

# CARLYLE

833MW RENEWABLE ENERGY  
CAPACITY INSTALLED

4TH YEAR  
CARBON FOOTPRINTING<sup>1</sup>

325 ESG DATA CONVERGENCE  
INITIATIVE PARTICIPANTS

\$25BN IN ESG-LINKED  
FINANCING<sup>1</sup>

340 DIVERSE  
BOARD SEATS<sup>2</sup>

70 SUSTAINABILITY  
WORKSHOP ATTENDEES

113 PORTFOLIO  
COMPANIES WITH  
CARBON FOOTPRINTS<sup>1</sup>

80% BOARDS WITH  
GENDER DIVERSITY<sup>2</sup>

\$1.45BN INVESTED  
IN RENEWABLE AND SUSTAINABLE  
ENERGY PLATFORMS

NET ZERO  
BY 2050<sup>1</sup>

7 ESG  
PLAYBOOKS

27% INCREASE IN DEI  
AWARD NOMINATIONS

# The EBITDA of ESG

2023 ESG REPORT



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<sup>1</sup>For more information please see the TCFD report on page 32.

<sup>2</sup>Includes Carlyle-controlled companies acquired since 2016, based on data reported as of 12/31/22. Gender diverse Boards have at least 1 female-identifying Board member.

<sup>3</sup>Includes directors appointed to a Carlyle Board between 1/1/2020 and 3/31/23. Our definition of ethnically diverse is aligned to the definition set forth by the Institutional Limited Partners Association (ILPA): Asian, Black, Hispanic or Latinx, Native Hawaiian / Pacific Islander, American Indian / Alaskan Native, or Two or More Races.

<sup>4</sup>For more information, please see the ESG-linked financings section of this document on page 11.

# Glossary

## NET ZERO

Net zero is generally defined scientifically as achieving a balance between anthropogenic greenhouse gas emissions into the atmosphere and anthropogenic greenhouse gas removals from it over a specific period<sup>1</sup>.

## CARLYLE'S NET ZERO GOAL OR "LONG-TERM CLIMATE GOAL"

In 2022, Carlyle announced a goal to achieve net zero greenhouse gas (GHG) emissions by 2050 or sooner across Direct Global Private Equity and Global Credit investments.

## "PARIS-ALIGNED CLIMATE GOAL"

The Paris Agreement aims to limit global warming to well below 2 degrees Celsius and pursue efforts to limit the temperature increase to 1.5 degrees Celsius, compared to pre-industrial levels. Carlyle defines having a Paris-Aligned Climate Goal as a portfolio company that has achieved the following three steps during the Carlyle hold period: 1. Baseline: Calculate a baseline GHG footprint; 2. Targets: Set clearly defined short- and long-term GHG reduction targets aligned with the Paris Agreement; 3. Reporting: Publicly report on progress. In certain instances, companies may take a different approach to one or more of these steps; Carlyle may still choose to accept the company's climate goal as counting towards Carlyle's Goal #1 at its discretion.

## CARLYLE'S NEAR-TERM CLIMATE GOALS

In 2022, Carlyle set two near-term goals:

### "Goal #1"

75% of Carlyle's In-Scope Companies' Scopes 1 and 2 emissions will be covered by Paris-Aligned Climate Goals by 2025; and

### "Goal #2"

Beginning in 2025 all new Direct, Majority-Owned Corporate Private Equity, Energy and Power portfolio companies will set Paris-Aligned Climate Goals within two years of ownership.

### "In-Scope Companies"

In-Scope Companies include Direct, Majority-Owned Corporate Private Equity, Energy and Power funds' Direct, Majority-Owned portfolio companies in the following 2021 and earlier vintage funds: Carlyle Asia Growth Partners (CAGP) IV, Carlyle Asia Partners Growth (CAPG) I, CAPG II, Carlyle Asia Partners (CAP) III, CAP IV, CAP V, Carlyle Japan Partners (CJP) III, CJP IV, Carlyle Europe Partners (CEP) II, CEP III, CEP IV, CEP V, Carlyle Europe Technology Partners (CETP) III, CETP IV, Carlyle Partners (CP) V, CP VI, CP VII, CP VIII, CP Growth I, Carlyle Global Financial Services Partners (CGFSP) III, Carlyle Equity Opportunities Fund (CEOF) I, CEOF II, Carlyle Global Partners (CGP) I, CGP II, Carlyle International Energy Partners (CIEP) I, CIEP II, and Carlyle Power Partners (CPP) II.

