



ASPEN NETWORK  
OF DEVELOPMENT  
ENTREPRENEURS  

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# Measuring the Impact of Climate Small and Growing Businesses

A walk-through of impact tools,  
frameworks, and best practices

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## ABOUT ANDE

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**The Aspen Network of Development Entrepreneurs (ANDE)** is a global network of organizations that propel entrepreneurship in developing economies. ANDE members provide critical financial, educational, and business support services to small and growing businesses (SGBs) based on the conviction that SGBs will create jobs, stimulate long-term economic growth, and produce environmental and social benefits.

As the leading global voice of the SGB sector, ANDE believes that SGBs are a powerful, yet underleveraged tool in addressing social and environmental challenges. Since 2009, ANDE has grown into a trusted network of nearly 300 collaborative members that operate in nearly every developing economy. ANDE grows the body of knowledge, mobilizes resources, and connects the institutions that support the small business entrepreneurs who build inclusive prosperity in the developing world. ANDE is part of the Aspen Institute, a global non-profit organization committed to realizing a free, just, and equitable society.

Learn more at [www.andeglobal.org](http://www.andeglobal.org).

## ABOUT CLIMATE COLLECTIVE FOUNDATION

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**Climate Collective Foundation (CCF)** is a non-profit supporting South Asia's climate tech start-up ecosystem. CCF registered in 2018 in Vishakhapatnam, India, and has since accelerated 720+ start-ups across the region, including India, Indonesia, the Maldives, Nepal, and Sri Lanka as well as in Africa, including Ghana, Kenya, Mauritius, and South Africa. CCF is working towards building an integrated, diverse, and inclusive ecosystem for climate entrepreneurship.

Learn more at <https://climatecollective.net>.

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## Contributing Organizations

Entrepreneur Support Organizations	Impact Investors		Small & Growing Businesses
GIZ	Small Enterprise Assistance Funds	Omnivore	Solar Infra
Villgro Innovations Foundation	Lanka Investing Network	Third Derivative	Ecoplore
New Energy Nexus	Fundo Vale	Sheltermtech	Maji Safi
SELCO Foundation	Root Capital	Ankur Capital	Dharaksha Eco
Climate KIC		Intellectap	Carbon Neutral
Wandara Green Ventures	<b>Other Organisations</b>		
Habitat for Humanity	Global Impact Investing Network		



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# GLOSSARY OF COMMONLY USED TERMS

Term	Definition
<b>Adaptation</b>	<p>“Adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects or impacts.”</p> <p><b>Source:</b> <a href="#">UNFCCC</a></p>
<b>Climate impact</b>	<p>“Any change to the climate or environment, whether adverse or beneficial, resulting from a business’s activities, products, or services.”</p> <p><b>Source:</b> <a href="#">U.Calgary</a></p>
<b>Climate SGBs</b>	<p>SGBs that provide goods and services aimed toward climate impact as defined above. Going beyond, this guide takes a broader approach and encompasses ‘green’ innovations with SGBs operating in sectors such as clean water, recycling and waste, air quality, and pollution.</p> <p><b>Source:</b> <a href="#">Cleanenergyventures</a></p>
<b>Climate tech</b>	<p>“Technologies explicitly focused on reducing GHG emissions or addressing the impacts of global warming. Climate tech applications can be grouped into three broad sector-agnostic groups—those that: Directly mitigate or remove emissions, improve communities’ ability to adapt to the impacts of climate change, and/or enhance society’s understanding of the climate.”</p> <p><b>Source:</b> <a href="#">PwC</a></p>
<b>CO<sub>2</sub>eq</b>	<p>“A carbon dioxide equivalent or CO<sub>2</sub> equivalent, abbreviated as CO<sub>2</sub>-eq is a metric measure used to compare the emissions from various greenhouse gases on the basis of their global-warming potential (GWP), by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential.”</p> <p><b>Source:</b> <a href="#">Eurostat</a></p>
<b>Entrepreneur support organization (ESO)</b>	<p>An organization that provides programs, spaces, and resources to help entrepreneurs grow their businesses. Examples include incubators, accelerators, and Business Development Service (BDS) providers.</p>
<b>Greenhouse gas (GHG)</b>	<p>Any gas that has the property of absorbing infrared radiation (net heat energy) emitted from Earth’s surface and radiating it back to Earth’s surface, thus contributing to the “greenhouse effect.” Carbon dioxide, methane, and water vapor are the most significant greenhouse gases.</p> <p><b>Source:</b> <a href="#">IPCC</a></p>
<b>Impact framework</b>	<p>A system for collecting data, measuring, and reporting the environmental, social, and economic impact of a business’s products or services.</p> <p><b>Source:</b> <a href="#">Thinkinsights</a></p>
<b>Impact investment</b>	<p>“Investments made with the intention of generating positive, measurable social and environmental impact alongside a financial return.”</p> <p><b>Source:</b> <a href="#">GIIN</a></p>

Term	Definition
<b>Impact measurement and management (IMM)</b>	<p>“Impact measurement and management (IMM) includes identifying and considering the positive and negative effects one’s business actions have on people and the planet, and then figuring out ways to mitigate the negative and maximize the positive in alignment with one’s goals.”</p> <p><b>Source:</b> <a href="#">GIIN</a></p>
<b>Key performance indicator (KPI)</b>	<p>Key performance indicators measure progress toward an intended result; these are typically aligned with specific programmatic outputs or outcomes.</p> <p><b>Source:</b> <a href="#">KPI.org</a></p>
<b>Metrics</b>	<p>Quantifiable measures commonly used for assessing, comparing, and tracking performance.</p> <p><b>Source:</b> <a href="#">Sopact</a></p>
<b>Mitigation</b>	<p>“Efforts to reduce or prevent the emission of greenhouse gases, such as using new technologies and renewable energies, making older equipment more energy efficient, or changing management practices or consumer behaviour.”</p> <p><b>Source:</b> <a href="#">UNEP</a></p>
<b>Qualitative data</b>	<p>“Data that describes qualities or characteristics. It is collected using questionnaires, interviews, or observation, and frequently appears in narrative form.”</p> <p><b>Source:</b> <a href="#">Libguide</a></p>
<b>Quantitative data</b>	<p>Data that is numeric in nature, expressing quantities, values, ranges, or other measurements. Quantitative data is typically collected through surveys.</p> <p><b>Source:</b> <a href="#">OECD Statistics Portal</a></p>
<b>Resilience</b>	<p>“The ability of a system to absorb, withstand and bounce back after an adverse event. It is the collection of policy, infrastructure, services, transportation, energy infrastructure, and planning that position municipalities to resist natural disasters and other dangerous impacts of climate change.”</p> <p><b>Source:</b> <a href="#">EESI</a></p>
<b>Sustainable Development Goals (SDGs)</b>	<p>“A collection of 17 interlinked global goals designed to be a ‘blueprint to achieve a better and more sustainable future for all’. The SDGs were set up in 2015 by the United Nations General Assembly and are intended to be achieved by 2030.”</p> <p><b>Source:</b> <a href="#">UN SDG</a></p>
<b>Small and growing businesses (SGBs)</b>	<p>“Commercially viable businesses with five to 250 employees that have significant potential and ambition for growth. Typically, SGBs seek growth capital from USD \$20,000 to \$2 million.”</p> <p><b>Source:</b> <a href="#">ANDE</a></p>
<b>Validation of impact</b>	<p>The assessment of an SGB’s reported impact, either through self-assessment or via third party verifiers.</p>



# INTRODUCTION AND PURPOSE OF THIS GUIDE

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**As the world grapples with the urgent challenges presented by climate change, the need for innovative, commercially based solutions has pushed entrepreneurship to the center of the discussion.**

Entrepreneurs need to be prepared to measure and communicate their contribution to climate change mitigation, adaptation, and resilience to key stakeholders. However, there is currently no standardization of climate impact reporting in the small business sector, leaving the burden on entrepreneurs to grow a successful business and implement the right tools to measure climate impact. Impact investors and entrepreneur support organizations (ESOs) likewise struggle to understand, use, and deploy climate metrics cost-effectively.<sup>1</sup> In addition, most resources are geared toward climate mitigation, leaving a gap to be addressed for climate adaptation and resilience (A&R) in the ecosystem.

Climate Collective Foundation and the Aspen Network for Development Entrepreneurs (ANDE) have published this guide to provide SGBs, impact investors, and ESOs with a consolidated list of available tools and frameworks for climate impact measurement, along with guidance on how to select best-fit resources based on their industry and impact area. This guide does not seek to replace any existing frameworks or tools or create new resources. Rather, this guide presents an aggregation of resources and insights from the ecosystem to provide a starting point for impact management and reporting for climate SGBs in developing economies.

## **The guide is structured in two parts.**

- ▶ **Part 1** describes why impact measurement matters for climate SGBs, highlights perspectives and approaches by investors and ESOs, and features case studies of ecosystem stakeholders that have developed their own internal systems for measuring climate impact.
- ▶ **Part 2** provides consolidated lists of climate impact tools and frameworks as well as considerations such as affordability and added features, instructions for choosing the best-fit tool for a given SGB, and deep-dives into three widely used tools and frameworks. These insights are derived from surveys and interviews with climate SGBs, investors, and ESOs (such as accelerators and incubators). The methodology is described in detail in the Appendix.

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<sup>1</sup> SME Climate Hub. 2022. [New data reveals two-thirds of surveyed small businesses concerned over navigating climate action.](#)

# WHO SHOULD USE THIS GUIDE?

**This guide is designed to help SGB sector stakeholders understand the available resources for measuring the impact of SGBs that address climate change mitigation, adaptation, or resilience through their business model.**

SGBs can use this guide to select the best-fit tool or framework for their business, and investors and ESOs can use this guide to learn how to better help supported SGBs navigate the available resources and/or determine how to gather data from SGBs in such a way that can be communicated to stakeholders. This guide does not offer advice on how to “green” an SGB or how to incorporate climate into ESG measures across a portfolio. Rather, the guide centers on decisions made by an SGB and how intermediaries can provide support and gather insights for their own practices.





