The investors selected for inclusion in this appendix are among those known to TIIP to be integrating, or considering ways to integrate, system-level considerations into their investment practices and to be assessing related progress.

TIIP curated information from each resource to include in this appendix that is *particularly relevant to this report’s audience*; readers should visit the sources listed below the descriptions to learn more.

Appendix D: Investor Measurement Approaches

The F.B. Heron Foundation		
Investor summary		
Type	Headquarters	AUM
Foundation	United States	US\$278 million (2016)
<p>The Heron Foundation focuses on addressing poverty in the U.S. It is committed to investing “100% for mission”, or ensuring that all its assets and resources—all investments and grants—are deployed in service of the foundation’s mission to help economically disadvantaged Americans.</p>		
Measurement approach		
<p>Heron tries to measure the net contribution of each of its investments; that is, for each investment, it attempts to determine “whether, on net, the world is better off with or without any given enterprise based on its ‘net contribution’ to people, place, and planet.” Through the approach, Heron aspires to look beyond the intended impact of an investment to its outcomes for all stakeholders. It tries to examine how enterprises that it invests in (a) might simultaneously do good (e.g. create jobs) while also doing harm to the people that Heron wants to help (e.g., pollute rivers and exploit workers) and (b) the extent to which the good exceeds the harm or vice versa.</p> <p>Heron illustrates its use of the approach through its divestment from CoreCivic, then called Corrections Corporation of America (CCA). While CoreCivic employs thousands of people, and job creation is presumably in line with Heron’s mission to combat poverty, it raises various social, governance, and environmental concerns. Heron divested from CoreCivic after assessing that it posed a greater harm to society than its benefits as a job creator. Another example Heron shares is Property-Assessed Clean Energy (PACE) investments, which, as the name implies, use tax liens to provide upfront financing for clean energy retrofitting. It’s a popular type of impact investment, but Heron ultimately felt that under certain conditions, the risk to homeowners of losing their homes outweighed the positive impacts of the investment.</p> <p>Central to its net contribution analyses, is Heron’s assessment of each enterprises’ absorption and production of four types of capital (as described on Heron’s website):</p> <ol style="list-style-type: none"> 1. Human Capital: an enterprise’s interactions with individual people with whom they have a direct relationship, including but not limited to their employee base. 2. Natural Capital: how an enterprise makes use of resources such as energy and raw materials, how they handle waste products, and their effects on the natural environment. 3. Civic Capital: an enterprise’s interactions with communities, including customers, neighbors, and governmental actors such as regulators. 4. Financial Capital: an enterprise’s interactions with the economic and financial landscape in which they operate, including most directly their effects on capital providers through governance practices and capital outlay decisions. <p>Heron uses data from various sources, depending on the asset class, to assess enterprises’ social and environmental performance along these dimensions, including:</p> <ul style="list-style-type: none"> • CSRHub, Oekom, and other data to analyze public equities investments; • HIP Investor to analyze the municipal portfolio, and; • B Lab to analyze private equity. <p>It then plots, compares, and contrasts enterprises, using the net contribution lens to better understand the portfolio and its impacts in the world, and to help Heron increasingly serve its mission and society by using all of its available resources.</p>		

Sources: The Heron Foundation. Website. Accessed on October 11, 2017.

TIIP telephone interview with Preeti Bhattacharji (VP, Integrated Capitals) and Amy Orr (Director, Integrated Capitals). August 23, 2017.

Appendix D: Investor Measurement Approaches

PGGM		
Investor summary		
Type	Headquarters	AUM
Pension plan	The Netherlands	US\$260 billion (2017)
<p>PGGM is the asset manager of the second-largest pension fund in the Netherlands (PFZW) with about 2.6 million participants. It believes that the health and stability of environmental, societal, and the financial systems directly impacts the long-term viability and sustainability of client investment portfolios and vice versa. Its responsible investment approach focuses on sustainable development—defined as “development which meets the needs of current generations without compromising the needs of future generations”—within seven areas: (1) climate change; (2) water scarcity; (3) healthcare; (4) food security; (5) financial system stability; (6) corporate governance, and; (7) human rights.</p>		
Measurement approach		
<p>PGGM reports on the cumulative progress of each of six systems-related activities (instruments) annually to the public through its <i>PGGM Annual Responsible Investment Report</i>: exclusions, ESG integration, engagement, legal proceedings, and investing in solutions for sustainable development. Among other things, the report describes each new action undertaken in the reporting year within each of PGGM’s seven sustainable development areas and provides aggregate information on progress toward outcomes within each systems-related activity.</p> <p>PGGM otherwise measures the impact of its investments related to four themes—climate, water, food, and health—using a subset of 13 of mostly IRIS-based indicators developed by the Global Impact Investing Network (GIIN) as a precursor to SDG impact indicators once they are broadly adopted.</p> <p>PGGM requires fund managers and its solutions-oriented companies to submit reports (or “fact sheets”) that (a) describe the social challenge(s) addressed by the investment and how the investment contributes to the solution, (b) report quantitative progress indicators, (c) discuss the long-term objectives pursued by the company or project and the broader impact that the company or project has on the sector, and (d) note any additional positive impact sought but not explicitly pursued by the investment.</p>		

Sources: Klop, Piet. Investing in Solutions = Beleggen in oplossingen (BIO), in Dutch. PowerPoint presentation. February 2016.

TIIP telephone interview with Piet Klop (Senior Advisor Responsible Investment, PGGM). August 17, 2017.

Appendix D: Investor Measurement Approaches

Saronas Asset Management		
Investor summary		
Type	Headquarters	AUM
Responsible/Impact Investor	Canada and The Netherlands	US\$200 million (2016)
<p>Saronas is a private equity investor that focuses on impact investing in emerging markets and specializes in investments in small- and medium-capitalization companies toward the goal of achieving competitive financial returns while maximizing positive impact and minimizing negative impact. It uses a “fund-of-funds” approach, investing in numerous private equity funds that are in turn specialists in locally-oriented, emerging market investing. Its six impact objectives are: (1) creating jobs; (2) improving job quality; (3) empowering women; (4) reducing environmental footprint; (5) improving governance; and (6) building sustainable communities.</p>		
Measurement approach		
<p>Saronas aims to deliver impact at three levels and to monitor its impact at each:</p> <ol style="list-style-type: none"> 1. At the immediate level, by tracking the social and environmental impacts of investee companies to understand the extent to which it is “improving lives on the ground.” Toward this end, in 2017, Saronas surveyed 220 companies held by the 32 funds in which it invested using 22 Global Impact Investing Network (GIIN) IRIS metrics. Saronas assesses company activities, outputs, outcomes, and impacts related to Saronas’s six social and environmental impact objectives: jobs created; improvements in job quality (increase in job training); empowerment of women (women managers); environmental footprint (megawatts of clean energy generating capacity); governance improvements (corporate taxes paid), and; building of sustainable communities (clients that benefited from portfolio company activities). Saronas also collects qualitative data from a sub-set of investee companies, which it uses to develop case studies about impact. 2. At the strategic level, by tracking its influence on private equity funds and within the frontier and emerging markets industry. At this level, Saronas seeks to “change the way business is done... [and] to influence how stakeholders in the investment industry in low- and middle-income countries make investment decisions and manage investee companies.” To monitor and score general partners’ (GPs’) related progress, Saronas collects environmental, social, and governance (ESG) leadership, management, investment process, and reporting data from investee companies per its <i>Environmental, Social, Governance and Impact (ESGI) Policy and via its Social and Environmental Management System (SEMS)</i>. 3. At the fundamental level, through global leadership, collaboration, and innovation to promote investments that “change systems and societies for the better over time.” Saronas acknowledges that related impacts are not easily measurable... the results are wide-ranging, long-term and diffuse.... [and that] there are no benchmarks, no metrics and no definitive way of quantifying [them].” Therefore, it reports on progress at this level by cataloging related activities (e.g., notable speeches, collaborations, field leadership positions) and their outcomes in its <i>Annual Values Report</i>. <p>In 2017, Saronas began assessing the alignment of its investee companies with the U.N. Sustainable Development Goals (SDGs). It reported that for Goal 8 Decent Work and Economic Growth and for Goal 16 Peace, Justice and Strong Institutions, 100% of its investee companies made contributions and as did nearly 50% of firms for Goal Five Gender Equality. In its 2017 Annual Values Reports, Saronas provided case studies of six investee companies that included a description of their alignment with the SDGs. It has stated that it will work with the U.N. Global Compact, Global Reporting Initiative, Principles for Responsible Investment, the GIIN and other stakeholders to “establish and adopt common SDG reporting methodologies.”</p>		

Sources: Saronas Asset Management. Growth That Matters: Annual Values Report 2017. Retrieved from <http://www.saronafund.com/user-files/uploads/2017/07/Values-Report-2017.pdf> on October 11, 2017.

