Acknowledgments

Authors
Dean Hand, Research Director
Rachel Bass, Research Senior Manager
Sophia Sunderji, Research Manager
Ben Ringel, Research Associate

Participants
We are incredibly grateful for the thought partnership and data contributions of study participants. For the full list of contributing organizations, please see Appendix 1.

Advisors and Reviewers
Special thanks to Lissa Glasgo, Senior Manager of IRIS+ and Impact Measurement and Management, for her guidance and expertise throughout the research process and to Noshin Nova, former Research Associate, for her leadership in laying the foundation to this work. Several members of the GIIN team also provided critical support and feedback on this report, including: Amit Bouri, Kellen Dorio, Grace Earle, Leticia Emme, Sean Gilbert, Uma Kommineni, Kelly McCarthy, Pam Rykowski, Alpesh Shah, Maddie Ulanow, and Sarah Zhukovsky.

We are grateful to all members of the IRIS+ Working Group on Climate Change Mitigation, in particular the GIIN’s partner organization, Ceres. For valuable input during the scoping phase and instrument development, we would like to thank Kimberly Foley at EFM; Mary Ignatiadis at Hancock Natural Resource Group; Yemi Katerere at NewAfrica Impact; Pierre-Laurent Macridis at Fondaction; Raghavan Narayanan at the International Finance Corporation; Shuaib Siddiqui at the Surdna Foundation. We would also like to thank the following individuals for reviewing parts of the report: Anne Amanda Bangasser at Treehouse Investments; Monica Marino and Patricia Richter at the International Labour Organization; Emily Simso at New Forests.

About the Global Impact Investing Network (GIIN)
The Global Impact Investing Network (GIIN) is the global champion of impact investing, dedicated to increasing the scale and effectiveness of impact investing around the world. The GIIN builds critical infrastructure and supports activities, education, and research that help accelerate the development of a coherent impact investing industry. For more information, see www.thegiin.org.

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Dear Reader,

Now more than ever impact investors need a granular understanding of their impact performance results to be most effective in mitigating climate change – arguably the most crucial challenges of our generation.

At a time when impact investing capital is growing with even more commitments by investors to combat our global challenges, this study demonstrates how the wider industry and investors can use data, rigorous methods, and performance tools to drive stronger results in two key ways.

Firstly, it examines how investors can differentiate their investment results on the basis of impact, with IRIS+ aligned real-world impact performance data and applying the methods laid out in COMPASS as a standard way to analyze and compare impact data. With a standard method, investors can compare performance with their peers in a reliable way, indeed even compete with peers, to strengthen performance.

Secondly, using the same process, but considering results from another perspective, investors can compare their performance to a threshold of change that’s needed to tackle the global challenge they aim to address.

Utilizing impact results from several angles allows investors to make more informed choices throughout the investment cycle, adjust their approach, and further enhance their impact performance. This study shows that it is possible to be even more effective through an appreciation of investor contribution. The extent to which investors’ inputs – their capital, engagement, and terms – influence results, serves to better inform investor decision-making.

Some investors are courageously heeding a call to action – to share their data and scrutinize their results from several dimensions of impact: scale, pace, and efficiency. Without these leaders, this study and the future work required to construct the impact performance eco-system would not be possible. We applaud their commitment.

Importantly, this series of impact performance studies represent one step in a much bigger vision that the GIIN holds to transform financial markets. In coming months, the GIIN will launch the first publicly available impact performance benchmark. This new horizon – impact performance benchmarks – is critical infrastructure for the industry, not only for investors of course, but especially for investment service providers seeking to emulate.

These developments – analyzing comparable investment data at scale, deploying standard IRIS+ metrics and the COMPASS methodology, and then the impact benchmark infrastructure – are all part of the vital process to ensure impact is central to every investment decision so that markets work fairly and inclusively for all. Especially at this time, knowing what investor action can be deployed to be most effective in mitigating climate change, is a most welcome inspiration.

Yours in research,

Dean Hand

Dean Hand
Director of Research, Global Impact Investing Network
## Contents

Purpose and study motivations .......................................................... 4

Report methodology ........................................................................ 6
  Sample scope .................................................................................. 6
  Research process ............................................................................ 6
  Study caveats .................................................................................. 7

Climate change mitigation: Achieving a net-zero world .................. 9

Sample overview ............................................................................. 10
  Investor organization background .................................................. 10
  Investment features ........................................................................ 12
  Investee features ........................................................................... 13
  Performance of impact investments .............................................. 17

Data availability and confidence ...................................................... 19

Decreased GHG emissions ............................................................... 20
  Key findings ................................................................................... 21
  Methodological approach ............................................................. 21
  Comparing impact results among peers ........................................ 22
  Investor contribution ....................................................................... 27

Accelerated clean energy solutions ................................................ 29
  Key findings ................................................................................... 30
  Methodological approach ............................................................. 30
  Comparing impact results among peers ........................................ 31
  Investor contribution ....................................................................... 33

Strengthened land-based solutions ............................................... 35
  Key findings ................................................................................... 36
  Methodological approach ............................................................. 36
  Comparing impact results among peers ........................................ 37
  Investor contribution ....................................................................... 38

Increased decent jobs supported .................................................. 41
  Key findings ................................................................................... 42
  Methodological approach ............................................................. 42
  Comparing impact results among peers ........................................ 43
  Investor contribution ....................................................................... 44

Lessons learned ................................................................................ 46

Conclusion and next steps .............................................................. 48

Appendices ..................................................................................... 50
Purpose and study motivations

Comparing and assessing impact performance is critical to increasing the effectiveness of impact investing. Investors around the world are growing their capital allocations toward impact-oriented strategies, deepening their approaches to impact measurement and management, and, anecdotally, becoming progressively better aware of the variety of strategies available to influence impact results. In an increasingly sophisticated industry, nearly all impact investors (97%) indicate that they make impact investments because they have a mission to pursue impact. Repeat respondents to the GIIN’s survey have increased their impact assets under management at a 17% compound annual growth rate. Yet, despite clear growth in commitments and capital directed to impact, global inequities and the climate crisis continue to worsen. The extent to which impact capital is meaningfully contributing toward the progress needed to achieve global development targets remains unclear. And a gap in impact analytics is palpably clear to impact investors, 84% of whom report they cannot compare their impact performance to the market. This hinders global progress and gives rise to impact-washing.

As a result, investors are demanding tools and resources to deepen their insight into impact performance, most commonly impact benchmarks as cited by 92% of impact investors. Investors lack many of the analytic tools they need to make critical investment decisions based on impact during their portfolio construction, investment selection, management, and exit. Equipped with the requisite tools, investors will be better enabled to effectively and efficiently use their capital and other levers of influence to contribute to progress against environmental and societal challenges.

In response, the GIIN’s impact performance studies seek to explore both impact performance across a sample of investments and an analytic approach that enables rigorous impact comparison across investments. This particular study, focused on impact investments that seek to mitigate climate change, builds on the IRIS+ system for impact measurement and management and the COMPASS methodology for comparing and assessing impact. Published by the GIIN after a public comment period that engaged more than 300 industry stakeholders, COMPASS enables investors and service providers alike to integrate comparable impact throughout the investment process at scale, paving the way for impact performance benchmarks. Each iteration of impact performance studies has led to greater insight into how to understand impact performance, not only refining each specific impact theme but also building towards a pragmatic, standard methodology for comparing the impact of investments in terms of an investor’s contribution toward solving global challenges.

Equipped with the right tools, investors will be better enabled to effectively and efficiently use their capital and other levers of influence to contribute to progress against environmental and societal challenges.
This third iteration of impact performance studies applies COMPASS to offer insight toward various angles of impact performance, and lays the foundation for benchmarks, specifically seeking to:

- consider the impact results associated with a sample of impact investments seeking to mitigate climate change, reflecting impact at a point in time (i.e., scale of impact) and over time (i.e., pace of change);

- assess impact performance within the broader context of social and environmental challenges, specifically by assessing the progress of impact investments seeking to mitigate climate change relative to the global change needed to address the climate crisis;

- explore impact reasonably associated with a given tranche of capital using investment-weighted impact results and examining how investors can contribute to impact through stakeholder engagement, capacity-building support, and flexible or catalytic structures;

- offer insights on what may be required from investors, industry-builders, and data service providers, among others, to yield deeper insights from comparable impact analytics; and

- equip investors with the information and tools they need to increase the effectiveness of their impact capital.

This study demonstrates how investors can begin comparing investments based on impact, not only highlighting impact performance across this sample of investments but also exploring investors’ contribution to that impact in terms of the progress so far in tackling climate change. Fundamentally, this research is intended to cultivate the suite of impact analytic tools to come, such as impact performance benchmarks, ratings, and indices. Its specific findings highlight the tremendous need for further research to enhance the industry's insights into impact performance and its drivers, enabling evidence-based decision-making. Ultimately, through this research and related efforts, the GIIN seeks to enable investors to optimize for impact at each stage of the investment process, accelerating progress toward global goals.
Sample scope

This study explores the impact results of impact investments with a focus on mitigating climate change. Given the breadth of this focus, participating investors have allocated their capital across sectors, through varied investment instruments, and to companies of differing levels of maturity. Respondents shared investment-level, annualized impact performance data on direct impact investments, following the GIIN’s definition: investments made with the intention to generate a positive, measurable social or environmental impact alongside a financial return. Investments made indirectly—or through funds or other intermediaries—were not included in this study in order to ensure sufficient comparability of results.

Research process

This study builds upon the expertise and feedback of its participants, third-party thematic experts, and specialists in impact measurement. A full list of study participants and experts may be found in Appendix 1. These organizations offered input throughout the research process:

Questionnaire design: The data-collection instrument was built using the IRIS+ Core Metrics Sets in Climate Change Mitigation, which were informed through an in-depth, multi-stakeholder consultation held from December 2020 to January 2021. Soliciting input from investors, companies, and thematic experts, the process took into consideration investors’ theories of change, relevant metrics substantiated by an evidence base, the feasibility of collecting data across those metrics, and the necessary variables or considerations for segmentation during analysis. This process informed emerging metrics sets, which were additionally compared with guidance from other industry leaders, such as Ceres. The questionnaire also captured data on investee and investment context in addition to impact results. Select investors and experts reviewed and offered feedback on a draft questionnaire for further refinement prior to data collection.

Data collection: The questionnaire was circulated among 440 impact investors in May 2021. This outreach list was built from the GIIN’s database of impact investors, including those who participated in the IRIS+ Working Group for the climate change mitigation impact theme. Respondents submitted data for inclusion in the study through September 2021. Submissions were reviewed by the GIIN Research Team; to enable meaningful and accurate analysis, where responses indicated inconsistencies or required clarification, respondents were invited to share additional insight and further describe the context in which those investments were made.
Analysis and drafting: Submissions were aggregated into a relational database to streamline the analytic process. Building upon the COMPASS Methodology, analysis generally focused on a series of impact outcomes that consider both the quantity and quality of a given outcome.

In alignment with COMPASS, analysis incorporated various contextual factors which inform the interpretation of impact performance, including variables pertaining to the investment (such as its instrument) and the investee (such as their stage of business). When data permitted, impact results were normalized based on the ratio of the outstanding investment amount to the enterprise value in a given reporting year, in addition to analysis in absolute (or unnormalized) terms. This normalized (or investment-weighted) figure represents the share of impact reasonably associated with a given tranche of capital; it does not, however, imply direct attribution of impact results. Investment-weighted impact results, included in the ‘Investor contribution’ sections of this report, offer insight into the role of investment capital, non-financial support, and stakeholder engagement in influencing outcomes alongside the fundamental role of investees. Analysis primarily anchored on the scale of impact—in other words, impact at a point in time. Where sample size allowed, analysis also explored the pace of impact (that is, change over time); given constraints in sample size, efficiency of impact—the third COMPASS-aligned analytic figure—was beyond the scope of this study. When relevant to a particular impact pathway, analyses also reflect the target pace of change to achieve an SDG or science-based target reflecting planetary boundaries.

The GIIN Research Team produced a draft report and shared sections with a subset of study participants and experts to test the interpretation of findings for resonance and clarity.

Study caveats

This research expands upon the GIIN’s previous work to understand the impact performance of investments across various impact themes. This study expands the industry’s knowledge of both impact results and the data collection and analytic processes required to assess those results, yet certain limitations must be acknowledged.

Self-selection bias: Participation in this study was optional, and respondents were invited to submit data for any subset of their portfolios. As with all performance research, investors may be less likely to submit data on poor-performing investments. However, this risk is limited, since investors were aware the study would only present aggregated, anonymized results.

Dataset size: Findings pertain to the sample of investments included in this study and cannot be generalized to all investments seeking to mitigate climate change. It is particularly useful to segment analysis along relevant variables, such as the geographic market or sector in which an investee operates. Naturally, the ability to segment data is constrained by the size of the sample. This study only reported findings when the sample included at least five annualized investments.