## DIRECT INVESTMENTS

"Direct" herein refers to investments made by funds advised exclusively by Carlyle, as determined at the time of the initial investment. For the avoidance of doubt, Direct Investments do not include (i) investments into funds managed by other private equity sponsors, including investments into or by Riverstone Holdings LLC or NGP Management Company, L.L.C.,<sup>2</sup> (ii) investments made through Carlyle's Global Investment Solutions group, or (iii) investments made through Carlyle's Global Credit group.

## MAJORITY-OWNED

"Majority-Owned" herein refers to investments by Carlyle's Global Private Equity group in which a Carlyle-managed fund has a majority ownership stake and control, as determined at the time of the initial investment.

## ACRONYMS

<b>CO<sub>2</sub>e</b>	Carbon Dioxide equivalent
<b>DEI</b>	Diversity, Equity, and Inclusion
<b>EBITDA</b>	Earnings Before Interest, Taxes, Depreciation, and Amortization
<b>EDCI</b>	ESG Data Convergence Initiative
<b>EHS</b>	Environmental Health and Safety
<b>ERG</b>	Employee Resource Group
<b>ESG</b>	Environmental, Social, and Governance
<b>GHG</b>	Greenhouse Gas
<b>GIS</b>	Global Investment Solutions
<b>GP</b>	General Partner
<b>GPE</b>	Global Private Equity
<b>GRI</b>	Global Reporting Initiative
<b>KPI</b>	Key Performance Indicator
<b>LP</b>	Limited Partner
<b>MT</b>	Metric Tons
<b>PE</b>	Private Equity
<b>RI</b>	Responsible Investment
<b>RoW</b>	Rest of the World
<b>SASB</b>	Sustainability Accounting Standards Board
<b>SOP</b>	Standard Operating Procedure
<b>TCFD</b>	Task Force on Climate-related Financial Disclosures

<sup>1</sup>It is important to note that methodologies and pathways to net zero GHG emissions by 2050 or sooner for investment managers are still evolving, particularly for asset classes such as private credit. Carlyle will continue to monitor and engage with market-leading frameworks and methodologies and expect to adapt and evolve our approach over time. In setting our initial approach, we drew on components of the SBTi PE Sector Guidance (November 2021) and the IIGCC PAll net zero Framework Consultation on Proposed Components for PE (February 2022). Carlyle has not fully accepted the principles of either framework.

<sup>2</sup>For more information on our relationship please see page 67 of this report.



# Introduction





# Letter from Our CEO

This report highlights our continued work in ESG integration, which builds on Carlyle's long history and industry leadership in this space.

As we reflect on our firm's progress in 2022, I want to share some thoughts on our approach and priorities as we continue seeking value for our fund investors, shareholders, and companies at the intersection of financial and ESG performance.

First, ESG is a crucial part of our firm's investment process—it is not an individual product, strategy, company, or fund. Integrating ESG factors throughout our investment processes provides an additive lens that we believe can provide opportunities for our portfolio companies to drive revenues, reduce costs, secure more efficient financing, and strengthen their competitive positioning. We believe ESG can be a means to honing an investment edge in a rapidly changing world and makes us better stewards of capital. As such, we have chosen "The EBITDA of ESG" as the theme of this year's report in order to reinforce this perspective.

Central to Carlyle's approach is the belief that we need to invest in the energy transition, not divest from it. In our view, this represents a significant investment opportunity over time. We are committed to using our capital, expertise, and global resources to help companies across industries and sectors be part of and work to build long-term value during the energy transition. Our value creation work ranges from supporting the decarbonization of carbon-intensive industries, such as through our partnership with VARO, to seeking to grow energy grid resilience and renewable energy deployment such as through our investment in NineDot Energy, and all sectors in between. Our work is directly connected to our growing Global Credit business, where we've sought to be a lender of choice by offering margin discounts across parts of our platform to borrowers that set and hit decarbonization targets, and our Global

Investment Solutions business's work, where we've worked with other private equity sponsors to advance their climate reporting and transparency.