# PART 1: UNDERSTANDING CLIMATE IMPACT MEASUREMENT AND CURRENT PRACTICES IN THE SGB SECTOR

## ABOUT CLIMATE SGBS

Climate change is the most significant challenge facing the world today. The International Energy Agency Report emphasizes that a global clean energy transition is not feasible with current technologies and that a strong focus on research and development is essential to achieving net-zero emissions. A total of 35% of the cumulative emissions reductions by 2070 in the Sustainable Development Scenario will come from technologies that are currently only in the prototype or demonstration phase, and around 40% from technologies that have not yet reached commercial development.<sup>2</sup>

Small and growing businesses (SGBs)<sup>3</sup> play a key role in developing and commercializing these new climate technologies and in helping communities adapt to the changing climate. The World Resources Institute states that small businesses are “a cornerstone of the economy where the most vulnerable communities exist,”<sup>4</sup> and the United Nations Sustainable Development Goals (SDG) framework recognizes that SGBs can significantly address climate and environmental action directly and indirectly.<sup>5</sup> SGBs are necessary for the journey to Net Zero, keeping the global temperature rise below 1.5 °C, and avoiding the worst effects of climate change.<sup>6</sup>

Apart from existing SGBs moving towards incorporating greener technologies, there is an increasingly new set of SGBs introducing much-needed climate tech-focused products and services. The term ‘climate tech’ refers to technologies that are explicitly focused on reducing GHG emissions or addressing the impacts of global warming. According to PwC research, climate tech applications can be grouped into three broad sector-agnostic groups, including those that “directly mitigate or remove emissions, improve communities’ ability to adapt to the impacts of climate change, and/or enhance society’s understanding of the climate.”<sup>7</sup> While focusing primarily on climate tech, this guide encompasses ‘green’ innovations and incorporates SGBs operating in sectors such as clean water, recycling and waste, and air quality and pollution as well. Many of these innovations have climate impact as an element of their mission, and due to the overlapping nature of many climate and other environmental impacts, many climate measurement tools address green impact as part of their calculations as well. In this guide, the term ‘climate SGB’ will be used to refer to businesses operating in any of these spheres.

2 IEA. 2020. [Clean Energy Innovation Needs faster progress.](#)

3 Aspen Network of Development Entrepreneurs. 2022. [Why SGBs.](#)

4 Dougherty-Choux, L. 2015. [Adapting from the Ground Up.](#) World Resources Institute.

5 The UN Global Compact. 2022. [All Companies Can Play a Role.](#)

6 The Economic Times. 2022. [What it takes for small and growing businesses to transition to Net Zero.](#)

7 PwC. 2021. [State of Climate Tech 2021](#)



## WHY IMPACT MEASUREMENT MATTERS FOR CLIMATE SGBS

As with any business that aims to achieve a social or environmental goal in addition to financial return, climate SGBs rely on effective impact measurement to assess their performance and convey their value-add to investors and customers. SGBs, by definition, start as small businesses or entrepreneurial concepts but have the potential to create a bigger impact as they scale. A report by the International Finance Corporation (IFC) projected that climate investments in developing economies would be US \$23 trillion between 2016 and 2030<sup>8</sup> and not just projected, but essential: the IPCC has estimated that “\$1.6 trillion to \$3.8 trillion will be needed each year through 2050 for the world to transition to a low-carbon future and avoid warming exceeding 1.5°C.”<sup>9</sup>

To take full advantage of this market opportunity, early-stage enterprises need impact forecasting to showcase their potential. For example, early stage enterprises might use impact forecasting to:

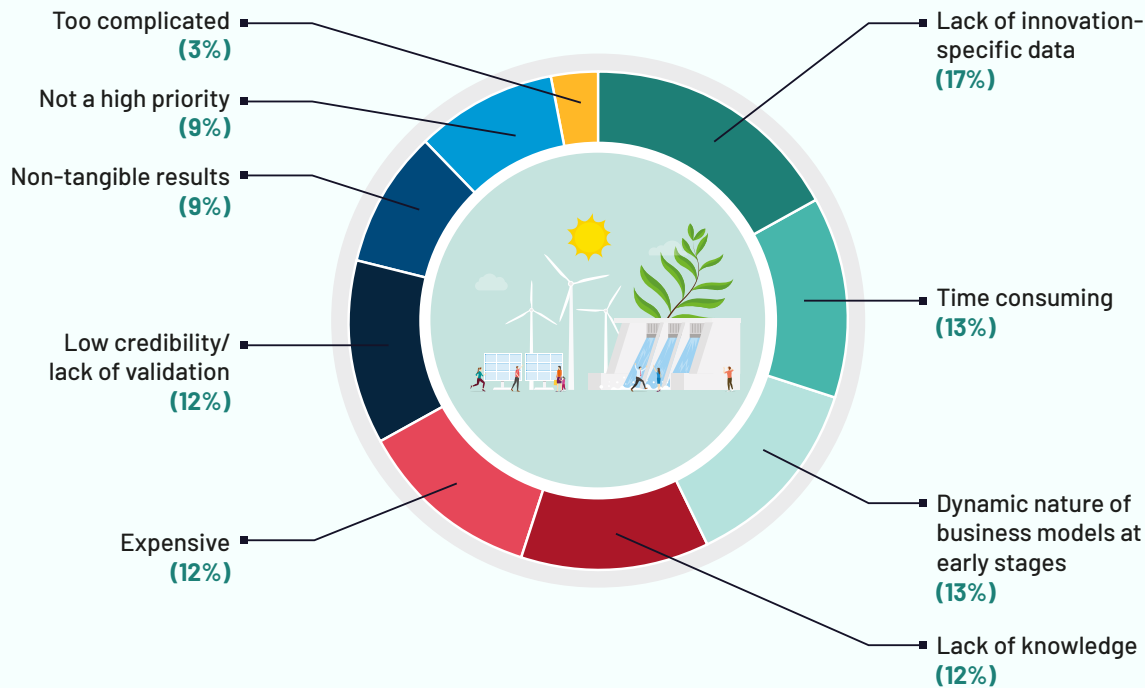
- ✓ **Secure funding:** To approach investors who have a focus on climate or attract funding from banks and lenders by incorporating climate risk management.
- ✓ **Connect with networks and support:** To apply for climate-focused enterprise support programs and network with other important players in the entrepreneurial ecosystem.
- ✓ **Communicate value:** To establish credibility with key stakeholders, design business models incorporating greater resource efficiency, and increase and retain customers.
- ✓ **Attract and retain talent:** To recruit employees with expertise in and commitment to climate action.

Despite the clear incentive for tracking climate metrics, SGBs face distinct challenges in doing so. While nearly 90% of the climate SGBs surveyed for this guide reported that they measure climate impact, only 32% an established impact tool. SGBs are interested in a simple and flexible tool where they can input their data and generate a region-specific climate impact report, yet face challenges such as a lack of technical IMM expertise within the team, a lack of region-specific data (especially in developing economies), a lack of funds to pay for measurement and validation, and a lack of awareness of terminology, frameworks, and tools (Figure 1). During roundtables and interviews, ESOs and impact investors also shared that their SGBs struggle to separate vanity metrics (metrics that look good in number but do not reflect actual impact) from actional metrics, that there are few tools for adaptation and resilience business models, and that oftentimes in-house impact measurement does not conform to international or sector norms.

8 Kerr, T., Maheshwari, A. and Sottong, J. 2016. [Climate Investment Opportunities in Emerging Markets](#). International Finance Corporation.

9 United Nations. 2022. [The Sustainable Development Goals Report](#).

– FIGURE 1: CHALLENGES FACED BY SGBS IN MEASURING CLIMATE IMPACT



## ABOUT IMPACT FRAMEWORKS AND TOOLS

There are many impact metrics that can be used by SGBs to measure climate impact. Impact frameworks and tools have been developed to help organizations navigate these metrics and determine how to measure and report their climate impact in a structured way.

- ▶ **Impact Tool:** A digital application that enables SGBs to input their company data and generate an impact report exclusively for their innovation or business operations. While this guide only assesses tools available online, manual methods are used by some SGBs as well.
- ▶ **Impact Framework:** A system for collecting data, measuring, and reporting the environmental, social, and economic impact of a business’s products or services.

While frameworks and tools both exist to help organizations clarify their approach to impact measurement, they serve different purposes. An impact tool is useful by an SGB to collect data on pre-determined impact metrics, while a framework is often used by an investor or intermediary seeking to measure impact across a portfolio. A framework may also be used by an SGB seeking to make an impact in multiple spheres beyond climate, such as job creation and community empowerment.



## INSIGHTS AND CASE STUDIES FROM IMPACT INVESTORS

Below are the most relevant take-aways from interviews and roundtables with impact investors:

### ► TOOLS AND FRAMEWORKS USED:

Most impact investors interviewed use an internally developed framework to measure climate and social impact. [IRIS+](#), the World Bank's [Environmental and Social Framework](#), [Task Force on Climate Related Financial Disclosures](#), [SDG](#), and The United Nations Sustainable Development Group's [gender equality scorecards](#) were mentioned as preferred frameworks, though in many cases, a mix of frameworks is used to suit the specific needs of the investor.




### ► EXPECTATIONS OF INVESTEES:

Impact investors provide support to SGBs in understanding and measuring their climate impact and do not expect the early stage SGBs to have a well-defined impact report. It was clear that impact investors are mindful of the fact that SGBs lack the expertise and resources for impact assessment. Many impact investors do not make quantified impact reports mandatory and will accept basic impact identification and narrative. Once a part of the portfolio, support is generally given to SGBs for impact reporting.

### ► KEY CLIMATE METRICS:

According to interviews with impact investors, the widely used impact KPIs for their climate tech SGB investees include: reduction in CO2 emission, liters of water saved, tons of waste managed, kilowatts of renewable energy produced, and kilowatts of electricity saved.