* COMPASS: The Methodology for Comparing and Assessing Impact can be found here.
Outliers: Findings are readily distorted or skewed by the presence of large outliers. This study considered two types of outliers. The first occurs when a single investor comprises a disproportionate share of the overall sample, which risks bias in the results toward their portfolio distribution. The second occurs when a single investment reports especially large performance figures, which causes a divergence between the average and median for some subset of analysis. Where relevant, both types of outliers are noted and sometimes excluded throughout the report.

Data gaps: All questions on the instrument were optional, and respondents submitted data for as many metrics as they could. In some instances, when requested data were unavailable, investors consulted their investees to fill in data gaps beyond their regular reporting processes. Data gaps may remain in instances where this was infeasible or imprudent; where a metric may not be relevant to a given strategy, sector, or business model; where respondents faced confidentiality constraints; or where investors are in the early stages of implementing systems to measure outcomes, such as greenhouse gas emissions reduced. Additionally, not all respondents shared data on investment amount outstanding and enterprise value. As a result, the volume of data collected varies by metric and by whether or not the findings were investment-weighted.
Climate change mitigation: Achieving a net-zero world

The climate crisis is rapidly and indisputably intensifying. Achieving net zero or negative emissions by 2050 requires large-scale economic transitions and behavioral shifts toward carbon-neutral or carbon-negative solutions. Yet global temperatures have risen 0.2 degrees Celsius per decade, spurring extreme weather events such as heat waves and hurricanes and fueling environmental degradation.\(^5\) Previously once-per-century floods now occur every year, and droughts are intensifying across regions around the world.\(^6\) Without drastic change, the next 50 years will see a fifth of the Earth’s land surface become unlivable hot zones.\(^7\)

The consequences are social, as well as environmental, perpetuating inequities that affect global human security and livelihoods. Since 2008, over 280 million people have been uprooted by natural disasters, and 1.2 billion more could be displaced by 2050.\(^8\) By the end of the century, over a third of the world’s population will be exposed to deadly heatwaves for more than 20 days each year. Such disasters disproportionately affect the world’s most vulnerable and historically disadvantaged communities. As people around the world flee catastrophic weather events, 96% of displacement will occur in fragile cities with a high risk of social unrest.\(^9\)

To prevent irreversible damage, the Intergovernmental Panel on Climate Change (IPCC) has called for global warming limits to 1.5 degrees Celsius above pre-industrial levels, requiring all stakeholders—including investors—to play their part to achieve this target. Limiting warming to 1.5 degrees Celsius requires the world to reduce global greenhouse gas (GHG) emissions by 7.6%, or 3.3 billion metric tons, each year from now until 2030.\(^10\) Investments across sectors and Sustainable Development Goals (SDGs) can contribute to mitigation efforts—not only efforts aligned with Climate Action (SDG 13) but also Clean Energy (SDG 7), Responsible Consumption and Production (SDG 12), and Life on Land (SDG 15), among others.

The investment community is beginning to rise to the challenge, building toward climate solutions and justice through clean energy, sustainable mobility and manufacturing, nature-based solutions in agriculture and forestry, and new technologies at scale. The United Nations Net-Zero Asset Owner Alliance, representing USD 5.5 trillion in assets under management, is targeting a 29% reduction in GHG emissions in its portfolios by 2025.\(^11\) Innovative approaches toward a circular economy could cut CO\(_2\) emissions by 3.7 billion tons.\(^12\) Financial regulators, in Europe and around the world, are enforcing environmental protection and carbon disclosure mandates, holding investors accountable for the state of the planet.\(^13\) The stakes of that challenge are no less than human survival.
In this study, 33 investor organizations shared impact results from 56 investment funds across 386 unique investments. Nearly two in five investors (39%) provided multiple years of impact data for some investments, resulting in a sample of 818 annualized investments across reporting years.

Most investors (82%) are based in developed markets, with 45% based in the U.S. & Canada and 27% in Western, Northern, & Southern (WNS) Europe. Just 9% of investors are headquartered in sub-Saharan Africa (SSA), followed by 9% in Oceania and 9% across both South and Southeast Asia combined.

Less than three-quarters are asset managers (73%), followed by family offices, foundations, and banks/diversified financial institutions each comprising 6% of the sample (Figure 1). Investors in the sample collectively manage USD 20.7 billion in impact assets, with the average investor managing USD 748.6 million (USD 144.8 million at the median). The four largest investors included in the sample represent 75% of the total assets under management (AUM).

* Assets under management are based on the most recent figures, if publicly available. Otherwise, this figure draws from 2019 year-end data among those investors that also participated in the GIIN’s 2020 Global Impact Investor Survey.
Impact investors commit to generating impact through intention, measuring impact to assess progress, and using that impact data to manage investment performance from strategy to exit.* Investors can contribute to impact results through the timing, terms, and engagement of their capital throughout the investment process.†

To guide their investment process, nearly every investor in the sample (90%) sets impact targets. Six in ten set quantitative impact targets, 65% set qualitative impact targets, and 35% set both. Only two investors do not set targets. Organizations investing to mitigate climate change recognize the inextricable link between social and environmental impact, with eight in ten explicitly targeting both. Across their portfolios, three-quarters of investors target diversity and inclusion (including gender and racial equity), the most-targeted impact area in the sample, and 70% target each of agriculture and energy. Just 5% focus on improving oceans and coastal zones. Within environmental impact, the greatest share of investors (85%) focuses on generating climate impact through terrestrial ecoregions, followed by 69% focused on air and 31% on fresh water.

After setting strategy and establishing impact targets, investors use a range of industry tools, systems, and frameworks to measure and manage their impact.Nearly all investors in the sample (85%) use the United Nations Sustainable Development Goals (SDGs), followed by 60% using the IRIS Catalog of Metrics; half use the IRIS+ Core Metrics Sets.‡ In addition to measuring positive impact, every single investor included in the sample also assesses negative impacts associated with their investments (Figure 2). While 85% of investors report assessing possible negative impacts during investment screening or due diligence, just 50% indicated that they measure negative and/or net impact for all of their investments. Half of investors actively manage and mitigate against negative impacts.

### FIGURE 2: Assessing negative impacts

<table>
<thead>
<tr>
<th>Question</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>We measure negative and/or net impact for all of our investments.</td>
<td>50%</td>
</tr>
<tr>
<td>We actively manage and mitigate against negative impacts.</td>
<td>50%</td>
</tr>
<tr>
<td>We assess possible negative impacts during investment screening/due diligence.</td>
<td>85%</td>
</tr>
</tbody>
</table>

Note: Respondents could select multiple answer options.

Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021

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* For more on the Core Characteristics of Impact Investing, see [here](#).
† This section includes information from 20 investors that also participated in the GIIN’s *State of Impact Measurement and Management Practice, 2nd edition* report.
‡ IRIS+ is the generally accepted system to measure, manage, and optimize impact. Learn more about the IRIS+ standard [here](#). These findings draw from 2019 data, shortly after the launch of IRIS+, and do not yet reflect those investors that may have adopted IRIS+ in recent years.
In managing their investments toward greater impact, investors use impact data for a variety of purposes. Most commonly, nine in ten investors in the sample use impact data to communicate results to stakeholders. Naturally, investors also use impact data to assess their impact performance (85%) and identify or refine appropriate metrics (80%). Impact investors, and indeed the broader industry, are beginning to move toward increased accountability for performance, with impact-washing remaining a significant market challenge. However, three-quarters of investor organizations in the sample are not audited or held accountable by a third party to validate their impact results.

**Investment features**

Investors included in the sample reported data on 386 investments between 1998 and 2020. The average outstanding investment amount was USD 5.3 million (USD 2.2 million at the median). Over three-quarters of investments (77%) target risk-adjusted, market-rate returns, and the remaining target below-market-rate returns. Perhaps unsurprisingly, investors in this sample are focused on private markets, with 36% of investments made through private equity, 32% through private debt, and 14% into real assets (Figure 3). Only 3% of investments were made using public debt or public equity. While the average investment was made in 2016, on average investors reported impact results for 2019, an average holding period of three years. Most investments in the sample have been held for one to four years (63%), and only 2% have been held for more than 10 years.

Over three-quarters of investments (77%) target risk-adjusted, market-rate returns, and the remaining target below-market-rate returns.

![Investment instrument](image-url)

**Figure 3. Investment instrument**

n = 244 investments

- **Public Debt**: 32%
- **Private Equity**: 36%
- **Public Equity**: 2%
- **Private Debt**: 14%
- **Equity-like Debt**: 9%
- **Real Assets**: 14%
- **Other**: 5%
- **Public Debt**: 1%

Note: Excludes one outlier investor. ‘Other’ includes combined debt and equity, carbon collateralized loans, project bonds, term loan facilities, and investments in renewable energy tax credits.

Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021

* Investment-level insights outlined in the remainder of this section exclude one outlier investor that contributed 35% of total investments in the sample and therefore skews findings. For a debt investment, ‘investment amount outstanding’ is defined as the difference between the original loan amount and the principal repaid. For an equity investment, ‘investment amount outstanding’ refers to the estimated valuation of an investor’s stake in the investee company as of the end of the reporting year.
Investee features

Climate investments span the globe across both emerging and developed markets, with 28% of investments made into SSA, followed by just over a quarter (26%) into the U.S. & Canada and 15% into South Asia. Just 10% of investments were made into Latin America & Caribbean (LAC), while 8% were made into WNS Europe. The U.S. was the most common country of investment in the sample, accounting for 21% of investments, followed by India at 14% (Figure 4). Investments were made into both rural and urban areas, with 79% and 75% invested into each, respectively, and many targeting both.

FIGURE 4: Countries of investment

n = 252 investments

PERCENT OF SAMPLE INVESTMENTS BY COUNTRY

Note: Excludes one outlier investor. Respondents could select multiple countries.

Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021
Investees operate across the supply chain through a variety of business models. Just over a third of investments (36%) were made into growth-stage companies, followed by 16% into each of venture-stage and mature, private companies (Figure 5). Every investment into a mature, private company was made into developed markets, either WNS Europe (67%) or the U.S. & Canada (33%). Meanwhile, most seed or startup investee companies are based in emerging markets, primarily South Asia (42%), SSA (26%), and LAC (10%).

**WHAT IMPACT IS CREATED**

Investors seeking to mitigate climate change work across a wide array of sectors, united by a shared commitment to protect air quality, human health, and the planet. Investments range from large-scale solar and wind energy projects to regenerative agricultural practices on community farms. Food & agriculture (35%) and energy (21%) were the most common sectors of investment within the sample (Figure 6). Surprisingly, 18% of investments were made into microfinance, and just 4% were in forestry & timber. Naturally, investments most commonly target climate action (SDG 13; 57%) and affordable and clean energy (SDG 7; 57%), followed closely by decent work and economic growth (SDG 8; 34%).

---

**FIGURE 5: Investee stage of business**

n = 243 investments

- **Growth stage**: 36%
- **Mature, private companies**: 16%
- **Venture stage**: 16%
- **Seed/Start-up stage**: 13%
- **Not applicable**: 17%
- **Mature, publicly traded companies**: 2%

Note: Excludes one outlier investor. Investee stage of business is ‘not applicable’ for investments made into real assets (primarily forests or farmland), educational institutions, or nonprofits.

*Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021*

**FIGURE 6: Investment sectors**

n = 243 investments

- **Food & Agriculture**: 35%
- **Energy**: 21%
- **Microfinance**: 19%
- **Forestry & Timber**: 4%
- **Financial services (excl. microfinance)**: 4%
- **Manufacturing**: 3%
- **Infrastructure**: 3%
- **Healthcare**: 2%
- **Water, Sanitation, and Hygiene**: 2%
- **Information & Communication Technologies**: 2%
- **Arts & culture**: 2%
- **Other**: 6%

Note: Excludes one outlier investor. ‘Other’ includes education, housing, property management, veterinarian services, and the service industry.

*Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021*
WHO IS IMPACTED

Given the global nature of greenhouse gas (GHG) emissions, investors intrinsically recognize the impact of their investments on the entire planet. Investors in the sample also recognize the effects of GHG emissions and mitigation efforts on people. Most investments (68%) target any and all adults, 36% explicitly target women, and just under a third (31%) seek to impact individuals living below national poverty lines. Though just 13% explicitly target previously excluded or historically disadvantaged populations, a handful of investors shared that inclusivity is integral to their mission, and several acknowledged the disproportionate effects of the climate crisis on marginalized groups. To engage with underserved demographic groups, especially women and those living below national poverty lines, investors cited distributing products and services in remote regions to increase access and engaging in client satisfaction surveys to better meet the needs of end stakeholders.

HOW IS CHANGE HAPPENING

Investments in the sample generate impact across the supply chain by providing sustainable products and services directly to end stakeholders, by supporting distributors and suppliers, and by scaling technology-based climate solutions. Specifically, investors in the sample seek to mitigate climate change through sustainable agriculture (46%), clean electricity and heat (41%), carbon capture and sequestration (9%), forestry and land use (8%), sustainable manufacturing (6%), and clean mobility (3%).

Through a variety of mechanisms, investors engage with both investees and end stakeholders (Figure 7). For just under six in ten investments (59%), investors collect impact data from stakeholders through interviews or surveys, and half of investors work with their investees to reflect end stakeholders’ perspectives throughout the investment cycle. For 29% of investments, while investees engage directly with end stakeholders, the investor does not. For two investments in the sample, neither the investor nor their investees engaged with the end stakeholders of their investments.