As a final point, Carlyle is committed to demonstrating leadership in ESG over the long term. We continue to execute against ambitions that we believe can strengthen the financial performance of our investments, including our net zero goals and, with respect to our portfolio companies, board diversity goals. At the same time, we know real change requires many actors. We are proud to participate in industry organizations focused on solving collective challenges, including through the ESG Data Convergence Initiative, which we co-founded in 2021, and as the inaugural underwriter of [The Milken Institute's DEI in Asset Management Program](#). Through this industry engagement, we aim to share knowledge from our own firm and portfolio, as well as continue to learn from others.

Carlyle has been focused on integrating ESG for many years, and while we are pleased with our progress, we understand there is still meaningful work ahead. We believe our impact as a firm is rooted in building better businesses and believe ESG is a core lever in this work. Our team remains focused on continuing to improve our approach, data, and tools to deliver better results for investors.

Sincerely,



**HARVEY SCHWARTZ**  
Chief Executive Officer

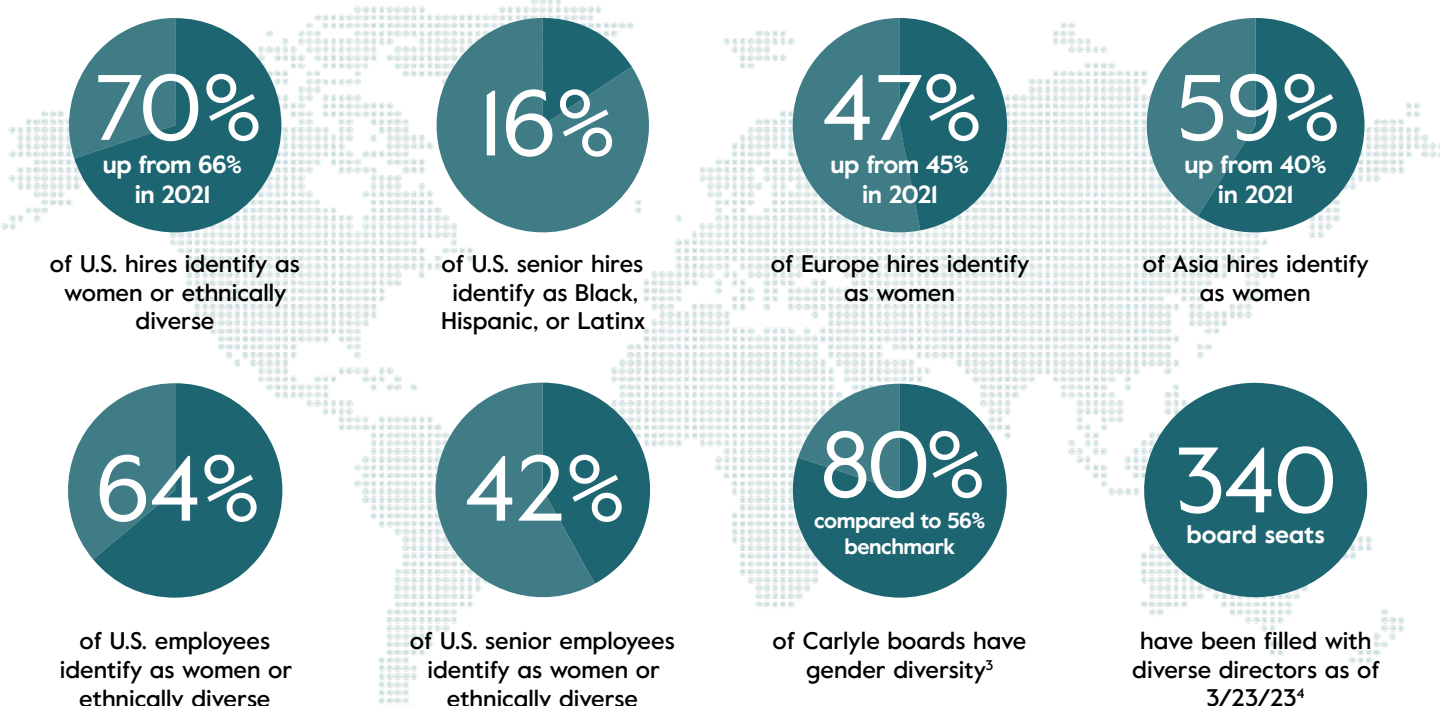
June 28, 2023



## Firm ESG Highlights

	2023	2022	2021
<b>GLOBAL PARTICIPATION</b>			
Participants in the ESG Data Convergence Initiative	325	190	54
<b>FINANCING METRICS</b>			
ESG-linked financings secured to date	\$25BN	\$20BN	\$6.5BN
<b>PORTFOLIO METRICS</b>			
Cumulative investments in renewable and sustainable energy companies	\$1.53BN	\$1.45BN	\$382MN
Years of carbon footprinting	4	3	2
Playbooks dedicated to ESG-driven value creation to date	7	6	2

## Firm and Portfolio DEI Highlights



Representation data as of 1/1/23. Hiring data from 1/1-12/31/22. The ESG or impact goals, commitments, incentives, and initiatives outlined in this report are purely voluntary, are not binding on investment decisions and/or Carlyle's management of investments and do not constitute a guarantee, promise, or commitment regarding actual or potential positive impacts or outcomes associated with Carlyle or investments made by funds managed by Carlyle. Ethnically diverse definition, aligned to the definition set forth by the Institutional Limited Partners Association (ILPA): Asian, Black, Hispanic or Latinx, Native Hawaiian / Pacific Islander, American Indian / Alaskan Native, or Two or More Races. <sup>3</sup>Carlyle-controlled companies acquired since 2016 as of 12/31/22 compared to Year 1 ESG Data Convergence Initiative data report released 11/4/22. <sup>4</sup>Between 1/1/20 and 3/23/23, 340 seats in Majority- and Majority-Owned CPE companies have been filled with a diverse director.



One of the **First** major private equity firms to make a carbon neutrality commitment in 2017<sup>5</sup>