### ► CHALLENGES:

-  Validation of impact is a key challenge as it incurs additional cost.
-  Some impact investors have a lack of expertise within their team and hence are seeking impact training workshops and certifications.
-  Due to the lack of impact assessment awareness and expertise in the ecosystem, impact investors find it difficult to weigh impact parameters within their investment decisions (for example, comparing the merits of an investment in a solar technology versus a reforestation investment in terms of climate impact).



**CASE STUDY:**  
**FUNDO VALE DRAWS ON MULTIPLE FRAMEWORKS AND KEEPS DATA COLLECTION SIMPLE.**

[Fundo Vale](#) is a Brazilian non-profit, ESO, and investment fund. Along with their funder Vale, they support innovative solutions restoring Brazilian rainforest and climate-based solutions. For due diligence and climate impact measurement, they use an internally developed impact framework called [Gimpact](#), which they developed by drawing on aspects of the Impact Management Project, IRIS+ Global Impact Investing Network (GIIN), the International Finance Corporation (IFC), and the SDGs. Gimpact can also be used to avail carbon credits using an evaluation matrix. The framework includes 65 impact indicators, 15 of which are common to all their supported SGBs. They collect data from their supported SGBs using simple tools like Google Forms and use third party validation for some of the indicators. They provide impact training for the SGBs and are looking for impact tools with better technology to easily measure impact.<sup>10</sup>



**CASE STUDY:**  
**OMNIVORE USES AN INTERNALLY DEVELOPED FRAMEWORK TO CAPTURE PORTFOLIO-LEVEL IMPACT.**

[Omnivore](#) is an impact investor based in India that focuses on climate adaptation and resilience and invests in SGBs that are shaping the future of agriculture and food systems. The four pillars of Omnivore’s theory of change include boosting smallholder profitability, enhancing smallholder resilience, promoting agricultural sustainability, and catalyzing climate action. In an effort to maintain consistency across their portfolio, Omnivore developed their own simplified framework by drawing on other more complex frameworks as references, including the SDGs, IRIS+, Impact Management Project, and operating principles for impact management adopted by GIIN members. They collect data on climate impact from SGBs based on stage and region of operation and then aggregate the data into a single picture of the impact of Omnivore’s portfolio.

– **TABLE 1: OMNIVORE KEY PERFORMANCE INDICATORS**

Theme	KPIs
Agricultural sustainability	Reduction in chemical usage (kg) and food waste (metric tonnes)
Climate resilience	Area under sustainable cultivation, reduced energy use, chemical use, water use (Ha)
Climate mitigation	Amount of GHG emissions avoided/mitigated

<sup>10</sup> Fundo Vale. 2022. [Impact Measurement and Management: GIMPACT](#).



**CASE STUDY:**  
**THIRD DERIVATIVE DEVELOPED A FORMULA FOR CALCULATING CLIMATE IMPACT ACROSS SGBS.**

Third Derivative (D3) is a global ESO and impact investor that supports climate mitigation innovations seeking to scale. D3 follows an internal impact framework that addresses SGBs’ carbon emissions abatement potential, which depends on the annual sales, market adoption rates, and lifetime of the SGB. For SGBs, all the above factors are highly unpredictable as they are dependent on consumer behavior, government policies, emerging markets, and industrial practices.

To determine the best-fit SGBs for their investment or nonfinancial support, D3 calculates the SGBs’ potential climate impact by first defining the type of impact the innovation creates. D3 classifies SGB applicants into three types of impact categories and then calculates the potential emissions drawdown in a hypothetical scenario where the solution scales to the maximum it possibly can. D3 then sets thresholds for this potential drawdown impact and accepts only those companies that pass that threshold.

D3 avoids choosing winners between different innovations and does not compare solutions creating different types of impact against each other. They only quantitatively assess a start-up’s impact against those set thresholds for each impact category.

– **TABLE 2: D3’S FORMULA FOR QUANTIFYING IMPACT ASSESSMENT OF SGBS<sup>11</sup>**

Impact sub-category	Formulae
<b>DMM 1</b>	$[GHG_{legacy} - GHG_{solution}] * S100$
<b>DMM 2</b>	Formula for DMM 1 OR, if more practical: $N * C_{legacy} * I * S100$
<b>DMM 3</b>	$N * [GHG_{legacy} - GHG_{solution}] * S100$
<b>CSE / DEE</b>	Impact potential of associated DMM. In this case, we consider whether the Enabler applies primarily for a certain sub-segment or level of adoption. CSEs often enable expanding applicable segments of increased levels of adoptions.

*Nomenclature: Direct Mitigation Measures (DMMs) are solutions that help replace legacy, GHG-intensive anthropogenic forcers with more benign alternatives (think electric vehicles to replace internal combustion engine vehicles), or that “heal” some of the damage already done by removing carbon from the atmosphere (like direct air capture technologies). “Enablers,” on the other hand, are startups creating indirect impact through key complementary technologies and solutions (such as charging infrastructure for EVs or project financing platform technology that speeds the adoption of rooftop solar). GHG legacy = GHG emissions per unit and per year (where applicable), based on legacy technology and process deployments; GHG solution = GHG emissions per unit and per year (where applicable), based on new technology or process deployment; S100 = Number of “units” in 100% of the target market segment(s) per year (can be global or regional); C legacy = Resource consumption per unit activity, based on legacy technology and process deployments; I = Carbon intensity of resource today; N=Percentage reduction in resource consumption; GHG’solution = GHG emissions per unit, with the enhanced zero/low-GHG solution; N\*=Percentage contribution of the performance enhancing solution (DMM3) to final emissions displacement by the enhanced low-GHG solution (other DMM)*

<sup>11</sup> Krishna, C. et al. 2022. [How \(And Why\) We Measure Climate Impact](#). Third Derivative.





## INSIGHTS AND CASE STUDIES FROM ENTREPRENEUR SUPPORT ORGANIZATIONS (ESOS)

Below are the most relevant take-aways from interviews and roundtables with eight accelerators and incubators (referred to as ESOs throughout this section):




### ► FRAMEWORKS USED:

ESOs, in general, do not use a specific impact tool or framework for measuring climate impact. However, ESOs shared that their funders are seeking a quantitative and validated impact report of ESO portfolios due to concerns about the quality of self-reported impact data.

### ► EXPECTATIONS OF SUPPORTED SGBS:

Interviewed ESOs shared that their funders prefer to receive verified quantitative impact reports for the SGBs and the ESO, using recognized models and frameworks through site visits. However, ESOs face technical and financial limitations. Some provide impact assessment training for SGBs in their programs and collect data from their portfolio to develop impact reports.

### Challenges:

-  Lack of knowledge and expertise in impact assessment
-  Lack of funding for training and supporting SGBs on impact measurement
-  Unaware of simple tools and frameworks in forecasting the impact of early stage SGBs



## CASE STUDY: NEW ENERGY NEXUS USES A NETWORK APPROACH TO BUILD IMM CAPACITY AMONG SGBS.

[New Energy Nexus \(NEX\)](#) is a network of accelerators and funds supporting clean energy entrepreneurship. They have supported 646 SGBs since 2016. The NEX Philippines, Indonesia, Vietnam, Uganda, California, and India chapters each designed their own impact tool using Microsoft Excel. NEX has found that its investors are more receptive to SGBs that measure their impact and value ESO participation during the data collection process, as it increases the credibility of impact reports. NEX encourages ESOs to support their SGBs in impact measurement through curriculum and impact training. As a part of their extended support to SGBs by conducting impact training sessions, they require a lean and simple monitoring and evaluation framework.

The global metrics that NEX tracks across its chapters include: 1) Number of start-ups supported, 2) Number of entrepreneurs supported, 3) Green jobs created, 4) Total amount given out in grants and investments by NEX, 5) Female entrepreneurs trained/supported, 6) Ecosystem building events organized, 7) Strategic partnerships, and 8) Tonnes of CO2 emissions mitigated.



## CASE STUDY: GIZ ASKS SGBS TO COMPLETE A SELF-ASSESSMENT TO ADDRESS THEIR IMPACT ON CLIMATE CHANGE ADAPTATION AND RESILIENCE.

The [Deutsche Gesellschaft für Internationale Zusammenarbeit \(GIZ\)](#) is a public-benefit federal enterprise supporting the German government that works with public and private sector clients in a wide variety of areas – including economic development and employment promotion, energy and the environment, and peace and security to develop effective solutions that offer people better prospects and sustainably improve their living conditions.

GIZ's project on [Private Adaptation Finance](#) aims to mobilize investment in private sector solutions for climate change adaptation and resilience (A&R) by supporting both the supply and demand side of capital for A&R investment in a holistic approach that includes ecosystem building and connects the global debate to the local context and stakeholders. In early 2022, GIZ conducted a call to identify adaptation-relevant SMEs for one-on-one investment readiness support. The selection process also included an assessment of the A&R relevance of the applicants (for reference, see [Application Form of PrivABoo Call for SMEs](#)).

Based on the call and resulting map of adaptation-relevant companies, GIZ is building a methodology for an impact self-assessment for SMEs with A&R products, services, or technologies. The methodology builds on the [Adaptation Solutions Taxonomy](#) and GIZ & IISD's [Repository of Adaptation Indicators](#) and strives to combine A&R eligibility screening for investments with practical guidance on selecting context- and location-specific key performance indicators per A&R business model and investment opportunity. The aim is to support SGBs and investors in the formulation of the business case for A&R in a language that is accessible to private sector actors whose perspective is focused on consumer needs and demands, risk management, market share, profit and loss, etc.

# PART 2: WALK-THROUGH OF COMMONLY USED TOOLS AND FRAMEWORKS

There being no standardization of climate impact reporting globally in the small business sector, entrepreneurs need to choose between the options available to guide them. Finding the right fit can be time-consuming and challenging. This section includes a list of commonly used tools and frameworks for measuring climate impact and their usability for climate SGBs in developing economies, followed by detailed examples of how to use three of the most used resources, the CRANE Impact Tool, Climate Impact Forecast, and IRIS+. These examples show how these resources are practically used and the type of outputs they can generate for users. For an interactive version of this guide, including filterable versions of the below tables, visit <https://climatecollective.net/impactmetrics>.