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**FIGURE 7: Stakeholder engagement mechanisms**

n = 290 investments

<table>
<thead>
<tr>
<th>Stakeholder engagement mechanisms</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collect impact data from stakeholders via interviews and/or surveys</td>
<td>59%</td>
</tr>
<tr>
<td>Work with our investees to reflect stakeholders’ perspectives throughout the investment cycle</td>
<td>50%</td>
</tr>
<tr>
<td>Our investees engage directly with stakeholders, but we do not</td>
<td>29%</td>
</tr>
<tr>
<td>Identify community and environmental need(s), if any, in collaboration with stakeholders</td>
<td>3%</td>
</tr>
<tr>
<td>Consult with stakeholders about their needs when developing our strategy</td>
<td>2%</td>
</tr>
<tr>
<td>Monitor stakeholder satisfaction</td>
<td>2%</td>
</tr>
<tr>
<td>Neither we nor our investees engage with end stakeholders</td>
<td>1%</td>
</tr>
</tbody>
</table>

Note: Excludes one outlier organization. Respondents could select multiple answer options. Respondents indicated ‘neither we nor our investees engage with end stakeholders’ for two investments; given the small figure, that category is excluded here.

Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021
Interestingly, investors structured most investments to include a catalytic component. Almost half (49%) comprised debt with flexible terms, 44% offered a grant (either as first-loss capital or recoverable), and 15% deployed equity in an all-catalytic structure. Only 22% of investments were not catalytic in nature. Capacity-building or non-financial support was provided for 40% of investments, primarily funded through whole or partial cost-share arrangements with the investee (27% of all investments). In some cases, capacity-building support was funded through the investor’s management fees and/or profits from investments (13%) or by donors, such as government agencies (11%).

Investees implement various mitigation practices to combat climate change, most often among those investing into land-based solutions followed by clean energy solutions. Most commonly, investees’ mitigation practice includes biodiversity assessments (35% of investments), GHG emissions strategies (34%), and water conservation strategies (23%). About 6% incorporate product lifecycle management to reduce their products’ environmental footprint, and 4% implement green building practices, such as energy-saving strategies or systems to improve air quality. Just over half of investees in the sample (53%) also face some competition in their markets; 37% face significant competition, and just 4% face little or no competition.

**IMPACT RISKS PERCEIVED BY INVESTORS**

Both investors and investees face risk that the impact generated will differ from what they expected, with material consequences for end stakeholders. As expected, investors most commonly perceived external risk (47% of investments), followed by execution risk (39%; Figure 8). An especially high share (67%) of investments seeking to mitigate climate change through clean mobility faced external risk.

**Most commonly, investees’ mitigation practice includes biodiversity assessments (35% of investments), GHG emissions strategies (34%), and water conservation strategies (23%).**

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**FIGURE 8: Impact risks faced by investments**

n = 154 investments

[Bar chart showing the percentage of investments facing different types of risk, with the following distribution: External risk 47%, Execution risk 39%, Evidence risk 18%, Unexpected impact risk 11%, Efficiency risk 10%, Alignment risk 7%, Stakeholder participation risk 6%, Endurance risk 6%, Drop-off risk 4%.]

* Catalytic capital structures are investments that accept disproportionate risk and/or concessionary returns relative to conventional investment in order to generate positive impact and enable third-party investment that otherwise would not be possible. This can include debt, equity, and guarantees along with investment instruments (John D. and Catherine T. MacArthur Foundation).

† Learn more about the various impact risks investees may face [here](#).
Investing into newer technologies and innovative business models naturally risks the achievement of impact, as shared anecdotally by several investors in the sample, particularly among those focused on solutions for carbon capture and clean energy. A large handful of investors also highlighted supply chain disruptions, political instability, and challenges related to conducting due diligence given the COVID-19 pandemic. Several organizations investing in sustainable agriculture identified physical climate risks, such as flooding and drought, which they perceived to directly impact their ability to meet both their financial and impact performance targets.

### Performance of impact investments

Impact performance in mitigating climate change anchors on GHG emissions released and reduced, with the objective to decrease GHG emissions to the atmosphere and ultimately build toward a net-negative world. Perhaps surprisingly, investors measure their direct emissions for just 12% of investments and indirect emissions for 15% of investments (see ‘Impact results’ section on page 20 for more detail). About 77% of investments either met or exceeded their impact targets, while 8% fell short (Figure 9). Investors do not set impact targets for 9% of investments included in the sample.

Investors also shared their realized annualized financial returns for their investments in climate change mitigation between 2017 and 2020. Among those 180 investments seeking risk-adjusted, market-rate returns, 36% are made through private equity, 31% are made through private debt, and 19% are in real assets. Across the 33 investments for which investors shared data on realized returns, the average annualized net financial return was 12% and the median was 10%, with considerable variance by asset class (Table 1). About 81% of investors indicated either meeting or exceeding their financial performance targets, while 13% fell short (Figure 9).

---

**Figure 9: Financial and impact performance of investments relative to targets**

<table>
<thead>
<tr>
<th></th>
<th>n = 144</th>
<th>n = 156</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative to financial targets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fell short</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td>Met</td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>Exceeded</td>
<td>71%</td>
<td>64%</td>
</tr>
<tr>
<td>Not sure</td>
<td>13%</td>
<td>8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relative to impact targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don’t have targets</td>
</tr>
</tbody>
</table>

**Table 1: Realized, annualized net financial returns across investments**

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>AVERAGE</th>
<th>MEDIAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private debt</td>
<td>11</td>
<td>8.9%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Private equity</td>
<td>6</td>
<td>12.1%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Real assets</td>
<td>16</td>
<td>14.3%</td>
<td>13.1%</td>
</tr>
</tbody>
</table>

Note: One investment, made through convertible debt, is excluded.

Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021
SPOTLIGHT: NEW FORESTS

Approach to estimating GHG emissions and using impact data

New Forests is a real asset investor focused on forestry, land management, and conservation across Oceania, Southeast Asia, and North America.

While New Forests has reported carbon storage across its investment portfolio since 2014, the organization recognizes that the measurement of direct and indirect (Scope 1 and Scope 2) GHG emissions related to its portfolio and business operations is equally critical for its impact management, as well as creating an effective climate change mitigation action plan.

To this end, New Forests developed a GHG inventory tool in 2020 to track its Scope 1, 2, and 3 corporate emissions, along with Scope 1 and 2 emissions across all its investments. Given the lack of internal capacity to efficiently and effectively implement such a system, New Forests engaged an external consultant to develop a tool aligned to the GHG Protocol Corporate Accounting and Reporting Standard and the IRIS+ Core Metrics Sets. Though the CEO and senior leadership team advocated for a standardized GHG inventory, the project required buy-in from key stakeholders across the organization, such as the New Forests Operations Team and third-party property managers.

Functionally, New Forests sends the Excel-based tracking system annually to each property manager to collect data on measures such as fuel consumption and electricity use at the assets they oversee. The tracking tool uses these inputs to calculate GHG emissions for each asset. The resulting data offers New Forests a sense of their overall carbon footprint and the scale of change needed to reach their climate impact goals. New Forests consulted a variety of stakeholder groups throughout this process, including clients—to whom New Forests reports financial and impact performance—and property managers, who engage in a feedback process regarding the efficacy of this reporting structure and may use these data to make decisions about properties they manage.

Looking forward, New Forests plans to use a GHG emissions and removals inventory across its investment cycle to inform key decisions, from due diligence to alignment of its broader portfolio with global goals such as the Net Zero Targets and Science Based Targets. New Forests is now developing a full set of accounts for its emissions, including Scope 3 for its investments, and for its carbon removals. The results will inform its future target-setting. Ultimately, New Forests aspires to become a carbon-negative investor, removing more carbon from the atmosphere than it emits.

Data availability and confidence

Investors provided data across each of the following IRIS metrics if and when available (Table 2). Given that not all metrics are relevant across each investor’s impact strategy, each question was made optional. Investors also shared the degree to which they were confident in the data they shared: Just under a third (31%) indicated a high level of confidence, over two-thirds (67%) indicated medium confidence, and just 2% indicated a low level of confidence in the impact information they shared.*

<table>
<thead>
<tr>
<th>METRIC</th>
<th>IRIS METRIC CITATION</th>
<th>NUMBER OF ANNUALIZED INVESTMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reporting Start Date</td>
<td>IRIS, 2021. Report Start Date (OD6951). v5.2</td>
<td>817</td>
</tr>
<tr>
<td>Sector to Influence</td>
<td>IRIS, 2021. Sector to Influence (PD8808). v5.2</td>
<td>810</td>
</tr>
<tr>
<td>Stakeholder Geography</td>
<td>IRIS, 2021. Target Stakeholder Geography (PD6424). v5.2</td>
<td>817</td>
</tr>
<tr>
<td>Stakeholder Demographic</td>
<td>IRIS, 2021. Target Stakeholder Demographic (PD5752). v5.2</td>
<td>751</td>
</tr>
<tr>
<td>Stakeholder Setting</td>
<td>IRIS, 2021. Target Stakeholder Setting (PD6384). v5.2</td>
<td>750</td>
</tr>
<tr>
<td>Greenhouse Gas Emissions Avoided or Reduced</td>
<td>IRIS, 2021. Greenhouse Gas Emissions Avoided or Reduced (PI2764). v5.2</td>
<td>248</td>
</tr>
<tr>
<td>Land Directly or Indirectly Controlled: Sustainably Managed</td>
<td>IRIS, 2021. Land Directly Controlled, Sustainably Managed (OI6912). v5.2, IRIS, 2021. Land Indirectly Controlled, Sustainably Managed (PI6796). v5.2</td>
<td>76</td>
</tr>
<tr>
<td>Client Individuals: Total</td>
<td>IRIS, 2021. Client Individuals: Total (PI4060). v5.2</td>
<td>344</td>
</tr>
<tr>
<td>Client Individuals: Female</td>
<td>IRIS, 2021. Client Individuals: Female (PI8330). v5.2</td>
<td>93</td>
</tr>
<tr>
<td>Client Individuals: Low Income</td>
<td>IRIS, 2021. Client Individuals: Low Income (PI7098). v5.2</td>
<td>21</td>
</tr>
<tr>
<td>Stakeholder Engagement</td>
<td>IRIS, 2021. Stakeholder Engagement (OI7914). v5.2</td>
<td>700</td>
</tr>
<tr>
<td>Units/Volume Produced</td>
<td>IRIS, 2021. Units/Volume Produced (PI1290). v5.2</td>
<td>52</td>
</tr>
<tr>
<td>Jobs in Directly Supported/ Financed Enterprises</td>
<td>IRIS, 2021. Jobs in Directly Supported/Financed Enterprises (PI4874). v5.2</td>
<td>621</td>
</tr>
</tbody>
</table>

Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021

* High confidence: data are precise and validated; Medium confidence: data rely on some assumptions or extrapolations; Low confidence: data are heavily reliant on proxies and subjective in nature.
† This study specifically assesses decent jobs directly supported as based on a set of policies in place at the investee organization. See Increased decent jobs supported on page 48 for more information on relevant IRIS metrics used in the decent jobs analysis. Climate change mitigation or adaptation strategies and associated IRIS metrics are also explored in the ‘Impact results’ section.
GHG emissions from human activity are a driving force behind the climate crisis. Investors can slow the effects of climate change by working with investees on their internal operations, business models, and product or service offerings. First, they may seek to reduce investees’ direct and indirect emissions (or Scope 1 and 2 emissions, respectively) through more efficient operations. Second, they may invest into businesses that seek to avoid future emissions or replace traditional, environmentally damaging products and services, such as gasoline-powered automobiles or fossil fuels, with low- or no-carbon alternatives. Finally, they may seek to sequester greenhouse gases through ecological solutions—such as sustainable forestry—or through carbon capture technologies. By decelerating the pace of climate change, these investments help reduce air pollution, stabilize weather patterns, and strengthen ecological viability.

### Decreased GHG emissions

GHG emissions from human activity are a driving force behind the climate crisis. Investors can slow the effects of climate change by working with investees on their internal operations, business models, and product or service offerings. First, they may seek to reduce investees’ direct and indirect emissions (or Scope 1 and 2 emissions, respectively) through more efficient operations. Second, they may invest into businesses that seek to avoid future emissions or replace traditional, environmentally damaging products and services, such as gasoline-powered automobiles or fossil fuels, with low- or no-carbon alternatives. Finally, they may seek to sequester greenhouse gases through ecological solutions—such as sustainable forestry—or through carbon capture technologies. By decelerating the pace of climate change, these investments help reduce air pollution, stabilize weather patterns, and strengthen ecological viability.

### GREENHOUSE GAS EMISSIONS

- Across 58 investments, investees reported an annual average of 4,333 metric tons of Scope 1 emissions. Further, across 68 investments, investees released an average of 340,929 metric tons of Scope 2 emissions.