TIIP email correspondence with Saronas (Daniel den Ronden, Vivina Berla, and Marina Leytes). August 29, 2017 through September 1, 2017.

TIIP telephone interview with Vivina Berla (Co-Managing Partner) and Marina Leytes (Head of Investor Relations, ESG & Impact). September 7, 2017

Appendix D: Investor Measurement Approaches

Sonen Capital		
Investor summary		
Type	Headquarters	AUM
Responsible/Impact Investor	United States	N/A
<p>Launched in 2011, Sonen Capital is an impact investment firm that aims to generate social and environmental impact alongside financial return, which is considered to be compatible and mutually reinforcing objectives. Its public equities and fixed income investments focus on securities with exemplary sustainability practices and those that target solutions to environmental and social challenges through their products and services in various thematic areas, including: energy efficiency, renewable energy, financial services for small enterprises in emerging markets, water conservation, and community development.</p>		
Measurement approach		
<p>Sonen Capital monitors and measures environmental and social impact in five ways.</p> <ol style="list-style-type: none"> 1. Identifies each investment along its <i>Impact Investing Spectrum</i>. Sonen developed a spectrum along which it systematically identifies and compares underlying investments across asset classes—its Impact Investing Spectrum, which characterizes investments as traditional, responsible, sustainable, thematic, impact first, or philanthropic. While individual Sonen investments span various parts of the spectrum, it focuses on sustainable (companies that conduct themselves in a sustainable way) and thematic (companies that produce goods and services that address environmental and social issues) investments. It assesses investee companies into these two categories through examinations of their business activities and revenue sources. 2. Assesses company environmental, social, and governance (ESG) performance relative to a benchmark. Sonen uses ESG data to examine the non-financial dimensions of underlying investments using eight different data points: carbon emissions, water use (environmental); health and safety, labor management, controversial sourcing (social), and gender diversity, board independence, and ethics and fraud (governance). It assesses data for its public equities strategy relative to the MSCI All Country World Index (ACWI) to identify companies that do not align with its values or that otherwise have ESG performance concerns. Sonen believes that positive ESG performance contributes to improved financial performance and reduced financial and impact risks. 3. Determines Sonen’s relative contribution to the U.N. SDGs. Sonen examines its investments using the impact indicators developed by the U.N. for each of those SDGs that align with Sonen’s investment themes. It does so toward two goals: (1) to determine the extent to which its individual securities and collective strategies might be contributing to certain of the U.N. SDGs, and (2) to report in definitive terms the size of those contributions. For example, for U.N. SDG 7 (Affordable and Clean Energy), Sonen examines its investments against the related energy intensity sub-indicator that measures the amount of carbon that is required to produce one unit of economic output. When compared to the MSCI ACWI, Sonen’s aggregated securities have reduced carbon intensity over the past five years. 4. Qualitatively examines the ways that an investment creates and delivers impact using Sonen’s <i>AIMS framework</i>. Sonen uses its Additionality, Intentionality, Measurability, Scalability (AIMS) framework to help its clients understand and compare the various ways that companies can create and deliver impact across the spectrum of asset classes. Specifically, the framework guides Sonen in identifying whether and the extent to which each investment: generates positive impact compared to what would have happened anyway (additionality); was purposefully made to generate impact (intentionality); generates impact outcomes that can be measured and quantified (measurability); and achieves a particular impact size and scale (scalability). 5. Quantifies impact using IRIS. Sonen uses the indicators provided by the GIIN (IRIS) to quantitatively and “unambiguously” analyze the impact of each of its investments in its sustainable real assets strategy. 		

Sources: Sonen Capital (2017). 2016 Annual Impact Report: Financial and Impact Reporting in Public and Private Markets. April 2017. Retrieved from <http://www.sonencapital.com/wp2015/wp-content/uploads/2017/04/16AIR.pdf> on October 11, 2017.

Sonen Capital (2017). Webinar: 5 Ways We Measure Investment Impact. Amando Balbuena III and Will Morgan. Accessed from <http://www.sonencapital.com/thought-leader-ship-posts/webinar-5-ways-measure-investment-impact/> on October 11, 2017.

Appendix D: Investor Measurement Approaches

Wellington Management Company				
Investor summary				
Type	Headquarters		AUM	
Diversified/specialized financial services provider	United States		US\$1 trillion (2017)	
<p>Through its impact investing approach Wellington “aim[s] to generate attractive financial returns through investing in a diversified portfolio of high-potential, publicly traded companies whose products and services are geared toward solving the world’s biggest social and environmental problems.”</p>				
Measurement approach				
<p>Through its impact investment practice, Wellington Management exclusively invests in companies where:</p> <ul style="list-style-type: none"> • Impact is central to their mission and cannot be duplicated by other means, and; • Impact can be quantified. <p>Wellington’s impact investments target three themes and ten issues:</p>				
Life essentials	Human empowerment	Environment		
Freedom from hunger Health Clean water and sanitation Affordable housing	Education and training Financial inclusion Digital divide and cybersecurity	Alternative energy Resource stewardship Resource efficiency		
<p>To measure the impact of its impact investments, Wellington:</p> <ul style="list-style-type: none"> • Develops key performance indicators (KPIs) for each investment and that depend on company business model and goals, and; • Assesses the opportunity for impact along a “logic chain” and identifies appropriate impact categories (depending on things like data availability). <p>Example KPIs for Wellington impact investment target issues by logic chain category:</p>				
Inputs	Activities	Outputs	Outcomes	Impact
Freedom from hunger	Financial Inclusion	Clean Water	Education	Alternative Energy
Spend US\$400 million on animal health research and development	Effect 115 million mobile banking transactions for Kenyan consumers	Install 7.3 million smart water meters	Provide 1.4 million Bazillion students with primary through secondary education	Produce wind power that avoids conventional power emissions equal to 2 million tons of CO2

Source: Wellington Management. Guide to Impact Investing. 2016. <https://www.wellington.com/en>