The screenshot shows the website interface for Climate Collective. At the top left is the Climate Collective logo. The navigation menu includes: Home, Our Projects, Guide, Tools & Frameworks, Resources, Events, and Write to us. The main heading is "Measuring the Impact of Climate Small and Growing Businesses (SGBs)" with a sub-heading "A walk-through of impact tools, frameworks, and best practices" and a "View Guide" button. A large globe image is positioned to the right. Below this, a downward arrow points to a section titled "IMPACT AT CCF". This section contains an image of a hand holding a globe with the Climate Collective logo, and a text block stating: "Since 2017, Climate Collective Foundation has been actively engaged in supporting the small and growing business (SGB) sector to measure the climate, social, and gender impact of early-stage startups. This work includes a curriculum introducing startups to climate impact assessment and workshops for startups ecosystem partners across our portfolio."

## **HOW TO NAVIGATE THE TABLES OF TOOLS AND FRAMEWORKS**

Before examining the table of available tools, consider the needs of your organization and the parameters you should apply to ensure you identify the best-fit resources for what you aim to measure.

### STEP 1 Identify the sector(s) in which the SGB operates.<sup>12</sup>

– TABLE 3: CLIMATE IMPACT SECTORS

Low Carbon Energy	Land and Ocean Management	Transportation	Water and Waste Management	Built Environment
<b>Energy Efficiency and Storage</b>	<b>Sustainable Agriculture and Aquaculture</b> (crop diversification, micro-irrigation, etc.)	<b>Electric Vehicles</b> (including charging infrastructure)	<b>Water Management</b> (collection, treatment and supply, etc.)	<b>Green Buildings</b> (retrofitting, new builds)
<b>Electrification with Renewables</b> (grid-tied renewables, off-grid renewables)	<b>Sustainable Forestry</b> (reforestation, carbon-sequestration, afforestation)	<b>Sustainable Mobility</b>	<b>Waste Management and Circular Economy</b> (solid waste, sewerage, and post-use processes)	<b>Disaster Management</b> (developing monitoring and response systems)
<b>Clean Fuels</b>	<b>Eco-tourism</b>			

### STEP 2 Identify the key performance indicators (KPIs) that best reflect the impact you aim to achieve. (Sources: interviews, surveys, and external sources)<sup>13 14 15</sup>

– TABLE 3: SAMPLE CLIMATE KEY PERFORMANCE INDICATORS

Mitigation KPIs	Adaptation & Resilience KPIs	Green KPIs	Social KPIs
Kilowatts of renewable energy generated	Hectares of land restored	Tons of waste diverted from landfills	No. of climate jobs created
Kilowatts of electricity usage reduced	Liters of water saved	Liters of wastewater treated	No. of women impacted and employed
CO2eq <sup>16</sup> emission reduction		Air pollutant reduction (PM2.5)	
		Reduction in chemical usage	

12 Categorization developed by Intellecip in partnership with ANDE for research on green SGBs. Publication forthcoming.  
 13 Trabacci, C. et al. 2020. [Adaptation Solutions Taxonomy](#). Adaptation SME Accelerator Project (ASAP). Inter - American Development Bank.  
 14 Global Impact Investing Network. 2022. [IRIS+ Catalog of Metrics](#).  
 15 Fiksel, J. et al. 2012. [A Framework for Sustainability Indicators at EPA](#). United States Environmental Protection Agency.  
 16 CO2 eq has become the default metric for transferring emissions of different greenhouse gases to a common scale using their Global Warming Potential (GWP).

## HYPOTHETICAL EXAMPLE OF AN **SGB** NAVIGATING THE *TABLE OF TOOLS*



**Arpit** is the founder of an early-stage SGB, Biopack. Biopack manufactures biodegradable packaging materials made from agriculture stubble waste. This packaging material is used as an alternative for single-use thermocols and plastic sapling containers.

To select the best-fit tool to measure his business's impact, Arpit takes a step-by-step approach:

**STEP 1 IDENTIFICATION OF SECTOR**  
→ *Waste management and circular economy*

**STEP 2 IDENTIFICATION OF IMPACT KPI**  
→ *CO2 emission reduction and tons of waste diverted from the landfill*

**SCENARIO 1:** Arpit plans to showcase the impact of his product on his website and to his corporate buyer in quantitative terms. Once Arpit filters out tools that do not address his sector, he's left to choose between the Climate Impact Forecast, Open LCA, and B-Impact Assessment. Additionally, each of these tools also helps assess allied social impact.

**SCENARIO 2:** Arpit approaches an impact investor who has SDG goals alignment as a major impact lens for their portfolio. Arpit needs to find an additional tool for SDG mapping as the tools identified and used before do not offer this functionality. Looking at the table, Arpit could use SDG Impact Assessment, SCAN, Impact Nexus, and SDG Action Manager.

## HYPOTHETICAL EXAMPLE OF AN **IMPACT INVESTOR** NAVIGATING THE *TABLE OF FRAMEWORKS*



**Clean EN** is an impact investor. They have invested in 50 climate tech SGBs with innovations in clean energy and energy efficiency. Clean EN is planning to develop a global impact report to attract more investments and to report to their current funders. To find the best way of presenting their annual report, they need a framework is relevant for all the SGBs in their portfolio. Clean EN's funders are looking for aggregated and comparable climate metrics along with SDG mapping and climate-based risks of their investments.

After filtering for tools designed for impact investors, Clean EN can select from IRIS, Climate Disclosure Standards Board Framework, Task Force on Climate-related Financial Disclosures (TCFD), or Integrated Reporting (IR). The IRIS framework can be used for climate metrics aggregation and the comparative analysis feature. Clean EN could also develop an internal framework based on their requirements and portfolio using IRIS, IR, and SDG Compass as references.

## COMMONLY USED CLIMATE IMPACT TOOLS

– TABLE 4: LIST OF TOOLS FOR CLIMATE IMPACT MEASUREMENT

Name of Tool	Sectors of Focus	Contents of Report Generated	Quantitative KPIs Measured	SDG Mapping Included	Social Impact Metrics Included
<a href="#">B Impact Assessment</a>	All sectors	Impact score and benchmarking	<ul style="list-style-type: none"> <li>• CO2eq emission reduction</li> <li>• Air pollutants reduction</li> <li>• Water and land pollutant reduction</li> <li>• Biodiversity conserved</li> <li>• Tons of waste diverted from landfills</li> <li>• Reduction in chemical usage</li> <li>• Hectares of land saved</li> </ul>	✗	✓
<a href="#">Carbon Reduction Assessment of New Enterprises (CRANE)</a>	All sectors	Annual and cumulative emission reduction potential based on the year of prediction	<ul style="list-style-type: none"> <li>• Emission reduction potential (ERP)</li> </ul>	✗	✗
<a href="#">Clean Energy Emission Reduction Tool (CLEER)</a>	Transportation, Low Carbon Energy	Projected CO2 emissions, CO2 emissions avoided, and cost savings due to energy efficiency improvement	<ul style="list-style-type: none"> <li>• Tons of CO2eq emission</li> <li>• GJ of energy generated or consumed</li> <li>• Energy saved</li> <li>• Clean energy generated</li> </ul>	✗	✗
<a href="#">Climate Impact Forecast</a>	All sectors	Carbon footprint and cost analysis of the footprint	<ul style="list-style-type: none"> <li>• Carbon footprint</li> <li>• Kg of CO2eq emission</li> <li>• Hectares of land saved</li> <li>• Tons of waste diverted from landfills</li> <li>• Eco-cost of human health, eco toxicity, resource depletion</li> </ul>	✗	✓
<a href="#">GHG Protocol - GHG Emissions Calculation Tool</a>	All sectors	Carbon footprint (tCO2eq)	<ul style="list-style-type: none"> <li>• Tons of CO2eq emission reduction (Scope 1,2,3)</li> </ul>	✗	✗
<a href="#">The Higg Index</a>	Water and Waste Management	Complete environmental impact assessment of a product or service (best fit for apparel, foot wear and textile industry)	<ul style="list-style-type: none"> <li>• Water and land pollutant reduction</li> <li>• Tons of CO2eq emission reduction</li> <li>• Life Cycle Assessment of a product or service</li> </ul>	✗	✗
<a href="#">IIX Tool</a>	All sectors	Impact and risk score; verification rating	<ul style="list-style-type: none"> <li>• Impact score</li> <li>• Risk score</li> </ul>	✓	✓



Name of Tool	Sectors of Focus	Contents of Report Generated	Quantitative KPIs Measured	SDG Mapping Included	Social Impact Metrics Included
<a href="#">Impact Nexus (For Investors)</a>	All sectors	Risk assessment	<ul style="list-style-type: none"> <li>• Tons of CO2eq emission</li> <li>• Water stress</li> <li>• Energy access</li> </ul>	✓	✓
<a href="#">One Click LCA</a>	Built environment	Life cycle assessment and benchmarking against industry standards; life cycle costing	<ul style="list-style-type: none"> <li>• Liters of water saved</li> <li>• Reduction in chemical usage</li> <li>• Tons of CO2eq emission reduction</li> <li>• (Life cycle assessment for the construction industry)</li> </ul>	✗	✗
<a href="#">Open LCA</a>	All sectors	Environmental and social life cycle assessment of a product or process	<ul style="list-style-type: none"> <li>• CO2eq emission reduction</li> <li>• Air pollutants reduction</li> <li>• Water and land pollutant reduction</li> <li>• Biodiversity conserved</li> <li>• Tons of waste diverted from landfills</li> <li>• Reduction in chemical usage</li> <li>• Hectares of land saved)</li> <li>• (Environmental and social impact of a product or process)</li> </ul>	✗	✓
<a href="#">Planetly</a>	Transportation, Water and Waste Management	Scope 1, 2, 3 GHG calculator; reduction and offsetting; ESG management	<ul style="list-style-type: none"> <li>• Tons of CO2eq emission (Scope 1,2,3)</li> <li>• GHG reduction and offset</li> </ul>	✗	✓
<a href="#">SDG Action Manager (from B Lab)</a>	All sectors	SDG mapping and scoring	N/A	✓	✓
<a href="#">SDG Climate Action Nexus Tool (SCAN)</a>	Land and Ocean Management, Water and Waste Management, Transportation	Qualitative SDG Mapping	N/A	✓	✓
<a href="#">SDG Impact Assessment Tool</a>	All sectors	Qualitative SDG Mapping	N/A	✓	✓
<a href="#">X-Degree Compatibility (XDC) Model</a>	All sectors	Carbon footprint (tCO2 eq) and its impact on global warming	<ul style="list-style-type: none"> <li>• Tons of CO2eq emission</li> <li>• Impact on temperature</li> </ul>	✗	✗

Each of the listed tools is free to access online, except for the Climate Impact Forecast and Impact Nexus. The premium services of CRANE, IIX, B-impact, Climate Hero and One Click LCA tools include verification process, authorizing your input data, detailed impact reports and access to datasets.