### EMISSIONS REDUCTIONS

- Together, investors reported an average annual volume of 5,946,179 metric tons of GHG emissions avoided and/or reduced across 241 investments. Additionally, for 24 investments, investors reported an average decrease in Scope 1 emissions of 291 metric tons from the previous year.

### EMISSIONS SEQUESTERED

- Across 28 investments, investees sequestered 2,869,623 metric tons of GHG emissions.
KEY FINDINGS

Investors reported Scope 1 and 2 emissions, emissions avoided or reduced, and emissions sequestered by their investees. On average, in a one-year period, a given investee emitted 4,333 metric tons directly (Scope 1) and 340,929 metric tons indirectly (Scope 2); this analysis excludes two large outliers, as it will throughout. Notably, for those investments with multiple years of data available, investees decreased their Scope 1 emissions by 291 metric tons on average since the prior year. This corresponds to an average decrease of emissions of 6.4% per year. Although this represents progress toward reducing emissions, this leaves a gap to the target -7.6% annual decrease in emissions required to limit warming to 1.5°C in alignment with IPCC recommendations. Simultaneously, investments have avoided or reduced emissions by 5.9 million metric tons per year, on average.

METHODOLOGICAL APPROACH

This section explores greenhouse gas emissions, estimated emissions avoided or reduced, and emissions sequestered. Data on Scope 3 emissions—that is, emissions from an organization’s supply chain—were not collected for this study. Respondents provided data for each metric when relevant and available; consequently, the sample varies from one component of analysis to the next. To estimate emissions avoided or reduced, investors largely followed standard reporting guidance, such as the GHG Protocol and the World Resources Institute’s (WRI’s) estimation tool; some relied on sector-specific tools, such as Global Off-Grid Lighting Association’s (GOGLA’s) GHG emissions calculator. Some investors directly reported the percent change in their direct emissions since the prior year, while this annual percent change figure was calculated in other cases where investors reported Scope 1 emissions for multiple years. These are analyzed together when assessing the change in Scope 1 emissions. Percentages were analyzed using a simple, rather than weighted, average; they do not account for the varied size of investee operations or scale of overall emissions. The absolute volume of change is considered, however, when exploring the absolute change in both emissions and emissions reduced. To explore investor contribution, figures were adjusted to reflect investment-weighted, rather than company-level, impact performance. To do so, the amount of emissions reduced was multiplied by the ratio of the investment size outstanding to the enterprise value as of the end of the reporting period. Throughout this section, analyses are presented across common segments when sample size allows.

* These IPCC recommendations were released in 2019; in the years since, actors globally have continued to release emissions beyond national or global targets. This results in an increasingly steep target pace of emissions reduction.

FEATURED IRIS+ METRICS

Greenhouse Gas Emissions: Direct/Scope 1 (OI4112)
Amount of greenhouse gases emitted through the organization’s operations from direct emissions sources over a one-year period.

Greenhouse Gas Emissions: Indirect/Scope 2 (OI9604)
Amount of greenhouse gases emitted through the organization’s operations from indirect emissions sources over a one-year period.

Greenhouse Gas Emissions Avoided or Reduced (PI2764)
Amount of greenhouse gas emissions avoided or reduced by the organization over a one-year period.

Greenhouse Gas Emissions Sequestered (PI9878)
Amount of greenhouse gas emissions sequestered by the organization during a one-year period.
Comparing Impact Results Among Peers

Greenhouse gases emitted

Investors reported an average of 4,333 metric tons of Scope 1 emissions, or CO₂ and other greenhouse gases emitted directly by their investees, equivalent to emissions from more 10,000 barrels of oil consumed. Investors additionally reported an average of 340,929 metric tons of Scope 2 or indirect emissions, the equivalent to a year’s worth of driving by over 74,000 passenger vehicles.

Naturally, investors’ Scope 1 and 2 emissions vary by business model and sector, reflecting the varied nature of investees’ operations (Table 3). Among investments seeking to mitigate climate change through sustainable agriculture, Scope 1 and 2 emissions averaged roughly 12,000 and 14,000 metric tons, respectively. Among those investments focused on clean electricity and heat production, Scope 2 emissions far exceeded Scope 1 emissions (196,592 metric tons and 7,380 metric tons respectively, perhaps unsurprisingly, given the nature of these investees’ activities. Similarly, investments in the energy sector reported higher Scope 2 emissions (39,652 metric tons, on average) than investments in other sectors. Healthcare investments, on the other end of the spectrum, released the lowest amount of Scope 1 emissions on average (126 metric tons). Investments into forestry and timber accrued the lowest indirect emissions, at just 3 metric tons on average.

Investments made through private equity averaged greater annual Scope 1 and 2 emissions than investments made through other instruments, reflecting the heightened exposure of private equity to certain sectors, namely energy and agriculture. The low Scope 2 emissions associated with real asset investments may similarly reflect that asset class’s exposure to forestry and timber. Notably, investees operating in emerging markets generated higher average annual Scope 1 emissions than did those in developed markets (5,612 versus 1,792 metric tons)—but they also had significantly lower Scope 2 emissions per year (6,100 versus 804,739 metric tons).

* For more information on these figures, see the EPA’s equivalency calculator.
### TABLE 3  Average annual Scope 1 and 2 emissions among segments (metric tons)

<table>
<thead>
<tr>
<th>SEGMENT</th>
<th>SCOPE 1 EMISSIONS</th>
<th>SCOPE 2 EMISSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>AVERAGE (METRIC TONS)</td>
</tr>
<tr>
<td>STRATEGIC GOAL: SEEKING TO MITIGATE CLIMATE CHANGE THROUGH...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustainable agriculture</td>
<td>17</td>
<td>12,329</td>
</tr>
<tr>
<td>Clean electricity &amp; heat production</td>
<td>27</td>
<td>7,380</td>
</tr>
<tr>
<td>Sustainable manufacturing</td>
<td>10</td>
<td>590</td>
</tr>
<tr>
<td>Carbon capture &amp; sequestration</td>
<td>7</td>
<td>534</td>
</tr>
<tr>
<td>SECTOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>10</td>
<td>3,005</td>
</tr>
<tr>
<td>Food &amp; agriculture</td>
<td>17</td>
<td>2,608</td>
</tr>
<tr>
<td>Forestry &amp; timber</td>
<td>8</td>
<td>557</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>6</td>
<td>490</td>
</tr>
<tr>
<td>Healthcare</td>
<td>7</td>
<td>126</td>
</tr>
<tr>
<td>INVESTMENT INSTRUMENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private equity</td>
<td>22</td>
<td>7,973</td>
</tr>
<tr>
<td>Private debt</td>
<td>15</td>
<td>2,961</td>
</tr>
<tr>
<td>Real assets</td>
<td>8</td>
<td>557</td>
</tr>
</tbody>
</table>

Note: Figures exclude two outliers for Scope 1 emissions and two outliers for Scope 2 emissions.

Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021
Change in greenhouse gases emitted

Year-on-year changes in emissions are critical to gauging progress in mitigating climate change. To meet the goals of the Paris Climate Accord and prevent a global temperature increase greater than 1.5°C, will require reducing emissions by 7.6% per year through 2030, with ongoing management of emissions thereafter.

Changes in emissions released by the sample of investors participating in this study can be compared to this -7.6% target. Comparing the change in impact to the pace of change needed offers insight into which investments are generating impact that outpaces these requirements—as well as which investments are not yet accelerating progress toward global targets.

On average, investees decreased their Scope 1 emissions by 291 metric tons annually (Table 4). This figure corresponds to an average decrease in Scope 1 emissions of 6.4% per year. This decrease represents progress toward reducing emissions yet falls short of the 7.6% annual decrease required to limit warming to 1.5°C, suggesting a need for investors to further develop and implement emissions reductions plans.

<p>| TABLE 4: Annual changes in Scope 1 emissions |</p>
<table>
<thead>
<tr>
<th>PERCENT CHANGE</th>
<th>CHANGE (METRIC TONS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>29</td>
</tr>
<tr>
<td>Average</td>
<td>(6.4%)</td>
</tr>
<tr>
<td>Median</td>
<td>(3.0%)</td>
</tr>
</tbody>
</table>

Note: Figures exclude one outlier. Some investors submitted data on the percent change in emissions but not the volume of those emissions, so there is some variance in sample size.

Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021

CONTEXTUALIZING IMPACT RESULTS BASED ON GLOBAL EMISSIONS REDUCTIONS TARGETS

The scientific community has long agreed that warming beyond a 1.5–2°C scenario would be catastrophic across ecosystems, threatening human populations around the world and accelerating biodiversity loss. To stay within these planetary boundaries, the UN Environmental Programme estimates a 7.6% annual reduction in emissions is required globally from 2019 emissions levels. Notably, different sectors and sub-sectors contribute unevenly to global emissions and could therefore have an outsized influence in reducing emissions. The energy sector, for example, contributes 76% of global greenhouse gas emissions. The OECD suggests the energy sector should reduce Scope 1 emissions by 30% and Scope 2 emissions by 33% from 2019 to 2025, or 5.8% and 6.5% per year, respectively. Several actors are actively developing sector-specific emissions targets.

Additional emissions targets have been set by various countries or regions as part of their nationally determined contribution to reducing emissions. The EU, for example, encourages a 40% domestic reduction of GHG emissions from 2014 to 2030, the equivalent to 3.1% per year. The United States’ national targets encourage a 50–52% emissions reduction from 2005 levels, or a 2.9% annual decrease. India has posed a goal of reducing the emissions intensity of its GDP by 33–35% by 2030 relative to 2005 levels. National targets may galvanize local action, but greenhouse gas emissions know no national borders. As the world continues to fall behind the emissions target needed to limit warming to 1.5–2°C, the annual decrease required to remain within planetary boundaries grows increasingly acute.

* Learn more about the global emissions gap in the UN Environment Programme (UNEP)’s report, here.
Greenhouse gas emissions avoided or reduced

Investors reported GHG emissions avoided or reduced for 242 annualized investments.* Across this sample, investments averaged an annual reduction in or avoidance of 5.9 million metric tons of emissions, again with significant variance by market segment (Table 5).†

Emissions avoided were most commonly estimated for investments in the energy sector (200 annualized investments), with each reporting an average annual reduction of 7.3 million metric tons of emissions. Investments in the manufacturing and food and agriculture sectors also reported emissions reductions, albeit at lower amounts of 105,314 and 38,529 metric tons per year, respectively. Emissions reductions also varied widely by investee stage of business, with especially noteworthy progress among seed- or startup-stage investments (an average of 31.7 million metric tons annually) and growth-stage investments (an average of 13.4 million metric tons annually). Investors also reported significant emissions reductions among more recent investments, averaging 11.9 million metric tons per year among investments made within the previous two years, compared to about 100,000 metric tons per year for investments held for longer than two years.

| TABLE 5: Average volume of emissions avoided or reduced annually among various segments (metric tons) |
| SEGMENT | SUB-SEGMENT | n | AVERAGE (METRIC TONS) |
| SECTOR | Energy | 200 | 7,331,233 |
| | Manufacturing | 9 | 105,314 |
| | Food & agriculture | 22 | 38,529 |
| INSTRUMENT | Private debt | 160 | 3,170,467 |
| | Private equity | 57 | 199,983 |
| STAGE OF BUSINESS | Seed/start-up stage | 30 | 31,707,025 |
| | Venture stage | 152 | 26,541 |
| | Growth stage | 38 | 13,429,585 |
| YEARS SINCE INVESTMENTS | 0 - 2 years | 133 | 11,929,944 |
| | 3 - 5 years | 70 | 108,174 |
| | 6 or more years | 16 | 97,837 |
| STRATEGIC GOAL: SEEKING TO MITIGATE CLIMATE CHANGE THROUGH... | Clean electricity & heat production | 198 | 2,610,147 |
| | Sustainable manufacturing | 12 | 79,008 |
| | Sustainable agriculture | 23 | 36,864 |

Note: Figures exclude two outliers.
Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021

* This metric can be challenging to interpret, given inconsistencies in standardization across sectors. See the ‘Lessons learned’ section on page 48 to learn more.
† One investor accounted for a large share of investments; excluding this outlier, the average volume of emissions avoided among private debt investments would increase to 17.4 million metric tons per year. Also, among investments seeking to mitigate climate change through clean electricity and heat production, this figure increases to 7.7 million metric tons per year, excluding this outlier.
Change in greenhouse gas emissions avoided or reduced

On average, investments avoided or reduced emissions by 108% per year, or 55% at the median. While this appears to far outpace the 7.6% global target, such a comparison may not be appropriate, as these emissions reductions figures do not also account for emissions released by those same entities (Table 6). This amounted to an average change in emissions reduced of 33,245 metric tons (4,188 metric tons at the median), accelerating the pace at which investees reduced emissions overall. Investments into venture-stage companies reported an average annual emissions reduction of 131%, and investments into growth-stage enterprises reported the highest annual change in reductions in absolute terms (an average of 172,239 metric tons). Private debt investments avoided or reduced emissions at a quicker rate, by 126% per year on average, while private equity investments showed a comparatively higher absolute change in the volume of emissions avoided or reduced (an average of 140,025 metric tons per year). Notably, these figures concern only emissions avoided or reduced and do not additionally account for emissions released.

| TABLE 6: Annual average change in emissions avoided or reduced across segments |
|---------------------------------|-----|----------------|-----------------------|
|                                 | n   | PERCENT CHANGE | AVERAGE (METRIC TONS) |
| OVERALL SAMPLE                  | --  | 108%           | 33,244                |
| STRATEGIC GOAL: SEEKING TO MITIGATE CLIMATE CHANGE THROUGH... |     |                |                       |
| Clean electricity & heat production | 115 | 118%           | 35,291                |
| Sustainable agriculture         | 9   | 18%            | 15,208                |
| STAGE OF BUSINESS               |     |                |                       |
| Seed/start-up stage             | 13  | 13%            | 14,090                |
| Venture stage                   | 89  | 131%           | 11,196                |
| Growth stage                    | 18  | 90%            | 172,239               |
| Not applicable                  | 9   | 48%            | 963                   |
| INSTRUMENT                      |     |                |                       |
| Private equity                  | 23  | 72%            | 140,025               |
| Private debt                    | 96  | 126%           | 10,447                |
| Other                           | 7   | 12%            | 1,927                 |

Note: Figures exclude two outliers.
Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021
INVESTOR CONTRIBUTION

For 36 investments, investors shared both estimates of the volume of GHG emissions avoided or reduced and data on the size of the investment outstanding and the enterprise value. Weighting the outstanding investment amount to enterprise value can gauge the share of emissions avoided or reduced that could be reasonably associated with a given tranche of capital, offering insight into an investor’s contribution toward those impact results.