**Net Zero** greenhouse gas emissions by 2050 or sooner across direct investments

**22** portfolio companies with Paris-Aligned Climate Goals<sup>6</sup>

**833MW** total installed renewable capacity as of December 31, 2022

**100+** AlInvest meetings with diverse GPs since 2021

**50+** CEOs have opted-into Carlyle's DEI Leadership Network

<sup>5</sup>We offset our operational emissions inclusive of the following categories: office utilities (scope 1 and scope 2), data centers, and employee business travel. Please see page 67 for additional information on our approach to carbon neutrality, including the role of carbon offsets. <sup>6</sup>Please see our Task Force on Climate Related Financial Disclosures, included as part of this document, for additional information.



# The EBITDA of ESG



## How to manage earnings before interest, taxes, depreciation, and amortization (EBITDA) through an ESG lens, seeking to optimize the relationship between financial performance and ESG outcomes

We believe “The EBITDA of ESG” is a lens through which companies seek to develop both revenue and cost strategies by aligning financial and ESG incentives. In a time of heightened scrutiny, we believe it is critical to work to build connections between the often-nebulous concept of ESG and traditional financial line items. Many vital components of the ESG field are long-term, intangible, and fundamentally hard to quantify, and this philosophy does not discount these facts. Instead, our goal is to begin working to find those areas of direct alignment that we believe can enable us to push the field forward in a tangible way in the near term.



**MEGAN STARR**  
Global Head of Impact

ILLUSTRATIVE P&L LINE ITEMS	EXAMPLE POTENTIAL FOR ESG-EBITDA CONNECTION
B2B Sales	Increase sales by meeting the sustainability requirements of major customers and prospects. For example, 5,000+ companies <sup>1</sup> have set or committed to setting science-based climate targets, which frequently apply to their suppliers
B2C Sales	Increase sales by quantifying sustainability attributes of products and services that align with consumers’ preferences. Research has shown that products marketed as sustainable grew ~2x faster than conventional counterparts over the past 5 years <sup>2</sup>
B2G Sales	Increase or retain sales by meeting government agencies’ sustainability requirements. For example, the U.K. government requires <sup>3</sup> major government suppliers to publish carbon reduction plans
<b>TOTAL GROSS REVENUE</b>	
Returns, allowances, and discounts	Limit returns and discounts and generate customer loyalty by focusing on durability, circularity, and pricing integrity in products and services
<b>TOTAL NET REVENUE</b>	
Raw Materials	Reduce costs associated with damaging reputational and legal risks by prioritizing suppliers who pay fair wages and responsibly source resources
Direct Labor	Reduce costs associated with high voluntary turnover and EHS violations by providing training, benefits, and safe and healthy working conditions
Freight-in	Pay less in freight costs and reduce GHG emissions by prioritizing logistics partners with dynamic route optimization and multi-modal options.
<b>TOTAL COGS</b>	
<b>GROSS PROFIT</b>	