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**CRANE**  **FEATURED TOOL:**  
**CRANE**

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**► ABOUT:**

[CRANE](#) (Carbon Reduction Assessment of New Enterprises) calculates the emission reduction potential (ERP) of innovations using verified GHG emission factors. The CRANE methodology is based on the Climate Impact Assessment Report by the Prime Coalition and NYSERDA.<sup>17</sup> CRANE was developed by Prime Coalition, Project Frame, and Rho Impact. Prime Coalition is a non-profit organization that works with philanthropists and other mission-driven organizations and individuals to support sustainable, effective, and scalable solutions to climate change. Project Frame is a collaboration of investors and experts in climate solutions who are working together to build frameworks and tools to assess the potential impact that today's climate investments will have on global greenhouse gas emissions in the future. Rho Impact was built based on Rho AI's decade of experience in data science and software development and led to the development of the web tool and methodology of CRANE. As of July 2022, CRANE has 3,000 users.

**► BENEFITS:**

- ✓ Calculates one common metric, ERP, that allows investors in different industries and sub-sectors to compare the potential impact of one business relative to another.
- ✓ Provides a first-order calculation of the uncertainty of annual and cumulative emission reductions based on user-defined upper and lower limits of market entry variables and performance metrics.
- ✓ Offers verified baseline data and emission factors for two hundred and thirty-six different innovative technologies.
- ✓ CRANE experts verify the customized data provided by users and certify the datasets as verified in the premium version.

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<sup>17</sup> Burger, S. et al. 2017. [Climate Impact Assessment for Early-Stage Ventures](#). PRIME Coalition and NYSERDA.

## ► INDUSTRIES COVERED:

- |   |  |
|---|--|
|  Agriculture |  Carbon Dioxide Removal |
|  Buildings   |  Manufacturing          |
|  Electricity |  Transportation         |

## How to Use?<sup>18</sup>

- ▼ **Step 1:** [Create an account](#) with CRANE
- ▼ **Step 2:** Select your industry or upload customized data
- ▼ **Step 3:** Select the type of innovation
- ▼ **Step 4:** Choose the start and end year of ERP estimation
- ▼ **Step 5:** Enter uncertainty value for market penetration potential
- ▼ **Step 6:** Select the target market and established market
- ▼ **Step 7:** Click “run report”

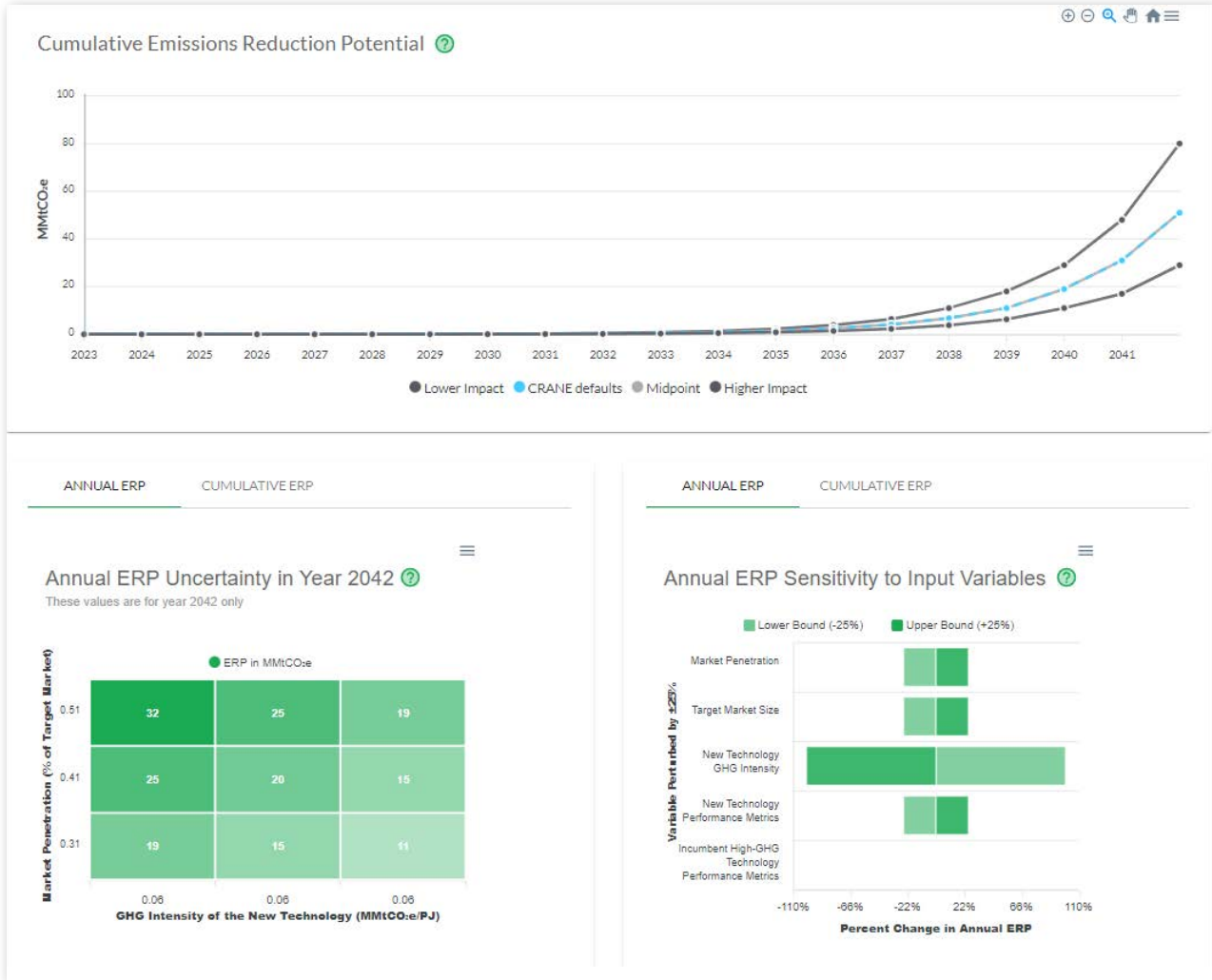
Report will be generated with annual and cumulative Emission Reduction Potential

## ► CONSIDERATIONS AND LIMITATIONS

- 1 The tool currently covers a limited set of innovation business models and corresponding validated baseline data sets and thus offers limited flexibility for a wider set of innovations that have yet to be validated (see [CRANE Technology Model Backlog](#)). The [premium version](#) of CRANE offers validation of customized user datasets as a service.
- 2 CRANE technology models are supported by global databases, with the majority of the databases being USA-focused. However, users from different geographies can use the tool by adding custom data to a custom technology module.
- 3 The tool is created for SGBs in the early stages and forecasts the ERP impact according to market projections. Before using the tool, SGBs should have a good understanding of their product-market fit.
- 4 The tool provides tutorials and free [demos](#); the premium version provides consulting services for users and guides them through analysis and results.

<sup>18</sup> CRANE. 2021. [Getting Started with CRANE](#).

– FIGURE 2: SAMPLE CRANE DASHBOARD



► **WHAT'S NEXT FOR CRANE:**

CRANE is working on additional features to broaden its functionality, including:

- ✓ Adding databases for innovation technologies in addition to the 236 existing datasets.
- ✓ Assessing the impact of potential state and country policies on emissions reduction potential.
- ✓ Integrating new areas of impact, such as water and land use, into a system-level analysis of impact.
- ✓ Providing users with the ability to track company progress on impact metrics over time.



## FEATURED TOOL: CLIMATE IMPACT FORECAST

### ► ABOUT:

[Climate Impact Forecast \(CIF\)](#) is an online impact tool designed for innovators seeking to make climate impact visible during the growth stages of start-ups. The tool uses data and assessment principles from the Life Cycle Assessment methodology, which seeks to measure environmental impact through all stages of a product's life span.<sup>19</sup> A quick scan variant has been developed by the industrial design engineering faculty at Delft University of Technology's influential Design for Sustainability department. CIF assists impact investors, banks, funding agencies, and philanthropic organizations in selecting the most promising innovations for their pipelines and provides lean and effective expert IMM support. CIF additionally provides consultation and validation support to SGBs using the tool.