Appendix D: Investor Measurement Approaches

WHEB		
Investor summary		
Type	Headquarters	AUM
Responsible/Impact Investor	United Kingdom	£176 million (2017)
<p>WHEB is an impact investor with a long-term focus that exclusively invests through its FP WHEB Sustainability Strategy in opportunities created by the transition to a low carbon economy and companies that provide solutions to sustainability challenges. The fund focuses on nine environmental and social sustainable investment themes: cleaner energy, environmental services, resource efficiency, sustainable transport, water management, education, health, safety, and well-being.</p>		
Measurement approach		
<p>Starting in 2014, WHEB began reporting on the environmental impact of its investments. From 2016 onwards it has been measuring and reporting on this impact. The components of the approach are as follows:</p> <ol style="list-style-type: none"> 1. Categorize businesses into tiers based on likely contribution to the transition to a sustainable economy. WHEB categorizes each investee business into one of four tiers: (1) Products or services sold in an end-use format that can be used by customers; (2) Components or materials that are used in combination with other parts to improve the performance of the end product or service; (3) 'Platform' technologies that enable systemic change; and (4) Product or services that contribute to the on-going maintenance or monitoring of end-use products. Such groupings provide WHEB with a preliminary understanding of the likely availability and quality of environmental data related to each business. 2. Assess data availability and quality. WHEB then assesses which data are available from each business and, for those businesses able to provide data, which data WHEB can aggregate to determine total impact. When a business cannot provide needed data, WHEB determines whether comparable data might be available from a peer organization or if there is market share data available where overall market impact is known. 3. Estimate net impacts of investee businesses. For those businesses for which WHEB obtains adequate data, WHEB assesses each business to determine their net impact, which accounts for the positive and negative impact of the products/services and the positive and negative impacts of the underlying businesses. 4. Calculate WHEB impact. For each metric, WHEB calculates that percentage of the related impact that is attributable to the Fund's shareholding in the business. 5. Report outputs, impact, impact in terms of dollars invested, and impact in relation to the U.N. SDGs. WHEB reports on the above using a series of environmental output metrics (e.g. clean energy generated (MWh); waste water treated (m3); and drinking water supplied (m3)) and impact metrics (e.g. tonnes of CO2 e avoided and m3 of waste water treated). It also reports on the impact generated per every £1 million invested and on how each impact relates to the U.N. Sustainable Development Goals (SDGs). <p>Beyond this impact measurement, WHEB also conducts and reports on the following additional analyses:</p> <ol style="list-style-type: none"> 1. Maps social and environmental performance of individual Fund holdings. WHEB categorizes each investee business into one of four groups—two negative impact groups (degenerative or transitioning) and two positive impact groups (mitigating or breakthrough)—to assess their relative performance that of incumbent technologies. WHEB only invests in the positive impact groups. 2. Assesses Fund contribution to the U.N. SDGs. Given its exclusive focus on investing in companies that provide solutions to sustainability challenges, WHEB contends that all the holdings in its Fund "derive the majority of their revenues from products and services that help to achieve the SDGs." As such, it reports on the percentage of the Fund that is invested in businesses whose products or services directly contribute to achieving those goals that align with its investment themes (7 goals). <p>WHEB further asserts that the remainder of the U.N. SDGs are focused on solving systemic challenges (e.g., justice, peace). For these goals investors and investee companies can contribute to their achievement; though in these cases, "the contribution comes through business behaviors rather than through the products and services that companies sell." It therefore reports, anecdotally, on initiatives undertaken by Fund businesses that contribute to these goals. WHEB also reports on carbon emissions and its strategy for managing the risks of climate change as recommended by the Task Force on Climate-related Disclosures, and on the impact of its company engagement and voting activities.</p>		

Notes: Reported AUM equal to WHEB Sustainability Fund size as of September 30, 2017 reported in FP WHEB Sustainability Fund Factsheet: 30 September 2017.

Sources: WHEB. Performance Through Positive Impact: Annual Impact Report Jan 2016–Dec 2016. Accessed from <http://www.whebgroup.com/media/2017/05/WHEB-Impact-Report-2016-1.pdf> on October 10, 2017.

APPENDIX E: OTHER RESOURCES

This appendix—Appendix E: Other Resources—contains summary information on additional various thought-leadership and industry publications (e.g., reports and research papers) that TIIP examined to inform the *Roadmap to Assessing System-level and SDG Investing*.

These resources provide insight into how the financial community is thinking about its non-financial impact on the planet (environmental system), people (societal system), or the financial system, and how it is considering ways to integrate related considerations into assessments of its activities.

TIIP curated information from each resource to include in this appendix that is *particularly relevant to this report's audience*; readers should visit the sources listed below the descriptions to learn more.

Dutch SDG Investing (SDGI) Agenda
Building Highways to SDG Investing: Invitation to collaborate on a Dutch sustainable development investing agenda

Purpose

- Help the private sector use the SDGs (and the Addis Ababa Action Agenda and Paris Agreement on Climate Change) to guide investments in solving societal challenges, which “is in [the sector’s best interest, as well as that of [its] clients and investees”
- Recommend ways that Dutch investors, the Dutch government, and De Nederlandsche Bank (DNB) can collaborate to catalyze such investment
- Strengthen the Netherlands’ “competitive position in business” and help it to play a “leading role in international trade and development finance” through promoting sustainable investment

Target Audience

Dutch investors, the Dutch government, and DNB

Development

Developed by the SDGI Agenda, which includes 18 Dutch investors with a total AUM of approximately €2,800 billion. Agenda signatories collaborated to develop the recommendations and summary report over a period of six months.

Summary

Building Highways to SDG Investing establishes an agenda for Dutch investment in the SDGs, called SDGI.

The report outlines **underlying principles** for successfully establishing and enacting SDGI in the Netherlands:

- Given the enormous effort required to achieve the SDGs, SDGI focuses on encouraging **collaborative action** between investors, the Dutch government, and DNB.
- SDGI identifies ways to use the SDGs to **mainstream responsible, sustainable, and impact investing** (including investments in cash equivalents, debt/fixed income, venture capital, and private equity) in the Netherlands.
- Because the SDGs focus on developed, emerging, and developing markets around the world, SDGI considers Dutch institutions’ **domestic and international investments**.

The agenda also integrates a series of **underlying market considerations**; the following are necessary if SDGI is to succeed and scale:

1. Market-rate returns;
2. Societal confidence in the financial sector;
3. Development of long-term recoverable instruments
4. Directing liquidity in line with current risk/return frameworks while also encouraging long-term value creation
5. National priorities that align with global markets and international initiatives

SDGI establishes the following **four goals and a series of commensurate recommendations** for collaborative action on the part of the financial sector (F), government (G), and regulators (R):

	F	G	R
1. Catalyze significant SDG investment through the systematic deployment of blended finance instruments.			
• Set institutional targets for sustainable or SDG investing as feasible, and proactively address internal barriers to SDGI	<input checked="" type="checkbox"/>		
• Pool institutional funds and resources where feasible to enable economies of scale, and further adoption among smaller institutions (e.g., pension funds) and wealth holders	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
• Enhance and develop public risk-return enhancing solutions in close consultation with the financial sector, to crowd in greater institutional capital towards the SDGI agenda and to leverage government sending		<input checked="" type="checkbox"/>	
• Advance integrated structured financing solutions where feasible that cut across the lifecycle of investments with a focus on more ‘investable’ sectors—energy, infrastructure and water, agriculture & food, and healthcare	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
• Offer a ‘one-stop-blending-shop’ that guides projects requiring public sector support through government bureaucracies as needed		<input checked="" type="checkbox"/>	

Appendix E: Other Resources

	F	G	R
2. Make SDG investment 'the new normal' by encouraging and enabling all Dutch retail investors to invest with impact			
• Launch an SDG campaign to increase awareness of the SDGs and flag the opportunity for all to invest in the 2030 Agenda	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• Promote the relevance of a long-term investment approach and inclusion of SDG investment in private investor portfolios as feasible	<input checked="" type="checkbox"/>		
• Facilitate SDG investments among retail investors by avoiding that non-complex impact investing funds are unnecessarily classified as such, which can have the consequence that 'non-complex' AIFs are not distributed to retail investors			<input checked="" type="checkbox"/>
• Align pension savings schemes and regulations as possible to enable SDGI among individual pension savers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
• Strengthen advisor capabilities by engaging in a sector-wide SDG and impact investing training initiative across wealth advisors, banks, pension funds, and life insurers (E.g., through CFA modules, University curricula)	<input checked="" type="checkbox"/>		
3. Establish an enabling SDGI data environment by simulating the uptake of sustainability indicators and standards			
• Collaborate to determine a select set of SDG indicators for tracking institutional SDG investments, that can be used to track and compare sustainable development investments	<input checked="" type="checkbox"/>		
• Stimulate the uptake of sustainability standards in reports, benchmarks, and indices alongside national and international agencies—giving appropriate attention to both ESG and SDG indicators (2/5)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• Clarify its SDG 'data' ambition and approach to measuring private sector contributions to the 2030 Agenda, to ensure efficient and value-added data capturing and reporting processes		<input checked="" type="checkbox"/>	
• Make relevant SDG and market information available as feasible (incl. Country level information from embassies, private sector SDG contributions, etc.) in anticipation of a universal SDG(I) data infrastructure		<input checked="" type="checkbox"/>	
4. Identify and address actual and perceived regulatory barriers and incentives to SDG investment			
• Conduct further research and publish a summary of barriers and incentives, including a clarification of areas where barriers are perceived but do not exist			<input checked="" type="checkbox"/>
• Ensure SDG transparency by simulating the uptake of the SDGs in corporate reporting efforts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<p>The report notes that some SDGs are more “investable” than others, and highlights research projects conducted by UBS, ShareAction, and SDSN that:</p> <ul style="list-style-type: none"> • Points to the infrastructure- and environmentally-related SDGs as particularly investable areas, including: energy efficiency, waste management and recycling, clean air and carbon reduction, and emerging market healthcare; and • Cites investors as believing that support for the SDGs aligns with their fiduciary duties and could create opportunities for improved returns. 			