ILLUSTRATIVE P&L LINE ITEMS	EXAMPLE POTENTIAL FOR ESG-EBITDA CONNECTION
Sales & Marketing	Avoid costs due to reputational and legal risks by adhering to responsible marketing practices, verifying sustainability claims, and promoting transparency and integrity
R&D	Lower R&D costs by prioritizing efficient use of resources and increase sales by designing for the low-carbon transition and circular economy
G&A	Reduce costs by prioritizing efficient use of resources and employee satisfaction
<i>Rent</i>	Reduce rent expense by signing green lease agreements that reward tenants for energy efficiency and water conservation initiatives
<i>Utilities</i>	Reduce utility costs and lower GHG emissions by improving energy efficiency
<i>Office Supplies and Equipment</i>	Reduce costs of supplies and equipment by minimizing waste, prioritizing circular materials and practices, and monetizing waste and recycling streams
<i>Insurance</i>	Reduce risk of loss by incorporating climate risk and resilience strategy
<i>Payroll</i>	Limit overall payroll and recruiting costs by focusing on employee retention, engagement, and productivity, such as through aligning pay periods to fit employee needs; according to research, diverse and inclusive companies elicit more discretionary effort, greater intent to stay, commitment, and collaboration among teams <sup>4</sup>
<i>Employee Benefits</i>	Lower healthcare costs, improve access to high-quality care, and reduce voluntary turnover by implementing streamlined and fit-for-purpose benefits programs, including access to mental health or fertility services
<i>Legal and Professional Fees</i>	Reduce costs associated with employee or environmental litigation by prioritizing employee health and safety programs and environmental stewardship
<b>TOTAL OPERATING EXPENSES</b>	
<b>EBITDA</b>	