### ► INDUSTRIES COVERED:

CIF covers the major industries mentioned below with regional and global datasets:



Energy



Waste Management



Manufacturing



Land Use and Forestry



Agriculture

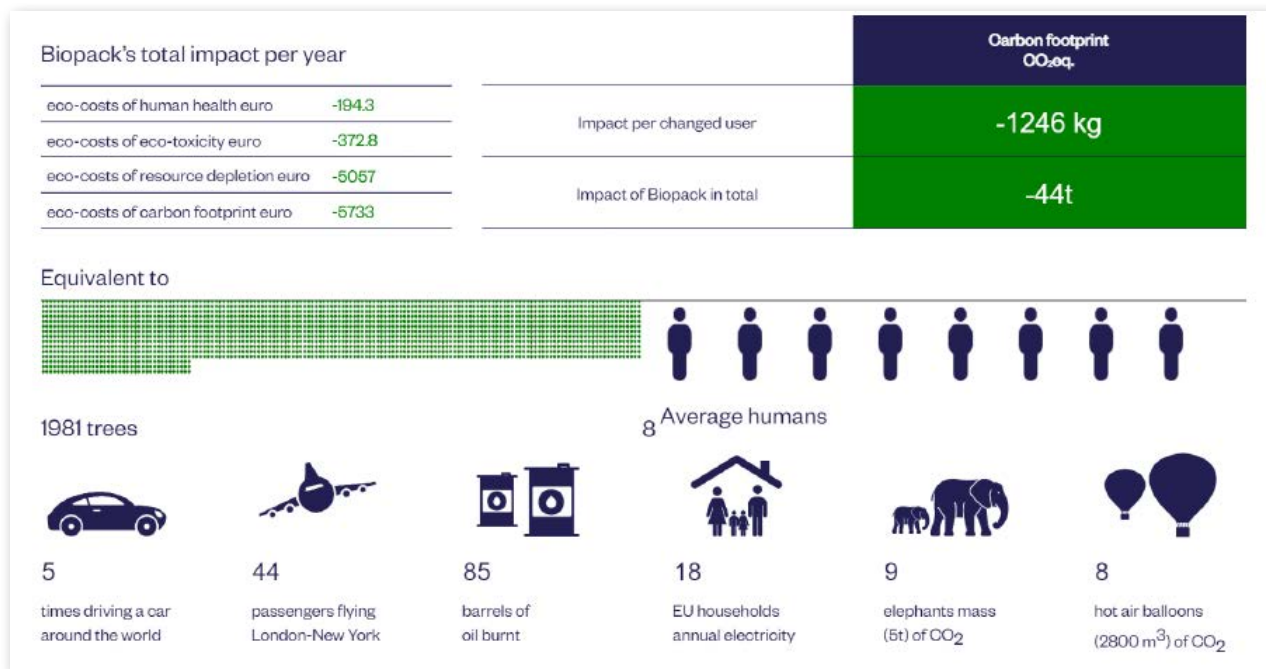
### How to Use:

- ▼ **Step 1:** [Login to CIF](#) and purchase your plan
- ▼ **Step 2:** Create new project and choose a sector taxonomy, country, sector, and subsector
- ▼ **Step 3:** Click "Start Climate Impact Forecast"
- ▼ **Step 4:** Select Enabler/Adaptation/Mitigation based on your business model
- ▼ **Step 5:** Enter the number of target users, baseline behavior (current scenario), users reached, probability of engagement, and average degree of user engagement
- ▼ **Step 6:** Select the life cycle indicators per reached user, per changed user, and overhead
- ▼ **Step 7:** Enter the quantity per changed user, reached user, and company

<sup>19</sup> Muralikrishna, I. and Manickam S. 2017. [Chapter Five - Life Cycle Assessment](#). Environmental Management: Science and Engineering for Industry.

– FIGURE 3: SAMPLE IMPACT REPORT FROM CIF

The total impact of your company in tonnes of CO<sub>2</sub>eq saved and impact per changed user will be calculated and provided as an impact report. CIF can also provide a comparative report of impacts between different companies, a useful feature for impact investors or ESOs.



The datasets are available for free, and there are examples available to aid the use of the tool.

**BENEFITS:**

- ✓ The datasets are available for free, and there are examples available to aid the use of the tool.
- ✓ CIF provides coaching, validation, and showcasing of impact report by impact experts.
- ✓ Measures the amount of emissions avoided using the innovation in comparison with a business as usual scenario.
- ✓ Provides a free impact hypothesis tool for answering questions about the [impact report](#).

► **LIMITATIONS:**

- ⓘ It is not easy for users to add customized user-defined databases.
- ⓘ CIF consulting support is required during the calculation of impact and impact validation.

► **FUTURE VERSIONS:**

The tool and platform are continuously updated. Future versions will be available at [platform.impact-forecast.org](https://platform.impact-forecast.org)



## COMMONLY USED CLIMATE IMPACT FRAMEWORKS

– TABLE 5: LIST OF FRAMEWORKS FOR CLIMATE IMPACT MEASUREMENT

Name of the Framework	Description	Benefits	Associated Tool	Type of Impact	Adoptable Stakeholders
<a href="#">Climate Disclosure Standards Board Framework</a>	A global framework has been developed by the CDSB for reporting and monitoring climate change initiatives. The framework facilitates organizations' understanding of how to report environmental data on natural capital (water, land, air, forests, minerals, biodiversity, and ecosystem health).	<ul style="list-style-type: none"> <li>Helps organizations better understand how environmental issues affect their performance.</li> <li>Helps investors in better allocation of capital based on the climate and environmental risks and opportunities accordingly.</li> </ul>	✗	Environmental and Social	Corporates and Impact Investors
<a href="#">The Climate Registry Reporting Resources</a>	TCR provides greater flexibility and streamlined guidance for SGBs' GHG emissions reporting.	<ul style="list-style-type: none"> <li>Provides tools, services, and support that help small businesses and local governments reduce their carbon footprint especially in North America.</li> </ul>	✓ (CO2 reduction)	Environmental	Corporates and SGBs
<a href="#">Ecovadis</a>	EcoVadis helps organizations of all sizes rate corporates within their supply chains and give recommendations for improving their sustainability performance.	<ul style="list-style-type: none"> <li>Ensures greater transparency in supplier sustainability and practices.</li> <li>Demonstrates to customers that your company meets standards for sustainability.</li> </ul>	✗	Economic, Environmental, and Social	Corporates and SGBs
<a href="#">GHG Protocol</a>	GHG protocol provides standards and guidelines for organizations of all sizes for accounting their GHG emissions output.	<ul style="list-style-type: none"> <li>It is possible to track the progress of companies against their targets by using a consistent methodology.</li> <li>Enables companies to meet or exceed current regulations by using a methodology that is internationally recognized.</li> </ul>	✗	Environmental	Corporates and SGBs
<a href="#">GRI Standards</a>	Public and private corporates can use the GRI's guidelines for reporting on sustainable development and identifying best practices. The guideline includes economic, social, and environmental performance metrics.	<ul style="list-style-type: none"> <li>Organizations of all sizes can use the GRI Standards, which are a great tool for showing their dedication to sustainability.</li> <li>Corporates can also take a look at their processes and procedures and see where the impact lies and how the information can be used to enhance their performance, gain insight into their supply chain, and improve their access to investors.</li> <li>SGBs can use these events as a valuable opportunity to examine their impact on their immediate environment, and act accordingly.</li> </ul>	✗	Economic, Environmental, and Social	Corporates, ESOs, and SGBs
<a href="#">IRIS Climate and Environment metrics</a>	Impact investors can easily translate their impact intentions into real impact results through IRIS+.	<ul style="list-style-type: none"> <li>Any investment or enterprise may be assessed using IRIS+ Core Metric Sets across all five dimensions of impact.</li> <li>By standardizing impact performance data, Core Metrics Sets enable aggregation of that information across investments.</li> <li>As impact investors need accurate, comparable impact data to make informed decisions, IRIS+ supports investors at every stage of the impact measurement process to quantify impact.</li> </ul>	✗	Economic, Environmental, and Social	Corporates and Impact Investors

Name of the Framework	Description	Benefits	Associated Tool	Type of Impact	Adoptable Stakeholders
<a href="#">IR (Integrated Reporting)</a>	International Integrated Reporting provides data for better allocation of capital by the capital providers, using a multi-capitals approach; value is created by combining six capitals, including financial, industry, intellectual, human, social, and natural.	<ul style="list-style-type: none"> <li>• Providing financial capital providers with better information enables them to allocate their funds more efficiently and effectively.</li> <li>• Enables SGBs to raise funds.</li> <li>• Enables SGBs to seek buyers and government contracts.</li> </ul>	✗	Economic, Environmental, and Social	Corporates, ESOs, Impact Investors, and SGBs
<a href="#">SDG Compass</a>	SDG Compass provides a set of guidelines to corporates on aligning their strategies as well as measuring and managing their contributions to the SDGs. Corporates can maximize their contribution to the SDGs by following a five step procedure.	<ul style="list-style-type: none"> <li>• Corporates can maximize their contribution to the SDGs by following a five-step procedure.</li> <li>• A key component of the SDG Compass is the recognition that all corporates have a responsibility to comply with all relevant laws, adhere to international standards, and address any negative impacts on human rights as a priority.</li> </ul>	✗	Environmental and Social	Corporates, SGBs
<a href="#">SME Climate Action Hub</a>	The SME Climate Hub is a global initiative that aims to help small businesses deliver on their climate goals and enable SGBs to build resilient businesses for the future.	<ul style="list-style-type: none"> <li>• Accessibility to the best tools and resources for measuring environmental impact.</li> <li>• UN's Race to Zero campaign will recognize SMEs that commit to the SME Climate Hub worldwide.</li> </ul>	✓ (CO2 reduction)	Economic, Environmental, and Social	SGBs
<a href="#">Task Force on Climate-related Financial Disclosures (TCFD)</a>	TCFD aims to "provide investors, lenders, and insurers with the information they need to assess and price climate-related risks and opportunities"	<ul style="list-style-type: none"> <li>• Helps SMEs and corporates in seeking funds.</li> <li>• Helps in the assessment of climate related risks of corporates.</li> </ul>	✗	Economic, Environmental, and Social	Corporates, ESOs, Impact Investors, and SGBs
<a href="#">UN Global Compact</a>	The UN Global Compact asks corporates to first do business responsibly and then pursue opportunities to solve environmental and societal challenges through business innovation and collaboration. The global indicator framework includes 10 major principles of which three addresses environmental obligations.	<ul style="list-style-type: none"> <li>• By signing the UN Global Compact, you commit your organization at the highest level, via a letter of commitment to the UN Secretary-General.</li> <li>• An annual Communication on Progress (COP) should be sent to the UN Global Compact to share what your organization is doing to maintain the commitment.</li> </ul>	✗	Economic, Environmental, and Social	Corporates and SGBs