On average, investors achieved an investment-weighted reduction in greenhouse gases of 40,535 metric tons per year...

...compared to an overall (unweighted) average of 175,235 metric tons of emissions for the same subset of investments.

Overall, the volumes of emissions avoided were relatively consistent among key segments (Figure 10). Notably, however, investors that engage directly with end stakeholders—whether through early consultation to inform strategy or through data collection—averaged an investment-weighted annual reduction in emissions of 52,891 metric tons (compared to 23,236 metric tons for those that did not engage directly). In cases where some form of capacity-building or non-financial support was offered, such as technical assistance, investments achieved a higher investment-weighted reduction in GHG emissions compared to those investments with no such support (44,594 versus 38,749 metric tons). Additional research is needed to fully understand the nature of investor contribution.

FIGURE 10: Investor contribution to investment-weighted average annual volume of greenhouse gas emissions avoided or reduced (metric tons)

| Provided catalytic capital | Did not provide catalytic capital | n=
|---------------------------|----------------------------------|----
| Provided some form of catalytic capital | 42,236 | 30
| Did not provide catalytic capital | 40,535 | 6

| Capacity-building support provided | n=
|-----------------------------------|----
| Capacity-building or non-financial support provided | 44,594 | 11
| No | 38,749 | 25

| Engagement with end stakeholders | n=
|---------------------------------|----
| We engage with our stakeholders | 52,891 | 21
| Our investees engage directly with stakeholders, but we do not | 23,236 | 15

Note: Figure excludes one outlier.
Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021
Reducing GHG emissions

**Treehouse Investments** is a minority-owned family office investing in climate solutions across energy, water, and waste systems, with direct investments in North America and sub-Saharan Africa.

Across its diverse portfolio spanning public and private equity, fixed income, and real assets, Treehouse Investments prioritizes the reduction of GHG emissions not only to mitigate climate risk but also to generate positive social outcomes, such as improved access to clean energy for low-income households. Treehouse’s annual direct and indirect emissions for each investment, calculated according to the GHG Protocol, vary with factors including each investee’s current stage of business (for example, emissions of early-stage renewable energy projects are highest during their construction phase) and asset class (for example, calculations of emissions for green bonds are often based on the number and size of deals closed that year). These variations demonstrate the need for a forward-looking approach to scale climate solutions and project future reductions in GHG emissions across a range of business models.

Because energy remains a major global source of GHG emissions, Treehouse is intent on scaling clean energy solutions. In 2016, Treehouse made a seed-stage, venture capital investment into a climate tech start-up, KOKO Networks, which has developed a hardware and software technology platform for safely distributing bio-ethanol cooking fuel to low-income households in Kenya. Burning charcoal and firewood for cooking, common practice in Kenya, is responsible for 40% of Kenya’s GHG emissions; in fact, use of charcoal generates as much as five metric tons of CO₂ emissions annually per urban Kenyan household. Moreover, burning such fuels is also especially harmful to human health because it releases black carbon. By switching households from charcoal to bio-ethanol, KOKO Networks reduced GHG emissions by 5,000 metric tons of CO₂ in 2019, the equivalent of 82,676 tree seedlings grown over 10 years, and ramped up to 140,000 metric tons of Certified Emissions Reductions in 2020 (or 2.3 million seedlings grown over 10 years). Treehouse Investments recognizes that climate-related impacts are inherently social and naturally anticipates positive social outcomes from this investment as it scales within Kenya and beyond, since millions of people worldwide, especially women and children, experience the detrimental effects of indoor air pollution each year. By prioritizing climate across its portfolio and measuring associated emissions for all of its investments, Treehouse is contributing to reduce deforestation, improve air quality, and improve physical human health.

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* Learn more about clean cooking in urban Kenya through Dalberg’s case study [here](#).
† This equivalency was calculated using the EPA’s Equivalencies Calculator, found [here](#).
‡ For more information on clean cookstoves and the burden of disease from household air pollution, see [here](#).

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Photograph credit: Treehouse
Accelerated clean energy solutions

Two-thirds of total global GHG emissions come from energy-related sources; mitigating climate change will thus critically require the transition to sustainable energy production and consumption. Investors are capitalizing diverse renewable energy projects – including solar, wind, hydro, and biomass energy – that enable producers to emit less or nearly zero CO₂. Clean solutions for producing energy are cost-effective, offering a safe, reliable, and affordable pathway to a net-negative world while increasing energy access for individuals and businesses. Investments in low- and zero-carbon energy alternatives can accelerate the use and uptake of clean energy solutions and decrease greenhouse gas emissions. Longer term, renewable energy generation and the corresponding reduced emissions can decrease air pollution, improve physical human health, and strengthen sustainable economic growth.

Across 163 annualized investments focused on clean energy solutions, each investee on average generated 2.9 million kWh of renewable energy for sale or consumption, equivalent to replacing 4,784 barrels of annual oil consumption.

Among those increasing energy access to individuals, 148,777 individuals benefited from access to renewable energy, with one-fifth of annualized investments targeting individuals living below the national poverty line.

On average, over a one-year period, investees emitted:

- 3,005 metric tons of CO₂ emitted directly across 13 annualized investments,
- 5,273,932 metric tons of emissions indirectly across 15 annualized investments, while
- Avoiding or reducing 101,519 metric tons of emissions across 192 annualized investments.

Each investee avoided or reduced 112% more GHG emissions than in the prior year across 97 annualized investments.

* See more on evidence associated with the transition to renewable energy here.
† Learn more about the evidence supporting climate change mitigation through clean energy and heat production within the IRIS+ Climate Change Mitigation theme here.
FEATURED IRIS+ METRICS

Energy Generated for Use or Sale: Renewable (O12496 and P15842)
Amount of renewable energy generated and consumed by the organization or generated and sold to off-taker(s) over a one-year period.

Client Individuals: Total (P14060)
Number of unique individuals who were clients of the organization over a one-year period.

Greenhouse Gas Emissions: Direct/Scope 1 (O14112)
Amount of GHGs emitted from direct emissions sources as a result of the organization’s operations over a one-year period.

Greenhouse Gas Emissions: Indirect/Scope 2 (O19604)
Amount of GHGs emitted from indirect emissions sources as a result of the organization’s operations over a one-year period.

Greenhouse Gas Emissions Avoided or Reduced (P12764)
Amount of GHG emissions avoided or reduced by the organization over a one-year period.

Greenhouse Gas Emissions Strategy (O18237)
Indicates whether the organization implements a strategy to reduce GHG emissions.

KEY FINDINGS

Investors in this study reported on renewable energy generated across 163 annualized investments. While some investees in the sample are large-scale operations generating renewable energy, others are smaller, start-up companies providing smaller-scale energy generation. Investments in the sample generated an average of 2.9 million kilowatt-hours (kWh) of renewable energy, or 90,593 kWh at the median. Investees with strategies in place for a GHG emissions generated an average 4.2 million kWh of renewable energy. On average, 105 annualized investments in the sample provided access to clean energy for 148,777 individuals each year. Approximately one in five annualized investments seek to enable access to energy for individuals living below national poverty lines. Investments focused on clean energy in this study emitted an average of 3,005 metrics tons of CO₂ directly and 5,273,932 metric tons of CO₂ indirectly.† On average, each investment avoided or reduced 112% more GHG emissions than in the previous year across 97 annualized investments.

METHODOLOGICAL APPROACH

Investments considered in this section aim to mitigate climate change by producing clean energy and heat. Renewable energy generated and consumed by investees is combined with renewable energy generated through products and/or services they provide, to calculate total renewable energy generated for consumption and sale. Segmented analyses across investees’ stages of business and by urban versus rural areas offer additional context for the impact results. This study did not collect data on different stages of the supply chain or type of energy generation project given the study’s multi-sectoral focus. Some investors also track the number of clients, or end stakeholders, accessing clean energy, which is reflected in this section. The analysis also includes the average year-on-year change in GHG emissions avoided or reduced across annualized investments in the energy sector. Given the small sample size reporting Scope 1 and Scope 2 emissions, analyses primarily focus on GHG emissions avoided or reduced. Impact results presented within the ‘Investor contribution’ section are weighted by the ratio of outstanding investment to enterprise value in order to gauge investor contribution to impact at the investment level. Investors can naturally influence impact results in various other ways, however, for example through stakeholder engagement mechanisms, non-financial support, and catalytic capital structures.

* Across this section, renewable energy generated figures exclude one outlier annualized investment.
† Figures for GHG emissions avoided or reduced and percent change exclude six outlier annualized investments, and figures for Scope 1 and Scope 2 exclude two outlier annualized investments.
**Comparing Impact Results Among Peers**

On average, an annualized investment in this sample generated 2.9 million kWh of renewable energy annually, equivalent to emissions released from 449 passenger vehicles driven for one year. The average amount of renewable energy generated by investees varied widely among peer groups (Figure 11). Venture-stage companies included in the study generated the most renewable energy on average at 2.4 million kWh annually. Renewable energy generation also varied greatly between private debt and private equity investments, at 1.5 million kWh versus 15.8 million kWh, respectively. Across investments seeking risk-adjusted, market-rate returns, investees generated an average of 5.1 million kWh of renewable energy each year; for below-market-rate investments, investees generated 1.7 million kWh on average.

Investors in the study targeting clean energy and heat production, focused on the energy sector, or both provided data on year-on-year change in Scope 1 emissions across only five annualized investments. For this set of investments, Scope 1 emissions increased by 8.6% while the OECM suggests the energy sector should reduce Scope 1 emissions by 5.8% per year to limit global warming to 1.5 degrees Celsius. This comparison suggests a need for increased progress to meet the energy reductions target, though notably findings pertain to this sample of investments. Investors in the sample focused on energy reported across 97 annualized investments on GHG emissions avoided or reduced and the year-on-year change.

**Figure 11: Average amount of renewable energy generated annually, across segments (kWh in millions)**

<table>
<thead>
<tr>
<th>Average Total</th>
<th>2.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investee Stage of Business</td>
<td></td>
</tr>
<tr>
<td>Seed/start-up stage</td>
<td>1.0</td>
</tr>
<tr>
<td>Venture stage</td>
<td>2.4</td>
</tr>
<tr>
<td>Growth stage</td>
<td>0.6</td>
</tr>
<tr>
<td>Mature, private companies</td>
<td>0.3</td>
</tr>
<tr>
<td>Investment instrument</td>
<td></td>
</tr>
<tr>
<td>Private debt</td>
<td>1.5</td>
</tr>
<tr>
<td>Private equity</td>
<td>15.8</td>
</tr>
<tr>
<td>Target Financial Returns</td>
<td>5.1</td>
</tr>
<tr>
<td>Risk-adjusted, market-rate</td>
<td></td>
</tr>
<tr>
<td>Below-market: closer to capital preservation</td>
<td>1.7</td>
</tr>
<tr>
<td>Urban</td>
<td>3.1</td>
</tr>
<tr>
<td>Peri-urban</td>
<td>3.2</td>
</tr>
<tr>
<td>Rural</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Note: Excludes four annualized outlier investments. Investee stage of business was categorized as ‘not applicable’ for those investing into forests, farmland, or educational not-for-profit institutions.

Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021

Across investments seeking risk-adjusted, market-rate returns, investees generated an average of 5.1 million kWh of renewable energy each year; for below-market-rate investments, investees generated 1.7 million kWh on average.
On average, each investment avoided or reduced 112% more GHG emissions than in the previous year. Venture-stage companies on average avoided more emissions year-on-year (133%) than any other stage of business (Figure 12). Despite this, in absolute terms, venture-stage companies avoided or reduced the lowest volume annually of all stages of business, at 36,809 metric tons of emissions on average. Investments targeting below-market-rate returns avoided or reduced more emissions compared to the prior year, at 137% on average, while risk-adjusted, market-rate-seeking investments avoided or reduced 57% more than the previous year. In absolute terms, however, risk-adjusted, market-rate-seeking investments avoided or reduced more emissions, at 135,845 metric tons of emissions on average each year, compared to below-market-rate-seeking investments (27,661 metric tons).

*Total emissions released directly and indirectly (i.e., Scope 1 and Scope 2 emissions) can offer additional context to interpret GHG emissions avoided or reduced, but the sample of investments providing data on emissions released and reduced varied. In this sample, an average of 3,005 metric tons of emissions were emitted directly for each investment across 13 annualized investments for which investors submitted data (excluding two outlier investments). Indirectly, investees emitted an average of 5.3 million metric tons of emissions across 15 annualized investments. Analyses presented in this section do not include Scope 1 and 2 emissions because these samples are small and inconsistent with different investments reporting data across all three metrics.

Note: Excludes six annualized outlier investments. Investee stage of business was categorized as ‘not applicable’ for those investing into forests, farmland, or educational not-for-profit institutions.

Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021
INVESTOR CONTRIBUTION

Across 33 annualized investments, investors provided data on enterprise value and the outstanding investment amount alongside renewable energy generated. Among these investments, investees generated an average of 16.5 million kWh of renewable energy; weighted by the ratio of outstanding investment amount to enterprise value, these investments generated an investment-weighted average of 9.1 million kWh of renewable energy, highlighting investors’ contribution to the impact results.

Investors that did not provide capacity-building or non-financial support generated an investment-weighted average 35.5 million kWh of renewable energy through their investments compared to an investment-weighted average of just 2.1 million kWh among investments with capacity-building support (Figure 13). Importantly, the timing of the non-financial support along with other factors are not reflected in this data and additional research is required. On average, investors that engage with stakeholders generated more renewable energy than investors that do not. Investments in which investors identified community and environmental need(s) in collaboration with stakeholders generated a weighted average of 36.4 million kWh of renewable energy, while those in which investors did not engage directly generated 423,623 kWh. As expected, longer investment holding periods are associated with higher amounts of investment-weighted average renewable energy generated in kWh. Those invested for seven or more years generated an investment-weighted average of 41.2 million kWh of renewable energy through their annualized investments compared to 3.6 million kWh for investments held between four and six years and 621,312 kWh for investments held between one and three years.

FIGURE 13: Investor contribution to investment-weighted average amount of renewable energy generated annually kWh in millions

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**FEATURED IRIS+ METRIC**

**Stakeholder Engagement (OI7914)**

Mechanisms in place to gather input from stakeholders on product/service design, development and delivery.

Note: Excludes two annualized investment outliers.

Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021

* Learn more about this calculation to assess investment-weighted impact results in the COMPASS methodology.
DBL Partners (DBL) is an impact venture capital fund based in the U.S. that invests in early-stage technology companies across a variety of sectors, including clean energy, food and agriculture, space technology, conservation, and public health.

DBL prioritizes sustainability and carbon reduction potential in evaluating investment opportunities, with a belief that investing in traditionally carbon-intensive sectors—such as energy, transportation, food, and agriculture—is critical to scale low-carbon technologies that can disrupt traditional business models.

To this end, DBL invested in Bellwether Coffee, makers of a fully electric commercial coffee roaster seeking to transform the way coffee is roasted, distributed, and sold. Traditional coffee supply chains require transportation to and from centralized roasting facilities powered by natural gas. With Bellwether, customers including cafes and grocery stores can roast fresh coffee at the point of sale using only electricity, decreasing emissions from both roasting and transportation.

This approach reduces the carbon footprint of each roasting cycle by as much as 90%; in fact, in 2020, the first year in which its roaster was commercially available, Bellwether reduced CO₂ emissions by 407 metric tons, the equivalent of energy use by nearly 49 homes in one year. As Bellwether scales its production and deployment of electric roasters, DBL projects that its carbon reductions will grow in tandem. Additionally, Bellwether sources its coffee beans ethically and sustainably by emphasizing coffee bean traceability and farmer wellbeing via its ‘Verified Living Income’ program, which sets procurement prices at levels that can provide local farmers with a secure livelihood.

DBL has engaged with Bellwether to measure and manage its environmental impact and has used that impact data to launch a sustainability calculator, which allows Bellwether to quantify the emissions reductions associated with its roaster. The sustainability calculator assesses CO₂ emissions from roasting, packaging, and transporting coffee beans from farm to cup, estimating carbon savings generated by Bellwether’s electric roaster as compared to traditional gas-powered roasting. This collaboration has enabled both Bellwether and DBL to assess and communicate potential carbon reduction capabilities to customers, improving Bellwether’s financial bottom line.

* This carbon equivalency was calculated using the U.S. EPA Greenhouse Gas Equivalencies calculator found here.
† The Bellwether Sustainability Report 2020 can be found here.
‡ Learn more about Bellwether’s approach to engaging with farmers and its Sustainable Buying Principles here.
Strengthened land-based solutions

Land and forests are both sources and sinks of GHG emissions. Stabilizing climate change at 1.5 degrees Celsius will require nature-based strategies to close the emissions gap and reduce the negative effects of climate change on ecosystems and their inhabitants. Reforestation, sustainable land management, and restorative agricultural practices can mitigate climate change by capturing and removing CO$_2$ from the atmosphere both above ground in biomass and below ground in roots and soil, decreasing global temperatures. Evidence shows that carbon capture and sequestration through nature-based solutions preserves biodiversity, strengthens ecosystems, and supports the transition to more sustainable food systems.

* See the IPCC Special Report on climate change and land for more detail.
† Learn more about the evidence supporting climate change mitigation through sustainable agriculture and forestry within the IRIS+ Climate Change Mitigation theme, here.
FEATURED IRIS+ METRICS

Total Land Sustainably Managed (OI6912 and PI6796)
Area of land directly or indirectly controlled by the organization and under sustainable cultivation or sustainable stewardship during a one-year period

Area of Land Reforested (PI4907)
Area of land that the organization reforested during a one-year period

Greenhouse Gas Emissions: Direct/Scope 1 (OI4112)
Amount of GHGs emitted from direct emissions sources as a result of the organization’s operations during a one-year period

Greenhouse Gas Emissions: Indirect/Scope 2 (OI9604)
Amount of GHGs emitted from indirect emissions sources as a result of the organization’s operations during a one-year period

Greenhouse Gas Emissions Avoided or Reduced (PI2764)
Amount of GHGs emissions avoided or reduced by the organization during a one-year period

Operational Certifications (OI1120)
Describes the third-party, business process- and practice-related certifications that the organization holds as of the end of a one-year period

KEY FINDINGS

In this subsample of investments seeking climate impact, 150 annualized investments (18% of the total sample) finance nature-based solutions. Investees in nearly one in five annualized investments (17%) are certified by the Forest Stewardship Council, and 10% are certified by Global GAP.* Across 75 annualized investments focused on mitigating climate change through sustainable agriculture, each investee was associated with an average 18,881 hectares of sustainably managed land (3,631 at the median). Among 22 annualized investments focused on sequestering carbon through forestry and land use, investees reforested an average of 9,310 hectares of land. Nature-based solutions in the sample directly emitted 1,952 metric tons of GHG, indirectly released 335 metric tons of GHG, avoided or reduced 38,529 metric tons of GHG, and sequestered 3,199,581 metric tons of GHG.†

METHODOLOGICAL APPROACH

This section offers insight on annualized investments seeking to mitigate climate change through nature-based solutions, primarily in sustainable agriculture and forestry. Total reforested land includes the total amount of land recovered from deforestation, comprising land controlled both directly by the investee and indirectly through investee operations. Similarly, sustainably managed land includes land both directly and indirectly controlled that is under sustainable cultivation or stewardship, leveraging crop rotation, soil health strategies, and regenerative practices, among other sustainable management techniques. Only the subset of annualized investments for which investors provided the relevant emissions data are included in figures on GHG emissions.

This section also includes investment-weighted analysis of GHG emissions sequestered, with this metric multiplied by the ratio of investment amount outstanding to enterprise value. The result offers investment-level insight into the impact of land-based solutions on carbon sequestered. Pace analysis was not conducted for this section, given small sample sizes.

* The Forest Stewardship Council is a market-based certification program that promotes the responsible management of global forests. Global GAP is a set of global standards for good agricultural practices (GAP) to promote sustainable agricultural production. While investors in the sample pursue other certification types as well, these were the most commonly reported.

† Respondents provided data for each relevant metric, when data were available; as a result, in this section, the sample varies across each emissions metric.
COMPARING IMPACT RESULTS AMONG PEERS

Among annualized investments focused on land-based solutions in this sample, 86% were made through real assets. Nearly all of these (95%) targeted risk-adjusted, market-rate returns. The volume of land sustainably managed varied by geography, investee stage of business, and the different types of sustainable certifications and practices investees have in place (Figure 14). Investees based in South Asia managed the largest amounts of land sustainably, on average, at 66,268 hectares compared to investees based in any other region. While investments made through private equity are associated with an average 60,422 hectares of land sustainably managed, real asset investments were associated with smaller quantities of land, on average, at just 12,727 hectares. The six venture-stage companies in the sample managed by far the largest average amounts of land sustainably (158,154 hectares), and the seven mature, private companies in the sample manage the smallest (5,039 hectares).

Investees within the sample focused on land-based solutions engaged in a variety of climate change mitigation practices, most commonly deploying biodiversity-related assessments (55% of annualized investments), water conservation strategies (36%), and greenhouse gas emissions strategies (35%). Interestingly, over a quarter (28%) had no mitigation practices in place, even as this group of investments was associated with greater amounts of sustainably managed land (63,489 hectares, compared to just 13,532 hectares for investments with climate strategies in place).

**FIGURE 14. Average amount of land sustainably managed annually, across segments (hectares)**

<table>
<thead>
<tr>
<th>GEOGRAPHIC REGION</th>
<th>U.S. &amp; Canada</th>
<th>Southeast Asia</th>
<th>South Asia</th>
<th>Oceania</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=</td>
<td>32</td>
<td>7</td>
<td>17</td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INVESTMENT INSTRUMENT</th>
<th>Private equity</th>
<th>Real assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=</td>
<td>19</td>
<td>47</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INVESTEME STAGE OF BUSINESS</th>
<th>Seed/start-up stage</th>
<th>Venture stage</th>
<th>Growth stage</th>
<th>Mature, private companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=</td>
<td>15</td>
<td>6</td>
<td>20</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SUSTAINABILITY CERTIFICATIONS</th>
<th>Sustainability certifications associated</th>
<th>No certifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=</td>
<td>42</td>
<td>34</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CLIMATE CHANGE MITIGATION PRACTICES</th>
<th>Climate strategies in place</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=</td>
<td>57</td>
<td>19</td>
</tr>
</tbody>
</table>

Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021

The volume of land sustainably managed varied by geography, investee stage of business, and the different types of sustainable certifications and practices investees have in place.
Growth-stage companies sequestered greater average amounts of emissions each year than did mature, private companies (3.1 million on average versus 1.4 million metric tons of emissions).

The amount of GHG emissions sequestered also varied by investee stage of business, geographic region, and investment time horizon (Figure 15). Growth-stage companies sequestered greater average amounts of emissions each year than did mature, private companies (3.1 million on average versus 1.4 million metric tons of emissions). Across geographies, investees in the U.S. & Canada sequestered an average of 4.6 million metric tons of emissions annually, comparatively more than the average in Southeast Asia and Oceania combined. Interestingly, emissions sequestered did not vary much by investment holding period.

INVESTOR CONTRIBUTION

Across 24 annualized investments for which investors shared both enterprise value and outstanding investment, investees sequestered an average 2.6 million metric tons of emissions. When weighted by the ratio of outstanding investment amount to enterprise value, which helps reflect the investment-weighted impact associated with a given tranche of capital, investors annually sequestered an average of 2.3 million metric tons of emissions.

* Learn more about this calculation to assess investment-weighted impact results in the COMPASS methodology.

Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021

FIGURE 15: Average amount of GHG emissions sequestered annually, across segments (metric tons)
Investors can influence impact results through engagement mechanisms and non-financial support offered to investees (Figure 16). Those investors that provided some form of capacity-building support sequestered far more investment-weighted GHG emissions than did those that did not provide any non-financial support (2.4 million versus 30,250 metric tons of emissions). Interestingly, in cases where investors did not engage directly with end stakeholders but investees did, average emissions sequestered annually were significantly higher, at 3.2 million metric tons of emissions (investment-weighted), compared to just 194,427 investment-weighted metric tons of emissions for those investments where community and environmental needs were identified by investors. Also surprisingly, investments with longer holding periods sequestered fewer emissions on average than did those with a holding period of three years or fewer (1.8 million versus 3 million metric tons of emissions, investment-weighted).