Notes: Signatories: ABN-AMRO Bank; Achmea; ACTIAM; Aegon; APG; ASN Bank; ASR Nederland; Delta Lloyd; FMO; ING; MN; NIBC; NN Group; PGGM; Rabobank; Robeco; Triodos Bank; Van Lanschot; Impact Summit Europe; PYMWYMIC; VBDO; C-Change; SDG Charter Coalition.

Sources: Dutch SDG Investing (SDGI) Agenda (2016). Building Highways to SDG Investing: Invitation to collaborate on a Dutch sustainable development investing agenda. December 2016. Retrieved from https://www.triodos.com/downloads/investment-management/articles/SDGI_Report_Building_Highways.pdf on October 9, 2017.

Investment Leaders Group <i>In search of impact: Measuring the full value of capital</i>	
Purpose	
<ul style="list-style-type: none"> • Develop a framework to help investors measure their non-financial impacts—defined as their contribution to sustainable development and rooted in the belief that “economic, social and environmental sustainability should be delivered as an outcome of the investment management process as investors go about generating robust, long-term investment returns” • Guide investors in measuring their impact on systemic challenges and issues, such as “poverty, health and wellbeing, job creation, use of resources, protecting ecosystems and stabilizing the climate” • Help investors address the question: “What information should be communicated to beneficiaries, and in what form, to allow them to determine whether their interests in non-financial outcomes are being realized?” 	
Target Audience	
The financial services sector	
Development	
Developed by the Investment Leaders Group (ILG) and the University of Cambridge Institute for Sustainability Leadership (CISL) in consultation with sustainability reporting organizations, information providers, and academics	
Summary	
<p>ILG developed the framework specifically to help investors measure their contribution to the SDGs. According to ILG, “in a world of volatile environmental risks, resource scarcities and social inequalities impeding economic progress, it is not enough to know simply that an asset is improving its social and environmental performance. It has become necessary to know whether it is doing enough to be considered part of the solution to the ambitions for the next fifteen years agreed by world leaders in 2015 under the auspices of the United Nations [SDGs].” Among the reasons that ILG cites regarding the need for such a framework is systemic risks. It notes that investors are increasingly recognizing the relationship between the health of society, the environment, and the economic system and long-term financial returns. When “left unchecked, [and] regardless of short-term financial returns from individual assets, [self-interested investor behavior] can produce systemically damaging risks to the economy.” Further, “while portfolios will continue to underperform or outperform their financial benchmarks, investors in aggregate will perform better in a healthier economy. Therefore, contributing to sustainable development is complementary to short-term financial materiality of social and environmental factors, and necessary to address underlying drivers of risk.”</p> <p>The framework has three defining characteristics; it:</p> <ol style="list-style-type: none"> 1. Focuses on actual non-financial <i>outcomes</i>, and not on intentions or policies; that is, on a firm’s impact on society, and not on whether its improving its own social or environmental performance. 2. Focuses on impact on the environment and society, not financial materiality; in other words, it does not focus on things like environmental, social and governance (ESG) issues as they relate to financial performance, but rather on non-financial impacts separate from financial performance. 3. Produces information that is “transparent, simple and relevant to help beneficiaries make practical choices about how they allocate their money.” <p>Core features of the measurement framework include:</p> <ul style="list-style-type: none"> • Distills the 17 SDGs into six themes relevant to the private sector: climate stability, healthy ecosystems, resource security, basic needs, wellbeing, and decent work. It assigns “simple-to-understand proxies for investment impact” to the themes: climate, nature, resources, health, poverty, and jobs. • Suggests a three-step approach to quantitative measurement. 	
<i>Base</i>	A quantitative measure of the impact on an asset (or fund) across its life cycle
<i>Stretch</i>	An enhanced measure to be implemented when the required data becomes available
<i>Ideal</i>	An enhanced measure allowing comparison of performance with the level required by the relevant SDGs
<p>[See the report for a detailed discussion of example base metrics related to each of the six themes and their proxies, with an assessment of their strengths and limitations and thoughts on how they might be refined over time.]</p> <ul style="list-style-type: none"> • Recommends that related disclosures to beneficiaries be straightforward and presented in simple but specific terms (e.g. it is more effective to tell a client that their fund “has sustained 60 jobs in the previous year or provided \$10,000 of services to low income communities” than to say that it “has a positive contribution to decent work”). • Asserts that qualitative information and analysis can help investors and their beneficiaries to better contextualize impact performance (e.g. assessing whether a fund’s impacts align with an SDG). 	

Notes: ILG members as of 2016: Allianz; First State Investments; Loomis Sayles; Natixis; Nordea; Old Mutual; PensionDanmark; Standard Life Investments; TIAA; Zurich.

Sources: Investment Leaders Group. *In search of impact: Measuring the full value of capital*. University of Cambridge Institute for Sustainability Leadership; 2016.

New Philanthropy Capital
Investing for Impact: Practical Tools, Lessons, and Results

Purpose

- Measure the social and environmental of impact of the KL Felicitas Foundation’s impact and thematic investments
- Secondly, develop a framework to help other impact investors measure their social impact

Target Audience

The KL Felicitas Foundation and other impact investors

Development

Developed as part of NPC’s efforts to assess the social and environmental impact of the KL Felicitas Foundation’s investments and movement-building work

Summary

As part of its efforts to assess the environmental and social impact of the KL Felicitas Foundation’s investments, NPC developed **a framework to help other impact investors measure their social impact**; the cornerstone of the framework is **NPC’s Impact Assurance Classification**.

The **1st component** of the framework is to **identify the different levels of impact that an investor can have**, of which there are three, and to measure impact at each level.

- 1. Impact on the investee**, through financial or non-financial support to increase investee capacity and strengthen organization; also called “Investor Plus.” To measure, qualitatively assess financial and advisory support provided.
- 2. Impact on people or issues** that benefit from the investee’s service or product (commonly expressed on number of beneficiaries impacted). To measure, construct an impact dashboard (discussed below) and an Impact Assurance Classification (also discuss below).
- 3. Impact of investees on a thematic area**, such as food security, energy, financial services, or access to clean water. To measure, identify meaningful metrics to aggregate in each sector and provide a qualitative description of common outcomes generated by investees; do so through combining IRIS data with data from other sources (including annual reports, investor reports, investee correspondence).

The 2nd component of the framework is to **establish Plan, Do, Assess, Review steps for evaluating social impact**.

Plan	<ul style="list-style-type: none"> • <i>Set goals.</i> Articulate the desired impact of the investments to serve as a reference point for investment performance. Consider developing a theory of change. • <i>Develop framework and select metrics.</i> Determine metrics to be used for assessing the performance of the investments. Utilize metrics that align with existing standards. For thematic focus areas, select multiple commensurate outcomes. Identify metrics with investees.
Do	<ul style="list-style-type: none"> • <i>Collect and store data.</i> Capture and store data in a timely and organized fashion. Build a tracking system. Collect data regularly. Includes data related to impact on investee. • <i>Validate data.</i> Verify that impact data is complete and transparent by crosschecking calculations and assumptions against known data sources, where applicable. Verify through visits, meetings, and co-investor input.
Assess	<p><i>Analyze data.</i> Review and analyze data to understand how investments are progressing against impact goals. Analyze for individual investments. Assess investments using Impact Assurance Classification (<i>discussed below</i>). Analyze data within thematic context to assess how investment outcomes are attributing to thematic outcomes. Aggregate indicators across portfolio when possible.</p>
Revise	<ul style="list-style-type: none"> • <i>Report data.</i> Share progress with key stakeholders. • <i>Make data-driven investment management decisions.</i> Assess feedback and make changes to investment thesis or theory of change; make necessary trading decisions.