## FEATURED FRAMEWORK: IRIS+

### ► ABOUT:

[IRIS+](#) is a free, publicly available resource that is managed by the Global Impact Investing Network (GIIN) to help integrate environmental and social factors into investment decision-making alongside risk and return. It contains metrics used by impact investors and corporates to measure, manage, and optimize impact through their portfolios. IRIS+ is the generally accepted system for measuring and managing impact among impact investors and includes over 700 standardized definitions that draw on existing best practices and expert input. Through evidence-backed and industry-validated starter kits of metrics and practical, how-to guidance, IRIS+ drives credible, comparable impact data to inform investment decisions and drive greater impact results. According to a joint report published by JP Morgan and the GIIN in 2011, more than 60% of surveyed impact investors used metrics aligned with IRIS to track their social, environmental, and financial performance.<sup>20</sup>

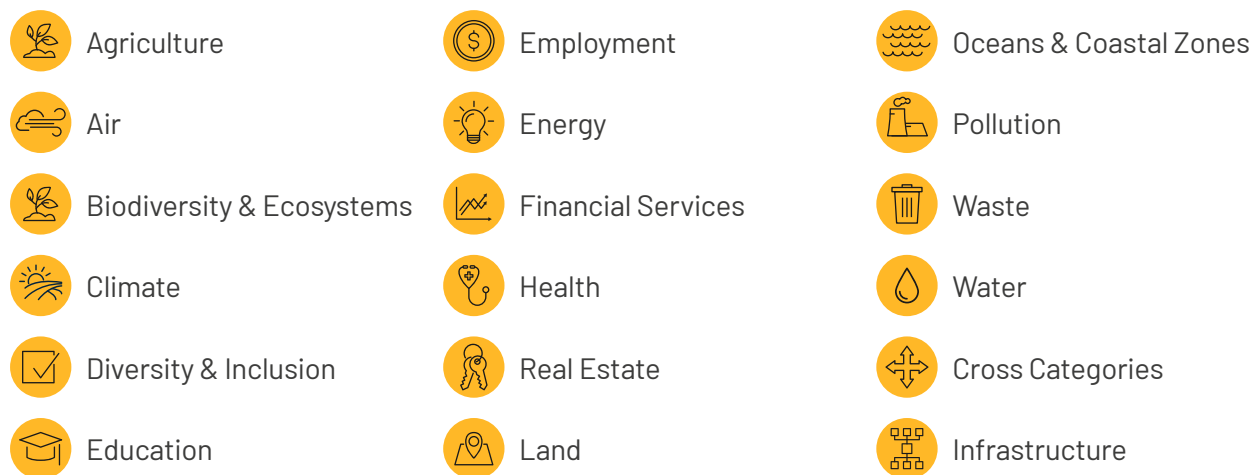
### ► BENEFITS:

- ✓ Can be integrated into most approaches to impact reporting and data management platforms and is aligned with 50+ standards and frameworks, including Global Reporting Initiative (GRI) Standards and CDP's climate change questions<sup>21</sup> used by large corporates and cities.
- ✓ Organized around a thematic taxonomy, which is based on generally accepted Impact Categories and Impact Themes like Smallholder and Sustainable Agriculture, Clean Energy, Affordable Housing, Quality Jobs, and Gender.
- ✓ Offers Core Metrics Sets to increase data clarity and comparability. These are backed by evidence and based on best practices across the industry.
- ✓ Includes curated resources and practical how-to guidance to support day-to-day impact management implementation.
- ✓ Aligned with the SDGs, including both SDG goals and targets.

20 Saltuk, Y. et al. 2011. [Insight into the Impact Investment Market: An In-depth Analysis of Investor Perspectives and over 2,200 Transactions](#). Global Impact Investing Network.

21 Disclosure Insight Action. 2022. [CDP Climate Change 2022 Questionnaire](#).

## Impact categories covered:<sup>22</sup>



## How to Use?

- ▼ **Step 1:** [Create your custom impact profile](#)
- ▼ **Step 2:** Identify your impact priorities (by SDG and/or Impact Category)
- ▼ **Step 3:** Specify your framework by selecting the Investment Themes and Strategic Goals that best match your approach
- ▼ **Step 4:** Explore your curated results set, including a short list of generally accepted impact indicators, research and evidence, a practical how-to guide for using IRIS+, and a best-in-class report relevant to your framework
- ▼ **Step 5:** Create as many frameworks as needed and edit them at any time

IRIS + generates a template for each type of impact category and business model

<sup>22</sup> Global Impact Investing Network. 2019. [IRIS+ Thematic Taxonomy](#).

FIGURE 4: SAMPLE IRIS+ TEMPLATE

## WHAT is the goal?

STRATEGIC GOAL

✔ **Objective of intervention**

**Strategic Goal:** Mitigating Climate Change Through Clean Mobility  
**Outcome:** Reduced GHG emissions, measured by Greenhouse Gas Emissions Avoided or Reduced (PI2764)

**Why Is This Important?**  
 To clarify the objective to be achieved with the investment or enterprise in order to be able to measure progress towards that goal.

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✔ **Outcome indicator: Total greenhouse gas emissions avoided or reduced**

**Why Is This Important?**  
 To understand the key indicator that will be used to measure the outcome, which is a critical step in measuring progress toward the Strategic Goal.

IRIS DATA NEEDED	FORMULA / CALCULATION GUIDANCE
<p><span style="color: #008080;">★</span> <b>Greenhouse Gas Emissions Avoided</b> (PI2764)</p>	<p>Calculate the amount of greenhouse gas (GHG) emissions avoided or reduced during the reporting period, along with a threshold and baseline number for comparison, using the following steps:</p> <ol style="list-style-type: none"> <li>1. Identify the threshold for the amount of Greenhouse Gas Emissions Avoided or Reduced (PI2764). The threshold is a number at which outcomes are "good enough" or meet a minimum acceptable standard. Thresholds may reflect industry standards or peer benchmarks.</li> <li>2. Identify the baseline for the amount of Greenhouse Gas Emissions Avoided or Reduced (PI2764). The baseline is the amount of Greenhouse Gas Emissions Avoided or Reduced (PI2764) in the prior period.</li> <li>3. Identify the amount of Greenhouse Gas Emissions Avoided or Reduced (PI2764) during the reporting period.</li> </ol>

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✔ **Importance of outcome to stakeholder**

**Why Is This Important?**  
 To understand the extent to which impact and value are created, identify the risk of negative impact and unintended outcomes, and uncover ways of maximizing social and environmental value creation. This metric may also uncover other effects or outcomes that target stakeholders perceive.

IRIS DATA NEEDED	FORMULA / CALCULATION GUIDANCE
<p><span style="color: #008080;">★</span> <b>Importance of Outcome to Stakeholders</b> (OI5495)</p>	<p>Describe the value or importance of the outcome being sought by the intervention or investment from the perspective of those affected.</p> <p>Note:</p> <ul style="list-style-type: none"> <li>• GHG emissions have global-scale impact, and so in this strategic goals, organizations should rely on scientific evidence to determine the importance of reducing greenhouse gas emissions to people and planet. Some of this guidance can be found in the Overview section of this Strategic Goal.</li> </ul>

Link to full summary report: <https://iris.thegiin.org/share/id/20681x6268f56776672/>

## ► USEFUL RESOURCES TO LEARN IRIS+

The GIIN offers educational support for the use of IRIS+. There are four ways to learn about IRIS+ based on the needs of an organization or individual:

- 1 [In Practice](#) – These summary-style use cases highlight how individual impact investors apply IRIS+ in their day-to-day impact measurement and management practices.
- 2 [IRIS+ Demos](#) – Regular, live, small-group walk-throughs and discussions of the system designed as introductions and opportunities for questions, typically for a beginner audience.
- 3 [Webinars](#) – The IRIS+ team hosts webinars on an ongoing basis to foster learning around impact management and seek feedback on planned features.
- 4 In-Person Support – Interactive in-person workshops offer hands-on engagement with the IRIS+ system for investors building their IMM and impact decision-making practices. The GIIN offers these workshops both for GIIN Members only and for a wider audience, often alongside large events like the GIIN Investor Forum.

## ► CONSIDERATIONS AND LIMITATIONS<sup>23</sup>

- ⓘ IRIS+ includes an exhaustive list of indicators which can be difficult to navigate if an organization does not already have a good sense of what it aims to measure. Many investors use IRIS+ as a base to create their own internal simplified frameworks which are customized to organizational goals.
- ⓘ Users of IRIS+ need to be able to identify the right indicator to reflect their impact. As with any tool or standards set, choosing the wrong key metric can lead to wrong impact decisions. IRIS+ updates guidance and core metrics sets on a regular basis to keep them in line with industry best thinking.
- ⓘ Does not offer an impact certification.
- ⓘ Does not offer a data management platform, meaning users need to identify their own systems to collect and store performance data.

## ► WHAT'S NEXT FOR IRIS+

The GIIN continues to expand IRIS+ on an ongoing basis. Some key areas of ongoing development include:<sup>24</sup>

- ✓ Developing new features for IRIS+ users, including a directory of impact investors and analytics tools to support better impact decision-making.
- ✓ Creating core metrics sets (in addition to the 70+ already available) and evidence maps, as well as identifying best-in-class resources to cover more impact themes. To provide feedback on themes in development, visit their [website](#).
- ✓ Developing practical guidance on topics of importance to impact investors.
- ✓ Developing use cases featuring examples of how leading investors are using IRIS+ in practice.

23 Hollman, D. 2011. [Good News: IRIS Report Shows Many Impact Investing Recipients Are Profitable; But More Study Needed](#). NextBillion.