**FIGURE 16. Investor contribution to investment-weighted average amounts of GHG emissions sequestered annually (metric tons)**

<table>
<thead>
<tr>
<th>Stakeholder Engagement Mechanisms</th>
<th>Capacity-building or non-financial support provided</th>
<th>Investment Holding Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>None provided</td>
<td>30,250</td>
<td>1-3 years</td>
</tr>
<tr>
<td>Identify community and environmental need(s), if any, in collaboration with stakeholders</td>
<td>194,427</td>
<td>1-3 years</td>
</tr>
<tr>
<td>Our investees engage directly with stakeholders, but we do not</td>
<td>3,234,359</td>
<td>4 or more years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,750,711</td>
</tr>
<tr>
<td>Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FEATURED IRIS+ METRIC**

Stakeholder Engagement (OI7914)

Describes mechanisms in place to gather input from stakeholders on product/service design, development, and delivery.
SPOTLIGHT: OKAVANGO CAPITAL PARTNERS, AFRICAN WILDLIFE FOUNDATION, AND COMACO

Strengthening ecosystems and biodiversity to mitigate climate change

Okavango Capital Partners is a commercial investment firm focused on reducing climate risks and biodiversity loss by promoting the well-being of local communities in sub-Saharan Africa.

By targeting environmental protections in sub-Saharan Africa’s critical ecosystems, Okavango Capital Partners and African Wildlife Foundation (AWF) work jointly throughout the investment process to increase community resilience to climate change.

Okavango and AWF formally partnered in 2017 to focus on ‘conservation-lens’ investing, an approach that aims to protect ecosystems and communities by harnessing the power of markets to scale sustainable behaviors. To ensure alignment with investees on its conservation-lens approach, during the due diligence process, Okavango builds a tailored plan based on incentives to drive environmental performance. AWF is involved at each stage of the investment cycle to deepen community relationships, enhance conservation expertise, and develop impact measurement and management tools. To measure its impact performance, Okavango is guided by the ‘Fours Cs’: conservation (e.g., area of land sustainably managed), climate (e.g., GHG emissions), community (e.g., income generation in critical conservation areas, gender equality), and commercial (e.g., market share of revenue and employment from sustainable industries).

Through this conservation-lens approach, Okavango has worked with a Zambian conservation enterprise, Comaco, to promote food security through sustainable farming practices. Comaco provides local farmers, 52% of whom are women, with the training and inputs necessary to adopt climate-smart agriculture practices that result in improved soil health and increased agricultural yields. These changes have provided market access for 225,000 farmers, improved conservation practices across 19 million acres of land, and raised household incomes for participating farmers by 219%. Comaco has also facilitated the transition of 760 poachers to become successful farmers, reducing a key threat to biodiversity. Through its collaboration with investees, Okavango and AWF’s investments have improved conservation efforts and helped to mitigate climate change by protecting more than three million acres of land and 500 million trees, thus avoiding more than six million metric tons of GHG emissions to date.

* Okavango assesses impact through proprietary tools, including ‘Conservation Covenants’ and ‘Conservation Business Intelligence,’ which ensure that investee companies adopt conservation-friendly behaviors and actively manage their business operations to achieve impact.

† Learn more about Comaco here.
Increased decent jobs supported

To build towards a future free of fossil fuels, it will be critical to support quality employment opportunities within organizations that mitigate climate change, especially across high-emitting sectors such as energy, manufacturing, and transportation. Such jobs include both those focused directly on preserving or restoring the environment and those at organizations with climate change mitigation strategies in place to reduce the environmental degradation resulting from daily work activities. Overall, the transition to a decarbonized economy will create significant job opportunities; the ILO predicts a net job creation of 18 million by 2030 due to the shift in business models and policies in support of a 1.5 degrees Celsius warming scenario. Over time, the carbon-free transition will increase economic growth and development while decreasing GHG emissions, facilitating a growing ‘green economy’ and just transition that is low-carbon, resource-efficient, and socially inclusive.

* Learn more about global employment trends in the ILO’s 2018 *World Employment Social Outlook* report. The ILO defines green jobs as decent jobs that contribute to preserve or restore the environment, in traditional sectors such as manufacturing or construction, or in new, emerging green sectors such as renewable energy and energy efficiency.

† For more information on the transition to a green economy, see here.

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**DECENT JOBS SUPPORTED**

Across 373 annualized investments, investees supported an average of 468 decent jobs annually.

**DECENT JOBS SUPPORTED AT CLIMATE-CONSCIOUS ORGANIZATIONS**

On average, 228 decent jobs supported were at investee organizations with at least one climate change mitigation or adaptation strategy in place. 64% of annualized investments supported biodiversity assessments, 59% supported GHG emissions strategies, and 33% supported each of water conservation and climate resilience strategies in any given year, across 87 annualized investments.

**GROWTH IN DECENT JOBS SUPPORTED AT CLIMATE-CONSCIOUS ORGANIZATIONS**

The number of decent jobs supported each year increased by 28% on average across 21 annualized investments.
KEY FINDINGS

Investors across 87 annualized investments in this sample reported on the number of decent jobs supported directly at investee organizations with at least one strategy in place to mitigate or adapt to climate change. Such ‘green’ investees represented less than a quarter (23%) of all annualized investments reporting jobs data. On average, climate-conscious investees supported 228 decent jobs per year. Investees’ climate strategies were most commonly biodiversity-related assessments (64% of investments), followed by GHG emissions strategies (59%), water conservation strategies (33%), and climate resilience strategies (33%). Investments in the sample supported a 28% average annual increase in decent jobs (across 21 investments for which data were made available). The number of decent jobs within the forestry & timber sector grew by 42% annually, while decent jobs in the energy sector grew more gradually (14% average annual growth).

METHODOLOGICAL APPROACH

Analyses in this section focused on decent, jobs supported at investee organizations, defined as those with each of the following policies in place: fair hiring/recruiting practices, fair career advancement practices, fair compensation practices, fair dismissal policies, sexual harassment policies, worker safety policies, employee feedback systems, child labor policies, community service policies, and occupational injury policies. Additionally, this analysis specifically considers the subset of decent jobs at investee organizations that contribute toward environmental outcomes by having at least one of the following climate change mitigation or adaptation strategies in place: GHG emissions strategy, climate resilience strategy, energy conservation strategy, water conservation strategy, community engagement strategy, or biodiversity assessments. Investees with at least one such strategy in place were considered ‘climate-conscious’ organizations. Any job within such climate-conscious investee organizations was included in these analyses, not just those jobs with functions focused on environmental protection or restoration. Demographic information related to employees at investee organizations was not captured. In investment-weighted analyses for quality jobs directly supported, investment-level impact is estimated by multiplying the number of quality jobs by the ratio of the investment amount outstanding to enterprise value.
COMPARING IMPACT RESULTS AMONG PEERS

The average number of decent jobs supported at climate-conscious investee organizations varied with strategic goal targeted, geography, and investee stage of business. The greatest number of decent jobs, on average, were at climate-conscious investees seeking to mitigate climate change through clean electricity and heat production (274 jobs each year), followed closely by those targeting forestry and land use (255 jobs), reflecting the critical role both sectors play in the green transition. On average, 121 decent jobs were supported at those investees focused on carbon capture and sequestration. This focus on ecological solutions is reflected in the nature of climate strategies investee organizations have implemented, with nearly two-thirds of annualized investments (64%) supporting investees with biodiversity-related assessments in place and an average of 209 decent jobs, while nearly six in ten (59%) supported investees with a GHG emissions strategy in place and 131 jobs, on average. Investments into growth-stage companies naturally supported the highest number of jobs on average, at 358 annually; meanwhile, seed- or startup-stage companies supported 276 jobs and venture stage companies supported 121 jobs.

Among those annualized investees in the sample reporting multiple years of data, investments made into forestry and land use saw the fastest increase in jobs supported, at 39% on average each year, compared to investments focused on clean electricity and heat production at 14% job growth (Figure 17). Investees based in Southeast Asia increased the number of jobs supported by 87% annually, while those in sub-Saharan Africa grew the number of decent jobs much more slowly, at an average of 20% each year. Interestingly, while the average number of decent jobs supported each year was roughly the same between investments targeting risk-adjusted, market-rate returns and those targeting below-market-rate returns (at 385 and 394 jobs, respectively), the annual change in jobs was higher among market-rate investments, with those investees growing jobs at 34% on average each year, versus 7% growth in jobs for investees of below-market-rate investments.

FIGURE 17. Average number of decent jobs and annual percent change in jobs at climate-conscious investees, across segments

Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021
INVESTOR CONTRIBUTION

Investors participating in the study reported enterprise value, outstanding investment amount, climate strategies, and decent jobs supported across 51 annualized investments. Among these, climate-conscious investees supported an average of 194 decent jobs. When weighted by the ratio of the outstanding investment amount to enterprise value of investees, investments supported an investment-weighted average of 88 decent jobs annually,* a figure that helps to reflect the impact associated with a given tranche of investor capital.

This correspond to an investment-weighted figure of 88 DECENT JOBS ANNUALLY.

Through the provision of capacity-building support, stakeholder engagement mechanisms, and investment holding periods, investors influence impact results (Figure 18). Those investments providing some form of capacity-building or non-financial support were associated with more jobs, on average, than those investors that did not (45 versus 16 investment-weighted decent jobs). Investors that did not engage directly with stakeholders (even if their investees did) supported 116 investment-weighted decent jobs, more than those that did engage directly (23 investment-weighted decent jobs). Investment-weighted decent jobs also varied with the investment time horizon.†

FIGURE 18: Investor contribution to investment-weighted, average number of decent jobs supported annually at climate-conscious investees

<table>
<thead>
<tr>
<th>Capacity-building support</th>
<th>We engage with our stakeholders</th>
<th>1-3 years</th>
<th>4-6 years</th>
<th>7 or more years</th>
</tr>
</thead>
<tbody>
<tr>
<td>None provided</td>
<td>Our investees engage directly with stakeholders, but we do not</td>
<td>115</td>
<td>93</td>
<td>40</td>
</tr>
<tr>
<td>We provide capacity-building or non-financial support</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: GIIN, Understanding Impact Performance: Climate Change Mitigation Investments, 2021

* Learn more about this calculation to assess investment-weighted impact results in the COMPASS methodology.
† Analysis of investment horizon excludes investments where the holding period is less than one year; though these serve as important baseline data, they cannot yet reflect the investor’s role or contribution.
ON AVERAGE PER INVESTMENT, OVER A ONE-YEAR PERIOD...

INVESTORS SEEK TO MITIGATE CLIMATE CHANGE THROUGH A VARIETY OF SECTORS AND BUSINESS MODELS, INCLUDING:

**LAND-BASED SOLUTIONS**
- 55% of annualized investments conduct biodiversity assessments, and
- 36% implement water conservation strategies.

**CLEAN ENERGY SOLUTIONS**
- 2.9 million kWh of renewable energy generated for sale or consumption on average each year.
- 148,777 individuals benefitted from access to renewable energy.

Investments across the sample decreased Scope 1 emissions by an average 291 metric tons annually, corresponding to a decrease in Scope 1 emissions by 6.4%, on average, as compared to the prior year.

To meet the **Paris Climate Accord target** and prevent a global temperature increase greater than 1.5 degrees Celsius requires a reduction in emissions of 7.6% per year through 2030, presenting a significant opportunity for investors.
Lessons learned

This study explores both typical impact performance across a sample of investments and the various strategies investors deploy to influence that impact. It also deepens the analytic approach to deriving rigorous, meaningful impact performance comparisons. Throughout the process, as the Research Team engaged with study participants and experts, several key learnings emerged on: impact data availability, impact over time, investor contribution, and impact comparability. These insights may inform the industry’s development of decision-making tools that will enable investors to apply comparable impact information to the investment process.

1. IMPACT DATA AVAILABILITY: Investors shared hundreds of critical impact and financial data points—including both outputs and outcomes—that reflect the performance of their investments seeking to mitigate climate change. Nonetheless, this third iteration of the GIIN’s impact performance studies reinforces the constraints investors and investees face in capturing and sharing impact data, particularly data related to outcomes. For example, surprisingly few investors track Scope 1 and Scope 2 emissions, a key anchor for tracking the mitigation of climate change. While standardized approaches, such as the GHG Protocol and the World Resources Institute (WRI) Methodology, are widely available to help organizations estimate emissions released through various business models and operations, investors anecdotally shared several challenges in uptake, including internal capacity constraints to implement any new methodology across portfolios and a lack of internal expertise to do so effectively for Scope 1 and Scope 2 emissions. While data on GHG emissions avoided or reduced were more readily available, these are not consistently standardized and so present inherent challenges to interpretation given the risk that creative accounting may be employed to assess avoidance. Meaningful interpretation of GHG emissions avoided or reduced also requires, for context, the rarely available data on total emissions. This gap in data reinforces that investors must continue to collect standardized impact data and presents a clear opportunity for increased transparency in data sharing across metrics that are relevant to assessing impact performance.