The 3rd component of the framework is to **develop an impact dashboard for each investment**. Impact dashboards help investors understand the impact of individual investments on the investees and their beneficiaries. They contain three main parts:

1. Mission and activities: investee goals, target beneficiaries, products and services, and target area.
2. Case study: how investee products or services impact beneficiaries.
3. Social/environmental impact achieved: examples of impact achieved during a specific time period in line with mission, number of people reached, and nature of impact; described quantitatively and qualitatively.

The 4th component of the framework is the **NPC Impact Assurance Classification**.

- Assesses investees across five components of good impact practice to generate a single score for each that crosswalks to an Impact Assurance Classification stage designation.

- Such scoring helps investors compare individual investees, and investments by sector or asset class—even given impact data issues such as inconsistency, incompleteness, and incomparability—and determine priorities for support and improvement.
- The Classification focuses on the quality of investee impact practices and impact measurement process, which NPC intends as a proxy for the level of impact an investor achieves—the thinking being that good impact practice is associated with a greater emphasis on impact which increases the probability of impact.
- Builds on existing impact measurement tools including IRIS metrics, GIIRS ratings, B Corp Scores and NESTA standards of evidence.
- The five components of good impact practice are: (1) outputs (variety, comparison to targets, up-to-date); (2) standardized metrics (use of industry standards, sharing to enable comparability); (3) clarity of mission (clear theory of change or logic model, intermediate outcomes identified, evidence for assumptions); (4) data to show change (quantitative and qualitative); and (5) additionality (evidence of causality of impact, beginning to address counterfactual).
- The four stages of Impact Assurance Classification are:

Stage 1	Stage 2	Stage 3	Stage 4
Some output data, pre-development of standardized metrics	Reasonable number of outputs, some standardized metrics, early anecdotal case studies	Developed list of outputs current within 24 months, well-articulated mission or theory of change	Relevant outputs to targets or historic, good use of standardized metrics, data within 12 months
First draft mission statement, limited case studies	Clear mission statement	Good case studies, quantitative data showing before and after effect	Clear theory of change & mission, detailed case studies, quality, up to date quantitative data showing effect
Not yet addressing additionality	Starting to address additionality	Evidence building of additionality	Demonstrating additionality using control or comparison group

Lessons learned by NPC while developing the framework include:

- Given that they work across many parts of the impact investment ecosystem, it is important to measure all aspects of an impact investor’s work to fully understand their impact.
- Investors have impact at three levels: (1) on investees; (2) on beneficiaries; and (3) on thematic outcomes.
- Theories of change can help impact investors articulate their visions and break them down into measurable outcomes.
- It is valuable to share measurement processes and result with others in the impact investment field.
- It can be difficult to collect impact data from enterprises; investors should independently or collectively develop systems to track enterprise data contacts and to otherwise track and monitor data collection.
- To increase outcome measurement standardization, investors should collaborate to develop standardized measures.
- Investors should validate data through discussions with investees.
- Investors should support enterprises in the selection of impact metrics.

Notes: The primary focus of the *Investing for Impact: Practical Tools, Lessons, and Results* project and summary report is to provide the KL Felicitas Foundation with information about its investment impact. This summary focuses on the resulting measurement framework that resulted from the project and that NPC describes as a tool for the broader impact investment community.

Sources: Lomax, Plum, Abigail Rotheroe and Peter Harrison-Evans. *Investing for Impact: Practical Tools, Lessons, and Results*. New Philanthropy Capital: November 2015.

Skopos Impact Fund and Bridges Impact+, the advisory arm of Bridges Fund Management *More than Measurement: A Practitioner's Journey to Impact Measurement*

Purpose

- Provide a model for managing impact that (1) goes beyond investing in sectors intuitively thought to produce impact, and instead (2) focuses on defining success along several dimensions and investing and measuring accordingly
- Makes point that measurement is useless without goal-setting (and vice versa)
- Includes a focus on additionality
- Focuses on outcomes (as opposed to activities or outputs)
- Modeled, in part, after “traditional investment” that measures successful financial performance based on whether it reflects the investor’s goals

Target Audience

Impact investors

Development

Describes Skopos’ approach to “managing assets to achieve explicit impact goals,” developed in consultation with Bridges Impact+

Summary

In partnership with Bridges Impact+, the advisory arm of Bridges Fund Management, Skopos developed an **Impact Measurement Approach** that (1) goes beyond investing in sectors intuitively thought to produce impact (e.g. education, microfinance), and instead (2) defines success along several dimensions.

Broadly speaking, the approach:

- Emphasizes that that measurement is useless without goal-setting and vice versa and asserts that measurement in and of itself does not indicate whether investments were successful if the investor has not clearly defined success;
- Focuses on outcomes (as opposed to activities or outputs);
- Is modeled, in part, after “traditional investment” that measures successful financial performance based on whether it reflects the investor’s underlying goals (liquidity, financial performance, financial return); and
- Emphasizes additionality.

The Impact Measurement Approach has three steps:

1. Define what success looks like.

Set goals and determine desired level of impact and acceptable risk. Identify the impact that the investor hopes to achieve by answering four questions: (1) Who (what end users) will experience the impact?; (2) What impact (outcomes) will they experience?; (3) Would the impact occur but for Skopos’ investment?; and (4) What else will change because of the investment? (What are the possible unintended consequences?).

Identify indicators of success. Identify indicators that measure performance relative to established goals and in terms of risk and reward. The Skopos impact scoring system: measures progress against quantitative and qualitative investment-specific impact targets; assigns a score (1 to 3) that indicates performance along a range of impact risk and return and relative to the corresponding score of the relevant goal; and averages individual investment scores to develop a portfolio score.

2. Choose strategies to achieve success.

Set targets. Set targets based on a realistic understanding of what an impact strategy could achieve. When possible, have enterprises set targets related to a specific outcome for a specific end user. Or, work with specialist investors to set portfolio-level targets in upfront ‘impact models’ that outlines targets and investor history, strategies, and capabilities around meeting them.

Select strategies. Develop theories of change that outline goals (e.g. help the unemployed find sustained, high-quality employment), strategies (e.g. focus on higher education (training and apprenticeship)), and indicators (e.g. number of people in course (activity); number of people getting qualifications (output); number of people with access to quality employment (short-term output); number of people sustaining quality employment (long-term outcome indicator)).

3. Understand whether success is occurring and respond accordingly.

Establish feedback loops to collect information on end user experiences and measure progress against targets. Collecting data and measuring progress can be challenging; Skopos suggests using: tools that track end users’ perception of their own progress (e.g. surveying, the Rickter scale, the Outcomes Star), technology to save money and increase data collection efficiency and effectiveness (e.g. SMS, call centers, online feedback, and Acumen’s Lean Data Initiative and Root Capital’s customer-centric mobile measurement), and proxy metrics that focus on shorter-term outcomes (given growing evidence of positive correlations between shorter-term outcomes and longer-term outcomes).