<sup>1</sup><https://sciencebasedtargets.org/companies-taking-action>

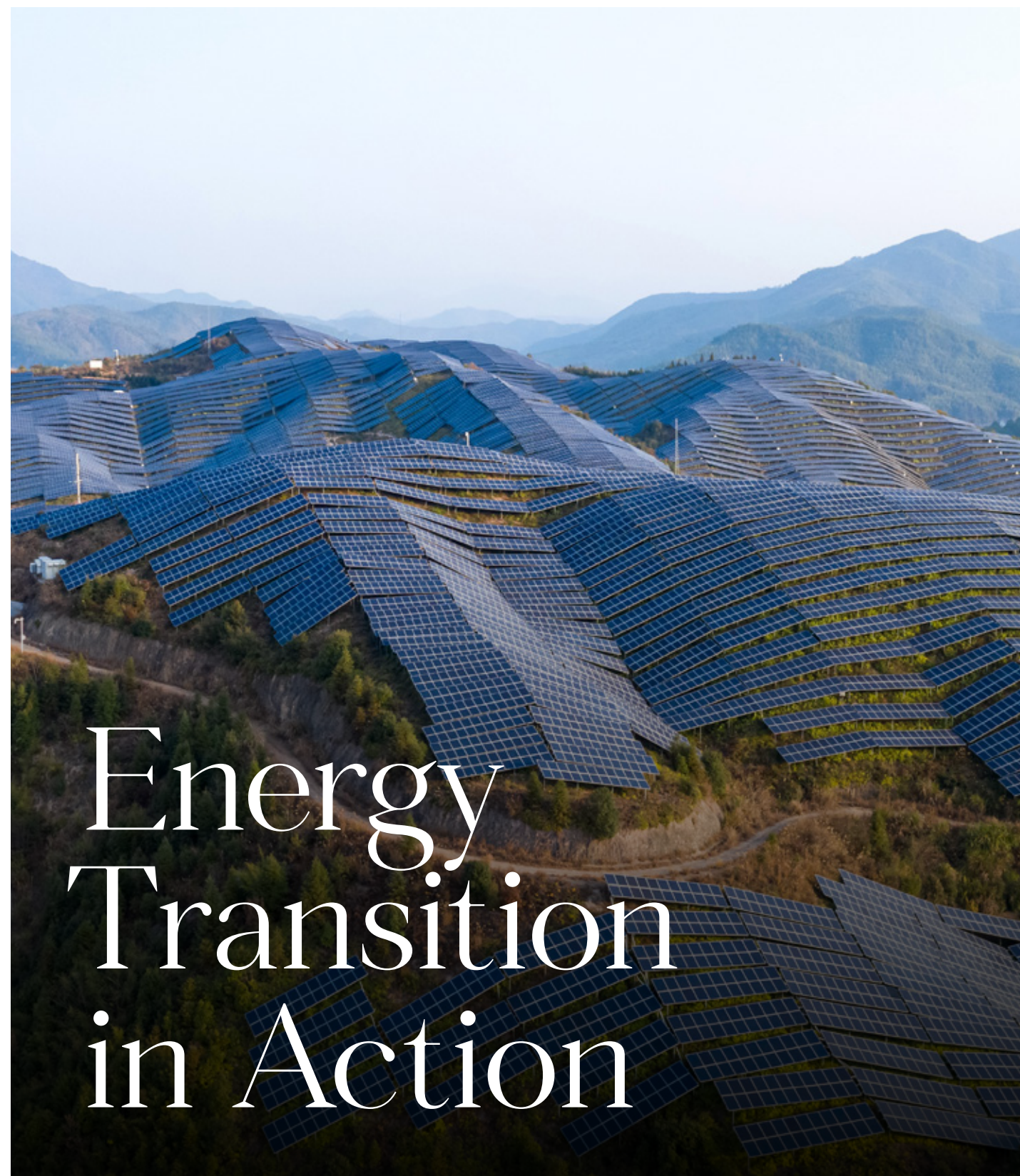
<sup>2</sup>NYU CSB/IRI Research: <https://www.stern.nyu.edu/experience-stern/about/departments-centers-initiatives/centers-of-research/center-sustainable-business/research/csb-sustainable-market-share-index>

<sup>3</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1054374/PPN-0621-Taking-account-of-Carbon-Reduction-Plans-Jan22\\_\\_L.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1054374/PPN-0621-Taking-account-of-Carbon-Reduction-Plans-Jan22__L.pdf)

<sup>4</sup><https://www.linkedin.com/pulse/unconscious-bias-leadership-tracy-spears/>

No assurance is being given of a direct causal link or correlation between applying an ESG lens or aligning financial and ESG incentives with an increase in company profitability for any investments managed and/or advised by Carlyle.





# Energy Transition in Action

<sup>1</sup>While we recommend that portfolio companies consider aligning with globally recognized frameworks (e.g., SBTi) when setting GHG reduction targets, we do not require alignment with a single framework or standard given the differences in applicability and feasibility.

<sup>2</sup>For more information please see our TCFD report on page 32.

Pursuing the energy transition requires managing the intersecting forces of energy transition, energy security, and energy access.

As the world looks to continue the decarbonization of the global economy over the coming decades, we believe investment opportunities will not represent a simple binary between “green” businesses and “brown” businesses, but instead, a complex interplay of our global economy and energy systems that will demand tremendous amounts of capital.

Through our Renewable and Sustainable Energy platform, we are seeking to increase the amount of new renewable energy generation capacity, along with grid-stabilizing technologies such as storage and bi-directional charging. We also recognize that traditional energy businesses have some of the greatest decarbonization potential globally, and that we can play a role in helping them decarbonize.

In addition, the energy transition touches almost every sector and geography; Carlyle teams seek to assist certain portfolio companies in industries ranging from beauty to steel forging understand their carbon footprint, and then design and execute decarbonization strategies. At Carlyle, we recognize that all sectors of the economy should see opportunity in having a crucial role in the larger decarbonization effort. We are focused on providing the capital, expertise, and time to help our global portfolio companies on this journey.