2. IMPACT OVER TIME: Data submissions that included historical impact information enabled the Research Team to assess annual changes in impact results, a significant leap that signals investors’ progress towards its commitment to data transparency. Investor willingness to share these data enabled analysis of not only the reach or breadth of impact but also impact over time, as presented in the COMPASS methodology. Scale of impact, pace of change, and the volume of change generated each offer important—and often differing—insights into impact performance. For example, while total GHG emissions released directly (Scope 1) is relevant to baseline performance, understanding impact performance requires assessing the volume of and percent change in emissions relative to the prior year. In general, assessing impact over time enables investors to compare and contextualize actual change in their year-on-year impact.

* This study does not explore how much impact is achieved per dollar invested, also known as efficiency of impact. Assessing efficiency requires both impact and financial data over the life of an investment, as well as comparison of those data across investments at the fund level. Further refinement to methodologies of fund-level impact analysis is needed to rigorously assess investment efficiency.
It has become increasingly clear that while absolute impact figures are necessary for context, the crux of impact performance is to measure the change in these figures. Investors should assess multiple angles of impact performance; while using point-in-time figures is useful as a baseline, measuring impact over time is crucial to understanding and comparing impact performance.

3. INVESTOR CONTRIBUTION: Investees are a central force in creating impact on the ground. In addition to investee-level results, this study explores investment-level insights to begin to understand investor contribution. Investment-weighted impact results can help investors explore key decisions that can meaningfully contribute to generated impact, such as stakeholder engagement mechanisms, provision of non-financial support, and deployment of catalytic capital. In this sample, however, such factors were not always associated with stronger impact performance. For example, in cases where investors did not engage directly with end stakeholders but the investee did, investment-weighted average annual emissions sequestered were significantly higher than in cases with direct investor engagement (3.2 million metric tons of emissions compared to just 194,427 metric tons). That said, these findings cannot be generalized; in addition to the small sample sizes, understanding causality would require econometric analysis that accounts for a variety of additional factors, such as the timing of additional support and varying business models. This speaks to the need for additional insight to better understand how to influence impact results and use mechanisms, such as non-financial support and stakeholder engagement mechanisms, most effectively to drive results. Insight into the drivers of impact remains a critical area for further research. This topic – drivers of impact performance – merits econometric analysis that can account for a variety of factors to inform investor strategies and correlate investor practice to impact results.

4. IMPACT COMPARABILITY: Contextual factors are critical to understanding and comparing the impact performance of investments. Disaggregating results by sector, stage of business, geographic region, and instrument, among other dimensions, can enable nuanced and meaningful comparison of results. Naturally, not all metrics are suited for the same type of comparison. Some work well with aggregate comparison (e.g., number of decent jobs supported), others work well with narrow comparisons (e.g., product type), and still others work best for analysis of a single entity over time (e.g., volume of product). In addition to comparing impact performance within market segments, comparing impact results to the change needed to address the broader challenge allows investors to determine whether their investments are having an under- or out-sized effect relative to global annual reduction targets. Importantly, however, it is not always feasible to contextualize impact relative to an external threshold. In some cases, the impact data investors commonly track do not match SDG indicators or other global targets, nor do the data captured by investors consistently account for end stakeholders that previously lacked access, possibly rendering such external comparisons inaccurate. Nonetheless, gauging impact achieved relative to the broader social or environmental goal is critical to understand the extent to which an investment is genuinely contributing toward progress. Contextualizing impact based not only on investor-, investment-, and investee-level information but also against global thresholds helps to gauge the progress investors are making in addressing global challenges, but such thresholds cannot be applied consistently across outcomes; generating meaningful insights from such comparisons requires a nuanced approach.

These lessons learned continue to advance industry progress toward comparable impact insights, informing the efforts of a variety of players that are building industry infrastructure and ultimately enabling investors to become more effective and efficient in achieving impact with their capital.
Conclusion and next steps

The GIIN embarked on the impact performance studies for two primary reasons: first, to use real data to shed light on the impact performance of investments within a theme or lens— in this case, Climate Change Mitigation. And second, to build, test, and iterate a standardized methodology to assess and compare impact performance across investments. This series ultimately seeks to build a foundation for the market’s impact performance infrastructure, enabling all investors to integrate impact into decision-making.

With global temperatures rising 0.2 degrees Celsius per decade, the planet and its people are experiencing catastrophic consequences, such as extreme weather events, displacement in fragile cities, and environmental degradation. The IPCC calls for limiting warming to 1.5 degrees Celsius to prevent irreversible damage. Investors play a critical role in building toward climate solutions and justice by investing into clean energy, sustainable mobility and manufacturing, nature-based solutions, and new technologies. In this sample, investors aim to tackle climate change by making investments to decrease GHG emissions and support the transition to carbon-neutral or carbon-negative solutions.

This study offers insight into various angles of impact performance and investor contribution across investments seeking to mitigate climate change. Conventionally, investors often describe impact at a point in time, assessing the total reach or breadth of their investees’ operations, products, and services. However, this offers just one layer of a multidimensional impact story. Year-to-year changes in the outcomes associated with investments offer additional depth to understand the effects of investors’ and investees’ activities. Comparing these insights to evidence-based climate targets demonstrate both progress achieved and the continuous need for further impact investment.

What this means for investors

Context has always been critical for impact investors in terms of sector, geography, stage of business, and asset class. However, this study demonstrates that context also matters in terms of the amount of change—“the delta”—both over time and in proportion to peer groups and to the pace of change needed to solve global challenges.

This research also explores the extent to which investors’ inputs influence impact results. Various factors—such as capital, engagement, and investment terms—begin to illuminate how investors may leverage a range of strategies to contribute to impact. This may raise new questions or challenge long-held beliefs, for example by encouraging investors and the industry to reflect on how they can most effectively use technical assistance to decrease GHG emissions. While there is still much more to learn, it is clear that investors must begin to identify, clarify, and refine fundamental assumptions about the nature of their contribution. Insight into investor contribution can equip investors to make better-informed, evidence-based decisions to contribute to greater, more effective impact.
What this means for the industry

The significant volume of data that investors submitted for this study—the largest set of annualized investments so far—highlights the leadership by a group of investors committed to deepening the industry’s understanding of impact performance. While this signals tremendous industry progress in data transparency, gaps in data remain. Industry-wide efforts focused on data sharing and aggregation promise to bring life to impact results by allowing investors to rigorously assess and compare impact performance relative to their peers and to the social and environmental solutions needed.

The GIIN has stepped forward to address investor and industry demand for impact performance analytics. Building upon IRIS+, COMPASS, and this series of impact performance studies, the GIIN is developing impact performance benchmarks to enable investors to better integrate impact into their decision-making. As data availability grows, the GIIN will also study the various drivers of impact performance to inform investors how their inputs and decisions can influence impact results and to lay a strong foundation for additional analytics products to come.

This research should empower investors to not just reflect on whether the impact performance of their investments is sufficient to solve global challenges, but also leverage their role and capital to mitigate climate change. For the industry, this work lays a pragmatic foundation for benchmarking impact performance at scale, driving markets toward more powerful measures of impact.
APPENDIX 1:

Study participants and advisors

This study would not be possible without the participation, guidance, and leadership from the following organizations:

AECF
AgDevCo
Agriculture Capital Management LLC
AHL Venture Partners
AlphaMundi Group
Blue Haven Initiative
Bridges Fund Management
Business Oxygen Pvt. Ltd.
City Light Capital
DBL Partners
DWS
Ecosystem Integrity Fund (EIF)
Enhanced Capital
FINCA International
Fondaction
Garden Impact Investments Pte Ltd
Hancock Natural Resource Group (HNRG)
IDB Invest
Impact Ag Partners
Innpact S.A.
Inspiriteuors & Partenaires
Lendable
Maj Invest Financial Inclusion
Mennonite Economic Development Associates (MEDA)
Mirova Natural Capital Ltd
New Forests Pty Ltd
Nexus for Development
Okavango Capital
Omnivore
responsAbility Investments AG
Southern Pastures
Treehouse Investments, LLC
Virginia Community Capital
Women’s World Banking

The GIIN appreciates the support of the following organizations, which helped to encourage impact investors in their networks to participate in this research study: AVPN, Bertha Centre, HIPSO, Impact Investing Institute UK, New Ventures, and Upstart Co Lab.
Appendix 2: Definitions

General

Stakeholder: The end person(s) or ecosystem(s) that investments target or seek to impact, such as clients, employees, suppliers, etc.

Enterprise value: The market value – or net present value – of equity plus the market value of debt for that investee entity in the reporting period.

Impact: Positive and negative social and environmental results associated with a given investment, without necessarily a link or attribution of those results to an investment and the products, services, and operations of the investee. This report reflects both positive and negative impacts, to the extent that it's possible.

Impact investments: Investments made with the intention to generate positive, measurable social and environmental impact alongside a financial return. They can be across asset classes, in both emerging and developed markets, and target a range of returns from below-market to market-rate, depending on the investors’ strategic goals.

Investee: The company, project, or real asset receiving the capital allocation to then finance its business activities (e.g., operations and design, production, and sales of products or services).

Investment amount outstanding: The remaining balance of a debt investment (original loan amount – principal repaid) or the estimated valuation of an equity investment into that investee in the reporting period.

Investment-weighted: Impact results multiplied by the ratio of the investment amount outstanding and the enterprise value of investees to reflect investment-level impact.

Outputs: The products, capital goods and services which result from a development intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes.

Outcomes: Change for affected stakeholders that is plausibly associated with the products/services of the enterprise.

Stage of Business

Seed/start-up: Business idea exists, but little has been established operationally; pre-revenues.

Venture: Operations are established, and company may or may not be generating revenues, but does not yet have positive EBITDA.

Growth: Company has positive EBITDA and is growing.

Mature: Company has stabilized at scale and is operating profitably.

Types of Impact Risk

Evidence risk: The probability that the evidence on which the strategy is based is not good evidence that the expected impact will occur.

External risk: The probability that external factors disrupt our ability to deliver the expected impact.

Stakeholder participation risk: The probability that the expectations and/or the experiences of stakeholders are misunderstood or not considered.

Drop-off risk: The probability that the expected impact does not endure.

Efficiency risk: The probability that the expected impact could have been achieved with fewer resources or at a lower cost.

Execution risk: The probability that the activities are not delivered as planned and do not result in the desired outputs.

Alignment risk: The probability that impact risk is not locked into the enterprise model.

Endurance risk: The probability that the required activities are not delivered for a long enough period.

Unexpected impact risk: The probability that significant unexpected positive and negative impact is experienced by people and the planet.
GHG PROTOCOL STANDARD

Scope 1 emissions: All direct emissions from the activities of the organization or under their control. Examples include fuel combustion, company facilities, and vehicle use.

Scope 2 emissions: Indirect emissions from electricity purchased and used by the investee. This includes primarily emissions created during the production and use of energy.

Scope 3 emissions: All other indirect emissions that occur in the value chain.

1.5 degrees Celsius scenario: Climate change mitigation target to ensure that global warming does not increase pre-industrial levels by more than 1.5 degrees Celsius, as part of the Paris Climate Agreement (a legally binding international treaty on climate change).

APPENDIX 3:

References


5. Intergovernmental Panel on Climate Change (IPCC), Global Warming of 1.5°C: Summary for Policymakers (Geneva: IPCC, 2018).

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About the Global Impact Investing Network

This report is a publication of the Global Impact Investing Network (GIIN), the leading global champion of impact investing, dedicated to increasing the scale and effectiveness of impact investing around the world. The GIIN builds critical market infrastructure and supports activities, education, and research that help accelerate the development of a coherent impact investing industry.

Relevant Resources

Each of the GIIN resources below offer additional data and guidance related to impact performance.

COMPASS Methodology
COMPASS presents a tested, widely accepted methodology to assess and compare impact results. Since impact is inherently multi-dimensional and complex, this methodology is designed to offer investors insight into three critical impact performance figures: scale, pace, and efficiency.

Understanding Impact Performance
The Impact Performance Studies aggregate investment level data to compare impact results across investments.

IRIS+ Core Metrics Sets
This document describes the main elements of the IRIS+ Core Metrics Sets: the questions they address, shortlists of key indicators, clear step-by-step calculation instructions, and the key insights derived from each indicator.

IRIS+ to Build an Impact Portfolio
This document provides practical guidance on how to use IRIS+ to inform investor’s decision-making when building an impact portfolio.

IRIS+ for Due Diligence
This document provides practical guidance on how to use IRIS+ within impact due diligence to inform investment decision-making.

Roadmap for the Future of Impact Investing

Interested in helping to build the field of impact investing? The GIIN’s Roadmap for the Future of Impact Investing: Reshaping Financial Markets presents a vision for more inclusive and sustainable financial markets and articulates a plan for impact investing to lead progress toward this future. To download the Roadmap and find more information about opportunities to get involved, visit roadmap.thegiin.org.
The Global Impact Investing Network (“GIIN”) is a nonprofit 501c(3) organization dedicated to increasing the scale and effectiveness of impact investing. The GIIN builds critical infrastructure and supports activities, education, and research that help accelerate the development of a coherent impact investing industry.

Readers should be aware that the GIIN has had and will continue to have relationships with many of the organizations identified in this report, through some of which the GIIN has received and will continue to receive financial and other support.

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