Social Impact Investment Taskforce, Measurement Working Group <i>Measuring Impact: Subject paper of the Impact Measurement Working Group</i>	
Purpose	Provide best practice guidelines on impact measurement toward the ultimate goals of legitimizing and growing the impact investment field and encouraging mobilization of private capital to help to address social and environmental problems
Target Audience	Investors (and impact investors most specifically), but also targeted at investees and other for-profit and non-profit entities (governments, foundations, corporates, individuals, intermediaries, measurement and data service providers, policymakers, and others)
Development	Developed over the course of six months by the Working Group on Impact Measurement under the direction of the Social Impact Investment Taskforce established as part of the United Kingdom's G8 presidency of the G8; recommendations reflect collective insights and experiences of the group members, information collected through 45 expert interviews and reviews of 60+ research publications, and consultation with external consultants and experts
Summary	<p>The best practice guidelines on impact measurement outlined in <i>Measuring Impact</i> include four phases of impact measurement and seven corresponding steps. The report also identifies three emerging trends in impact measurement for investor consideration. Adopting a shared impact "convention" that "revolves around the availability of material, reliable, comparable, 'additional,' and universal impact data" is essential to growing the impact investment field and, ultimately, solving global environmental and social issues. Beyond encouraging investors and others to adopt its impact measurement guidelines, the Working Group "calls on all participants in the impact investing and measurement ecosystem" to:</p> <ol style="list-style-type: none"> 1. Embrace "impact accountability" as a common value that lies at the heart of all impact investments 2. Apply measurement best practices across impact portfolios, deals, and investee organizations 3. Establish an "impact language" and data infrastructure that enables the application of these practices 4. Evolve the field through continued learning and the advancement of a shared impact measurement agenda <p>Phases and steps of impact measurement.</p> <ol style="list-style-type: none"> 1. Plan: investors and investees agree on impact objectives and approach to measuring progress toward established goals. <ul style="list-style-type: none"> • <i>Set goals.</i> Establish an investment thesis or Theory of Value Creation that outlines inputs, activities, outputs, outcomes, and impacts to clearly articulate impact objectives, provide the foundation for strategic planning and ongoing decision making, and serve as a reference point for investment performance. • <i>Develop framework and select metrics.</i> Develop an impact measurement framework that identifies performance assessment metrics (those that align with existing standards) and that outlines data collection and use. 2. Do: collect, share, store, and validate data at an investment, fund and/or portfolio level. <ul style="list-style-type: none"> • <i>Collect & store data.</i> Capture and store data in a timely, organized, effective, and efficient fashion. • <i>Validate data.</i> Validate data to ensure quality, and verify that it is complete and transparent. 3. Assess: analyze quality, level, and efficacy of achieved impact. <ul style="list-style-type: none"> • <i>Analyze data.</i> Analyze data to assess actual impact compared to established impact goals. 4. Review: share insights from impact measurement and strategic decisions based on these insights and further evolution of measurement practices. <ul style="list-style-type: none"> • <i>Report data.</i> Share impact analysis with stakeholders. • <i>Make data-driven investment management decisions.</i> Use analysis and stakeholder feedback to improve approach. <p>The Working Group advises that investors assess their readiness to adopt the measurement guidelines before committing to do so. Specifically, they should consider their (1) impact measurement goals (whether they trying to report on impact, strengthen decision making, and/or deploy payment-for-success structures); (2) internal structure (resources available for impact measurement); and (3) external demands (impact measurement requirements of external stakeholders).</p> <p>Emerging trends in impact measurement.</p> <ol style="list-style-type: none"> 1. Market convergence: blurring of boundaries between impact investing and mainstream capital markets. 2. Financial quantification: growing desire to quantify the financial value of the social and/or environmental impact of an investment. 3. External impacts: need to factor the external impacts or effects of an impact of economic activity on society into measurement practice.

Source: Social Impact Investment Task Force. *Measuring Impact: Subject paper of the Impact Measurement Working Group*. September 2014.

United Nations Environment Programme (UNEP) Finance Initiative <i>The Principles for Positive Impact Finance: A Common Framework to Finance the Sustainable Development Goals</i>	
Purpose	
<p>Establish the <i>Principles for Positive Impact Finance</i> aimed at achieving net positive impact on economic, environmental, and social development through pursuit of the United Nations Sustainable Development Goals (SDGs), in part through providing finance and other stakeholders with a common impact vocabulary. Within their broad purpose, the <i>Principles</i> aim to help the following groups achieve the following objectives:</p>	
Financiers	Identify, promote and communicate about Positive Impact Finance across their portfolios
Investors and donors	Holistically evaluate the impacts of their investments [positive and negative] and orient their investment choices and engagements accordingly
Auditors and raters	Provide financiers, investors and their stakeholders with the verification, certification and rating services needed to promote the development of Positive Impact Finance
Corporates and other economic stakeholders	Structure SDG-focused business opportunities and business models, and identify financial institutions capable of accompanying their efforts
Governments	Leverage their interventions with the private sector and adjust public policies strategically to maximize the leverage of public funds
Civil society	Identify and develop the kind of technical expertise that will be most helpful to the above parties as they seek to establish new, impact-based business models
Target Audience	
The financial community; also provides insights relevant to other stakeholder groups (corporations, governments, civil society)	
Development	
The Finance Initiative's banking and investment members released a <i>Positive Impact Manifesto</i> in response to the development of the SDGs; the Manifesto included a <i>Positive Impact Roadmap</i> that introduced the <i>Principles</i>	
Summary	
<p>The four <i>Principles for Positive Impact Finance</i> can be paraphrased as follows:</p> <ol style="list-style-type: none"> 1. Positive Impact Finance is that which serves to finance Positive Impact Business: that is, finance that contributes to net positive economic, environmental and social development and that is applicable across all categories of financial instruments and the business activities that underpin them. 2. Frameworks: entities (financial and non-financial) need processes, methodologies, and tools, to identify and monitor the positive impact of the activities, projects, programs, and/or entities to be financed or invested in. This includes positive impact analysis, which can: (a) be undertaken alongside existing procedures, for instance, at on-boarding and during periodical reviews of products, project or clients, and; (b) make use of existing and recognized tools, standards and initiatives where applicable. The Principles do not prescribe which methodologies and indicators that investors should use to identify, analyze and verify positive impact, but instead recommend that no matter the approach investors focus on ensuring transparency and disclosure regarding both the assessment framework and its conclusions. 3. Transparency: entities should disclose (a) activities, projects, programs, and/or entities financed considered and the intended positive impacts thereof; (b) processes for determining eligibility, and for monitoring and verifying impacts; and (c) impacts achieved. They should report regularly on their positive impact activities and business. 4. Assessment: assessment (for certification or rating) "should be based on the actual impacts achieved"; criteria can include: (a) variety of positive impacts delivered; (b) magnitude of the impacts delivered; (c) scale of impacts delivered relative to amount of funds spent (i.e. efficiency of the instrument); (d) degree of leverage of private funds relative to public funds and/or donations (i.e. optimization of public funds and donations where applicable); and (e) level of additionality (i.e. business and finance solutions that help address an unmet or underserved sustainable development need and hence constitute a significant step forward for the attainment of the SDGs). 	

Source: UN Environment Finance Initiative. *The Principles for Positive Impact Finance: A Common Framework to Finance the Sustainable Development Goals*. <http://www.unepfi.org/wordpress/wp-content/uploads/2017/01/POSITIVE-IMPACT-PRINCIPLES-AW-WEB.pdf>

APPENDIX F: CONFRONTING SKEPTICISM ABOUT SYSTEM-LEVEL INVESTING

A central input into this project and the development of the system-level investing measurement guidance presented in the *Roadmap to Assessing System-level and SDG Investing* were interviews with asset owners, managers, and other experts. These interviewees augmented TIIP's institutional knowledge on system-level investing, TIIP-developed theoretical frameworks, and information collected through an in-depth literature review. The objective of the interviews was to learn about how investors thought to be considering system-level issues as part of their larger investment practices were developing, executing, and measuring the effectiveness of related approaches. The interviews also sought to learn about whether and how the SDGs influenced and informed these investors' system-level investing strategies.

Interviewees echoed what TIIP has heard from other industry stakeholders during interactions for various projects. Namely, that despite increasing investor focus on environmental and societal system-level issues and embrace of the SDGs, many investors have lingering questions about how to adopt and measure the effectiveness of system-level investing approaches.

They conveyed that, though certain that system-level considerations affect the long-term well-being of institutional investment, asset owners and managers contend with three main roadblocks to integrating system-level investing into their investment practices: (1) skepticism about their ability to meaningfully contribute to system change, (2) desire to resolve challenges to managing portfolio-level impact before integrating system-level considerations, and (3) stakeholder skepticism about system-level investing and non-holdings related activities. These concerns about system-level investing permeate their thinking about whether and how to try to contribute to progress toward the SDGs; although some of the interviewed investors are trying to do so purposefully, others reported that their commitment to the SDGs is limited to public affirmations, that the goals are worthwhile, and that their general commitment to environmental and social impact aligns with the goals.

TIIP appreciates that investors will not adopt system-level investing, let alone the measurement roadmap presented in this report, if these concerns go unaddressed. The Introduction to the report that corresponds to this document and, specifically, Box I.1 aim to clarify frequently asked questions about system-level investing and its underlying concepts, and the remainder of this section describes and directly responds to skepticism about system-level investing raised during project interviews.