24 Global Impact Investing Network. 2021. [How to Use the IRIS+ and GALI Benchmark Survey Together](#).



# TIPS AND ADVICE FOR OPERATIONALIZING CLIMATE METRICS AND OVERCOMING IDENTIFIED CHALLENGES

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## ► FOR CLIMATE SGBS

- ✓ Climate SGBs should familiarize themselves with basic impact terminologies and spend time identifying the key impact metrics relevant to their innovation. Once KPIs are identified, find the best-fit framework and tool to measure, report, and showcase impact.
- ✓ There is no standardized tool followed by all impact investors or ESOs. Depending on the sector, climate SGBs should look at the tool and framework most appropriate for the sector in which they operate. For example, an SGB operating in disaster-resilient construction will have different measurement needs than a clean energy SGB. Simplicity generally being the key, climate SGBs do not need a detailed impact report with a life cycle assessment. Measuring and reporting a small set of KPIs that are specific to their business model will generally suffice for approaching investors or other stakeholders.

## ► FOR IMPACT INVESTORS

- ✓ Impact investors need to increase expertise within their team to understand and operationalize climate impact and effectively build impact parameters into investment decisions.
- ✓ There is a dissonance in understanding between impact investors and SGBs regarding expectations for climate impact reporting. This can be improved through strategic dialogue between key ecosystem players and transparency in climate impact reporting.
- ✓ Impact investors can help subsidize and support their portfolios with impact reporting – consider allocating capital to hire IMM staff and providing training in commonly used tools, access to expert support, or subscriptions to IMM platforms.

## ► FOR ENTREPRENEUR SUPPORT ORGANIZATIONS

- ✓ ESOs should set aside a budget for impact training for portfolio ventures. This would help develop higher quality training materials and support for SGBs, which would also benefit the other stakeholders like impact investors and corporates.
- ✓ ESOs should also prioritize impact validation. SGBs in early stages have low resource capacity to operationalize climate impact reporting, and ESOs can help increase the credibility of the climate SGBs by providing this support.
- ✓ ESOs need to increase team capacity and expertise to understand and operationalize climate impact. This would help ESOs in developing training materials and capacity building.

# THE WAY FORWARD

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In discussions with various ecosystem stakeholders supporting climate SGBs, it became evident that despite the many available tools and frameworks available, there is a clear need for additional financial, educational, and operational support to encourage greater adoption of right-sized climate measurement within these companies. This guide aims to provide a step in that direction; however, there are still gaps that need to be addressed, including:

- 1 A common language around climate impact:** SGBs need more impact information and tools which are simple to operationalize and report the core impact from the innovation. More dialogue on impact is necessary among all key stakeholders in the ecosystem to exchange best practices and new frameworks and share case studies.
- 2 Resources specific to adaptation and resilience:** There is a growing interest in businesses addressing adaptation and resilience (A&R), yet most impact tools focus only on mitigation. There needs to be a larger effort to build a robust taxonomy for A&R technologies and business models and to expand knowledge on how A&R measurement differs from mitigation-focused business models.
- 3 IMM support and training for SGBs:** While most SGBs measure their impact, they do so at differing levels of rigor and with varying levels of support. When asked what support they need from intermediaries, surveyed SGBs overwhelmingly responded that funding for climate impact qualifications was their primary need, followed by climate impact training/consultation and support validating their impact.

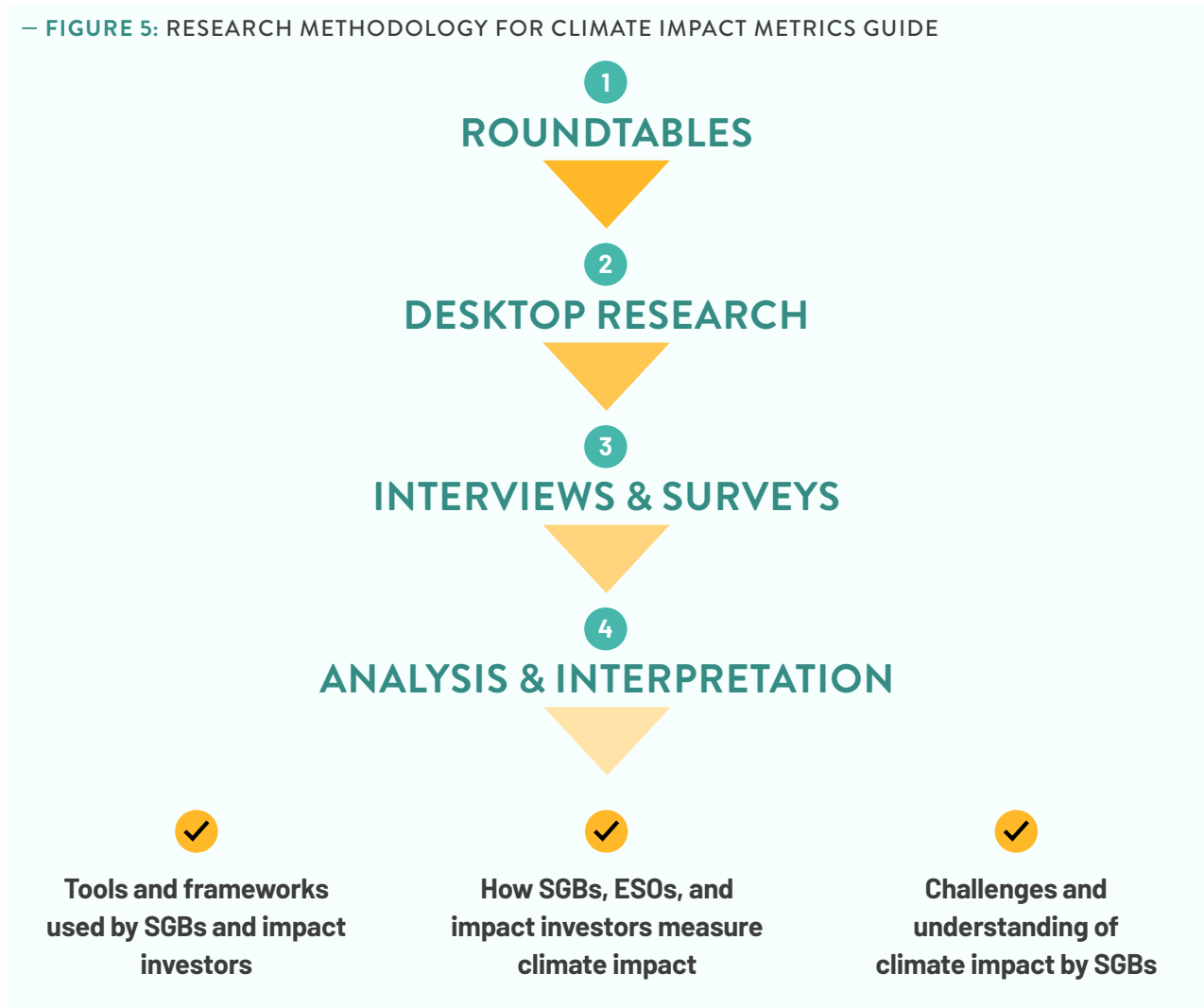
To learn more, please visit [www.climatecollective.net/impactmetrics](http://www.climatecollective.net/impactmetrics).

# ANNEX: METHODOLOGY

To gather stakeholder perspectives and practices for this guide, quantitative and qualitative data were collected from SGBs, impact investors, and ESOs. The primary questions explored by this data collection effort included:

- Q1.** *What is the level of understanding of SGBs, impact investors, and ESOs on climate impact metrics? What are the awareness levels of the framework and tools available?*
- Q2.** *How do SGBs measure and forecast the climate impact of their current business models?*
- Q3.** *What are the challenges faced by SGBs when measuring the climate impact?*
- Q4.** *What are the expectations of SGBs regarding climate impact calculation?*

The data collection process included four steps.



## 1 CLIMATE METRICS ROUNDTABLES:

As a network convener and membership organization in the SGB space, ANDE was able to gather key stakeholders together before beginning desk research for this guide. ANDE hosted two closed-door climate metrics roundtable sessions in January 2022 for ESOs and impact investors. Notes from those discussions helped inform a starting point for desktop research and data gathering.

## 2 DESKTOP RESEARCH:

To understand how SGBs measure the climate impact of their business model, comprehensive desk research was performed to list existing tools, frameworks, and resources. These resources were compiled from basic web research, the authors’ experience working with climate SGBs, insights from surveys and interviews, and data from stakeholder roundtables.

## 3 INTERVIEWS:

To gather perspectives from key stakeholders and to further validate the observations drawn from the desktop research, semi-structured interviews were conducted with a total of sixteen ESOs, impact investors, and climate SGBs. The participants were selected to represent a variety of geographies and industry focuses.

– TABLE 6: INTERVIEW PARTICIPANTS

Stakeholder	Type	Country of Operation
<a href="#">Climate KIC</a>	ESO	EU
<a href="#">GIZ</a>	ESO	Germany
<a href="#">New Energy Nexus</a>	ESO	Global
<a href="#">Villgro</a>	ESO	Global
<a href="#">Fundo Vale</a>	ESO and Impact Investor	Brazil
<a href="#">SELCO Group</a>	ESO and Impact investor	India
<a href="#">Wangara Green Ventures</a>	ESO and Impact Investor	Ghana
<a href="#">GIIN</a>	Impact Investor	USA
<a href="#">Lanka Investing Network</a>	Impact Investor	Sri Lanka
<a href="#">Root Capital</a>	Impact Investor	USA
<a href="#">Small Enterprise Assistance Funds</a>	Impact Investor	USA
<a href="#">Carbon Neutral</a>	SGB	Jamaica
<a href="#">Ecoplore</a>	SGB	India
<a href="#">Maji Safi</a>	SGB	Tanzania
<a href="#">Sabon Sake</a>	SGB	Ghana
<a href="#">Solar Infra</a>	SGB	India

## 4 SURVEYS:

An online survey was conducted to capture data from SGBs. The survey was circulated within CCF’s network consisting of climate SGBs, and 27 responses were received and analyzed.



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