TIIP also appreciates that investors will be more likely to adopt system-level investing strategies if provided with an approach to measuring and communicating their effectiveness to clients and other stakeholders. As such, the "TIIP's response" notes below emphasizes the important role that measurement must play in overcoming stated skepticisms. The corresponding report—*Measuring Effectiveness: Roadmap to Assessing System-level and SDG Investing*—details recommendations for system-level investing measurement.

TIIP encouraged respondents to speak freely and assured them anonymity in this report; therefore, information and quotes reported in this section are not attributed to specific sources.

► SKEPTICISMS ABOUT SYSTEM-LEVEL INVESTING

Interviewees reported that they contend with three main roadblocks to seriously integrating system-level investing into their investment practices:

1. Investor skepticism about their ability to meaningfully contribute to system change. Among the most commonly cited concerns about system-level investing raised by investors is whether any individual investor can truly affect system-level change; and, if they cannot do so alone, whether it is realistic to expect that the collective investment community will mobilize to protect and enhance the environment, society, and financial system. Investors that raise this concern note that if all investors focus on generating environmental or social impact with their indi-

"Can you really make a difference? Is it ever going to be more than just a rounding error? Should we even bother?... Can we, by making tweaks in our portfolio or joining a task force, can we ever really fix the problem or are we just going through the motions? Can we ever be effective at the system-level? Can we really make a difference at the system-level as an individual investor?"

- Interview respondent

vidual portfolios, then the collective investment community could achieve system-level influence; but these investors also note that too few influential investors integrate such considerations into their investment strategies to convince them that achieving system-level change in this way is possible. They note that the prospect that any single investor could influence a system-level challenge such as climate change is daunting, as is the hope that the collective investment community will coordinate to affect change.

Some of the interview respondents that voiced skepticism about their or the investment community's ability to generate system-level impact relayed their thoughts in the context of the SDGs. These investors explained that the SDGs are too broad to expect that investors and the enterprises that they invest in would be able to achieve them entirely.

2. Investor desire to resolve challenges to managing portfolio-level impact before integrating system-level considerations. Interview respondents also reported that they are still confronting challenges to portfolio-level impact management and therefore cannot yet consider how to manage system-level influence. They highlighted measurement fragmentation, inconsistency, and lack of standardization and data availability and quality as the primary challenges to measuring the environmental or social impact of their investments. Nearly all the interviewees noted that the Global Impact Investors Network (GIIN) has made great progress in addressing some of these issues through the development of its Impact Reporting Investment Standards (IRIS) indicators and reported that they use IRIS to assess impact, while also noting that IRIS is not universally applicable to all investors and their individual goals and investment approaches. For instance, one interviewee noted that many IRIS indicators were too granular for their organization's purposes, and another lamented difficulty collecting data from underlying portfolio enterprises that aligns with the indicators. The investors noted parallel concerns about the SDGs and their commensurate measurement indicators, and challenges mapping portfolio-level indicators like those prescribed by IRIS to the SDGs.

3. Stakeholder skepticism about system-level investing and non-holdings related activities. It is one thing for investors to be convinced of the value and need for system-level investing, it is something entirely different for their various stakeholders to buy-in to and support the idea. One interview respondent explained that its primary client raises questions each time the investor engages in non-holdings activities and asks why the investor does not exclusively focus on its own financial targets and portfolios and whether it dedicates staff to such activities. Another noted that it must be clear with its clients that their focus on system-level issues and strategies implemented above and beyond daily portfolio management (e.g., public policy advocacy, thought leadership, and convening investor interest groups) does not interfere with their overall investment strategy and return goals and is not paid for through client management fees. Stakeholder skepticism does not preclude either of these investors from engaging in system-level investing, but it nonetheless presents roadblocks along the way.

“One challenge that [we] encounter in participating in non-holdings activities... is ‘backlash’ from [our] primary client: ‘Why [are you] even doing that? Why don’t [you] just focus on our own targets? Our own portfolio? Why spend all of this [staff time] on influencing others?’”

- ISIM project interview respondent

► ADDRESSING THE SKEPTICISMS

System-level issues require investor attention now, not later. Although no one investor can single-handedly alter an entire system, the actions of individual investors can—and do—collectively impact system health. Intentional collaborative action can help investors efficiently and effectively address system-level challenges.

Investors will be more likely to adopt and sustain their system-level investing strategies when they can measure and communicate about their effectiveness. The *Roadmap to Assessing System-level and SDG Investing* report provides an important first step in providing investors with an approach to assessing their system-level approaches to help ensure that such approaches are effective and to promote legitimacy, transparency and accountability.

System-level issues are material to investor portfolios; they should confront them immediately. While investors increasingly recognize the materiality of environmental, societal and governance

(ESG) factors in security valuation—as of 2017, approximately 1,700 institutional investors with assets under management nearing \$70 trillion signed the Principles for Responsible Investment (PRI) and pledged to “incorporate ESG issues into investment analysis and decision-making processes”—many still hesitate to incorporate such considerations into their investment processes.⁶ Shifts in organizational norms and culture are required for the financial community to broadly embrace ESG factors, given the historical ignorance of the materiality of these issues; and cultural change is always difficult.

Because they are slow to adopt portfolio-level ESG integration, however, should not prevent investors from acknowledging the materiality of, and otherwise confronting, environmental, societal and financial system-level issues. These system-level factors can affect entire markets, and hence all portfolios, in substantive ways. Investors on the whole benefit from the performance of the overall markets, driven in large part by the performance of the economy. It is this market “beta”—swings in benchmark performance against which investors’ performance is often measured—that is the primary source of their long-term returns, rather than the “alpha” that individual investors generate by outperforming benchmarks.⁷ Alpha is a zero-sum game, difficult for any single manager to generate consistently and impossible for more than half of all managers to claim at any one time. Market beta represents value added to investors through the creation of long-term value and benefits them individually and collectively. Consequently, investors have a compelling reason to consider environmental, societal and financial systems-level issues as part of their investment processes while also grappling with the integration of ESG factors in portfolio management.⁸

Investors will be well served by integrating system-level considerations into their investment processes at the same time as they manage ESG integration at the portfolio level. While this report does not address here the issues surrounding portfolio-level impact measurement frameworks and metrics (i.e., the GIIN’s IRIS framework), it is important to note that ongoing refinement is a necessary part of the evolution of any metrics system.

Investors can convey the materiality of system-level considerations by providing information related to each step of the system-level investing measurement process (outline in the Roadmap to Assessing System-level and SDG Investing report), including: (a) providing justification for their focus on a system and articulating clear goals for influencing the system; (b) explaining which tools will help to achieve stated goals, and; (c) assessing their influence related to stated goals.

That investors today perceive a need for system-level investing is evidenced by their widespread endorsement of the U.N. Sustainable Development Goals (SDGs), which focus on contributing to widespread, sustainable system-level change. Achieving related progress, therefore, can therefore serve both to enhance the performance of all portfolios and to realize widely agreed-upon goals for social and environmental progress. Although the framework for assessing investor influence at system levels is not as well developed as those for measuring portfolio-level impact, the task is equally as urgent and need not wait for further refinement of the latter before confronting the former.

Investors collectively influence systems and individual investors can increase their potential for influencing systems positively through collaborative action. Individual investors with their collective \$250 trillion in investable assets can, and do, take actions that influence systems, both negatively and positively. This is particularly true when these investments take place at “leverage points” within the system, or places where even small or otherwise seemingly isolated actions can fundamentally shift investment norms.

Take the 2008 financial crisis and 2010 global commodities markets as examples of how the collective actions of individual investors generated negative influence on societal and financial systems. During the 2008 financial crisis, few investors understood how mortgage defaults in one country could, through collateralized debt obligations, wreak such devastating effects on the global financial system. In the early 2010s, speculators in the global commodities markets for staples such as wheat

⁶See the Principles for Responsible Investment website. Retrieved from <https://www.unpri.org/about> on November 7, 2017.

⁷Jim Hawley & Jon Lukomnik, *The Long and Short of It: Are We Asking the Right Questions? Modern Portfolio Theory and Time Horizons*, 41 Seattle U. L. Rev. 449 (2018).

⁸*Ibid.*

and corn, along with oil and fertilizer, helped drive the price of basic foods such as wheat and rice to levels so unsustainable for the world's poor that they provoked food riots and arguably contributed to the social unrest that ignited the Arab Spring with its subsequent failures of states and its regional geopolitical instability.⁹

Such collective actions of individual investors, on the other hand, can also generate positive system-level influence. Take, for example, the transition to a low-carbon economy necessary to address the environmental system challenge of climate change. Opportunities increasingly exist for investment in renewable energy. Although no one of these investments will catalyze a system-level transition to a fossil-fuel-free world, such investments can, in the aggregate, have a substantial impact on accelerating this transition. Global investments in renewable energy—primarily solar and wind power—have ranged between \$234 billion and \$312 billion each year since 2010. A crucial indicator of investor influence, more important than dollars invested, is an increase in the overall percentage of new energy-generating capacity now coming from renewable sources. Investments in renewables were lower in 2016 (\$241 billion) than in 2015 (\$312 billion), but newly installed energy-generating capacity from renewables was higher in 2016 (138.5 gigawatts) than in 2015 (127.5 gigawatts) and accounted for 55% of all newly installed energy-generating capacity worldwide, a higher level than in any previous year.¹⁰ Investments at this key leverage point are tipping the scales at least as far as new generating capacity is concerned.

Intentional collaborative action can help investors solve system-level problems efficiently and effectively, more so than attempting to do so alone. Of course, the financial community is highly competitive, and investors might not be enthusiastic about taking actions beneficial, but costly, to themselves, that simultaneously help their competitors at no cost—the “free rider dilemma.” An Investor might, for example, perceive risks to their portfolio from companies that poorly manage climate-change-related risks. They want to engage these companies but are reluctant to do so alone. Through intentional collaborative engagements in partnership with peers, however, investors can address portfolio-level risks. The advantages of such collaborative initiatives are becoming increasingly clear to investors since they address not only the free rider problem but also help them to more effectively communicate to the broader corporate community the collective importance of issues from an investor perspective.

In 2017, for example, members of the Global Investor Coalition on Climate Change launched Climate Action 100+, a five-year project through which 100+ of the world's largest institutional investors will collaboratively engage the world's largest corporate greenhouse gas emitters—so-called “systematically important carbon emitters.” This initiative is the culmination of a process of coalition-building to enhance effective engagement and impact among institutional investors that has been underway since the 2003 founding of the U.S. Investor Network on Climate Change. Such a united front of the largest investors not only sends an unmistakable signal to corporations that this is an issue of investor concern. It also ensures that investor time and resources spent are spread across all members, addressing the free rider issue. Once the potential of the collective impact of individual investments and of collaborative action by investors in the aggregate is considered, it becomes clearer that investors can overcome the hesitation to act and their fear that all actions are in effect isolated ones.

⁹ The Investment Integration Project (TIIP). *Investors need to invest in the bigger picture: here's how the SDGs could fit the bill*. Responsible Investor. March 14th, 2017.

¹⁰ Frankfurt School of Finance and Management. *Global Trends in Renewable Energy Investment 2017*. Frankfurt, Germany: Frankfurt School of Finance and Management) 2017, pg. 11.

APPENDIX G: RESEARCH METHODS THE ISIM PROJECT AND RESEARCH METHODS

Despite emerging institutional investor focus on environmental, societal, and financial system issues and private sector embrace of the SDGs, little guidance exists to help investors develop and execute system-level investing strategies, manage their influence on systems and systems impacts on their investments, or measure their effectiveness.

The purpose of the *Investors' System-level Impact Measurement Project (ISIM)* project that relates to the *Measuring Effectiveness* report is to provide investors with a preliminary roadmap for measuring the effectiveness of their system-level investing strategies, including those that move beyond alignment with the SDGs and that can contribute to progress toward achieving them. Within this broad purpose, *ISIM* aims to:

- Help investors to understand the feedback loops between their investment approaches and the environment, society, and financial system and, conversely, between these systems and investment decision-making.
- Examine prevailing approaches used by investors to manage and evaluate the environmental, societal, and financial impacts of specific investment selection and portfolio construction decisions (“portfolio-level” activities); and, to the extent that they exist, approaches currently used by investors to assess their influence on systems—and these systems’ effects on their portfolios.
- Address the challenge of measuring the effectiveness of investors’ intentional actions to address system-level challenges.

Research methods. To fulfill the project objectives, TIIP:

- Identified and reviewed literature on investor approaches to managing, evaluating, and reporting on environmental, societal, and financial impact. This included examining widely-used measurement frameworks (i.e., established guidance for how investors and other stakeholders should approach generating and measuring positive systems impact on the planet, people, or the financial system); best-practice assessment approaches utilized by individual investors; and, other reports, websites, and articles reflecting current financial community research and guidance.
- Interviewed 15 individuals from 10 asset owners and managers and a sustainable investment expert, about: their approaches to environmental, societal, and financial impact management; investors integration of the SDGs into such approaches, and; evaluation and prevailing best practices. Respondents mainly included high-level and executive personnel, such as vice presidents, chief executive officers, partners, directors, and fellows.

They represented the following organizations:

- | | | |
|-------------------------------|--------------------------------------|----------------------|
| 1. Aviva Investors | 5. F.B. Heron Foundation | 9. Sarona Fund |
| 2. Bridges Fund Management | 6. Ireland Strategic Investment Fund | 10. Sonen Capital |
| 3. Domini Impact Investments | 7. New Philanthropy Partners | 11. Tellus Institute |
| 4. Ellen MacArthur Foundation | 8. PGGM | |

TIIP staff conducted interviews using an interview guide that ensured the systematic collection of comparable information across individuals and entities while also allowing each discussion to focus on individuals’ specific expertise and experience.

- Refined TIIP’s institutional knowledge on system-level investing and related theoretical frameworks. TIIP integrated, referenced, and built-on its previous research on system-level investing to inform the roadmap presented in this *ISIM* report; including, TIIP’s: *Portfolios and Systemic Framework Integration: Towards a Theory and Practice*; *System-level Considerations and the Long-Term Investor: Definitions, Examples, and Actions occasional paper*; *Tipping Points 2016: Summary of 50 Asset Owners’ and Managers’ Approaches to Investing in Global Systems and Central Bank and Development Finance Institution Approaches to Investing in Global Systems* reports developed with the IRRC Institute; and *Effective Investing for the Long Term: Intentionality at Systems Levels* conducted in partnership with High Meadows Institute.

Considerations. Many mainstream investors are still grappling with how best to integrate environmental and societal impact considerations into their daily portfolio management, let alone considering how to best consider the consequences of their activities at broader systems levels. As such, the guidance presented in the report *Measuring Effectiveness: Roadmap to Assessing System-level and SDG Investing* represent a preliminary roadmap to measuring the effectiveness of system-level investing approaches that is intended to ignite thoughtful dialogue and is not meant to represent final guidance on the approach.

Acknowledgments, Author Information, & About TIIP

ACKNOWLEDGEMENTS

For their helpful comments and suggestions on various drafts of this paper, TIIP would like to thank Jon Lukomnik, Will Morgan, Michael Musuraca, Brian Tomlinson, Brian Trelstad and Sandra Waddock. For its financial support for this and related TIIP projects, we would also like to thank the IRRIC Institute.

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ABOUT TIIP

TIIP helps institutional investors understand the big picture, or “systems-level,” context of their portfolio-level decisions. This is important because “systems-level” events, such as economic crises, ecosystems under stress, and societies in turmoil can disrupt the best-laid plans of investors and cost them dearly. Even seemingly “local” issues are now having much greater impact than they once did as the world becomes increasingly interconnected. TIIP designs, provides and maintains data and analytics that enable institutional investors to make this important connection between portfolio-level decisions systems-level considerations. TIIP's research portal and database of investor profiles, market analysis, and practical guidance provides a way to better match investors, benchmark systems strategies, and optimize program development. Investors leverage TIIP's data and analytics to solve program inefficiencies, enhance impact measurement, and boost absolute returns. Learn more at www.tiipproject.com.