Our belief is that for the world to be on a Paris-aligned trajectory, firms like Carlyle need to invest in this business transformation, not solely deflect responsibility through divestment. This is why Carlyle not only established the ultimate goal of net zero by 2050 across our direct investments, but also set near-term goals across our Majority-Owned power and energy portfolio companies, as detailed further in the [Task Force on Climate-related Financial Disclosures \(TCFD\) section](#) of this report. We take the “portfolio coverage” approach—derived from recognized frameworks and guidance such as the Science Based Targets Initiative (SBTi). Here we focus on helping an increasing percentage of our portfolio companies get on Paris-aligned pathways during our hold period so that they continue this process even after they exit our portfolio. We do not believe that fully decarbonizing most businesses during our average hold period is feasible, but by supporting companies with the climate and energy tools, guidance, and expertise we have at Carlyle, we believe we can help portfolio companies set credible decarbonization targets and capitalize on related potential value-add opportunities as they pass through our investment portfolios.

Since we set our climate goals, 22 Carlyle portfolio companies have set a Paris-Aligned Climate Goal<sup>1</sup>. Our deliberate decision to invest in traditional energy, with a focus on decarbonizing existing energy infrastructure, has also resulted in tangible progress. Notably, three energy portfolio companies have recently set net zero or similar goals: [VARO](#), [Cepsa](#), and [Neptune](#). We believe this is a more effective means of driving real world emissions reductions than solely divesting these companies to an owner who may not encourage such aggressive climate targets.

## Net Zero

by 2050 or sooner across our direct investments<sup>2</sup>

## 22

portfolio companies have set a Paris-aligned goal since we set the firm's climate goals<sup>2</sup>

*Our belief is that for the world to be on a Paris-aligned trajectory, firms like Carlyle need to invest in this business transformation, not deflect responsibility through divestment.*





## Altadia

### A tile manufacturing company

Altadia, a global manufacturer of intermediate products for the production of ceramic tiles, conducted a detailed decarbonization analysis. This was part of Carlyle's 100-day action plan developed during the investment phase as a core value creation lever. The results of this analysis helped the company to seek to double its carbon reduction trajectory by 2025. Activities that contributed to this reduction are anticipated to yield annual net cost savings of ~€4.5 million with a two-year payback. Furthermore, the carbon reduction target has been linked to the financing of the transaction and will generate a decrease in interest rates if the target is reached.

# €4.5 Million

*anticipated annual net cost savings due to Altadia's carbon reduction trajectory*



## Forgital

### A metal forging company

Forgital is a leading forging company with a deep history in metal work in Northern Italy. With the support of the Carlyle team and our consulting partners, the company developed a digital twin for one of its most energy intensive locations to help inform a decarbonization strategy and determine a carbon reduction target. The digital twin identified a focused set of energy and carbon reduction opportunities that are projected to result in a 30% absolute carbon reduction by 2030, with projected €4 million in annual energy cost savings against a business-as-usual scenario of an 81% increase in carbon emissions dioxide equivalent (CO<sub>2</sub>e).

# €4 Million

*anticipated annual net cost savings due to Forgital's carbon reduction trajectory*

<sup>1</sup><https://www.saverglass.com/en/our-expertise/the-specialist-in-value-creation-and-customization>  
Case studies are provided for illustrative purposes only and to demonstrate how certain ESG targets and activities are implemented in Carlyle portfolio companies. There is no guarantee that any ESG target or related projection will be met, that any ESG activities will be implemented to the same degree for each investment, or that they will create a positive ESG or financial impact.



## Saverglass

### A glass manufacturing company

A French manufacturing business with more than a 100-year history evolved into a global specialist for luxury glass bottle<sup>1</sup> manufacturing and decoration. Between 2009 and 2019 (prior to Carlyle ownership), the company achieved an 11% reduction across Scope 1, 2, and 3 CO<sub>2</sub>e intensity per ton of glass produced. Under Carlyle ownership, the company is embarking on a journey to further advance decarbonization efforts across the group. Saverglass received a validation from the SBTi in November 2022 and has committed to reduce Scope 1 and 2 by 50% per metric ton of product, which equates to a 40% reduction and a Scope 3 reduction of 32% per ton of product by 2035. Based on our assessment, the largest decarbonization levers the company is pursuing include a switch to low carbon energy, a rapid increase in the use of recycled glass, and a redesign of its furnaces to a hybrid melting process and green hydrogen (pilots have already commenced).

# 32%

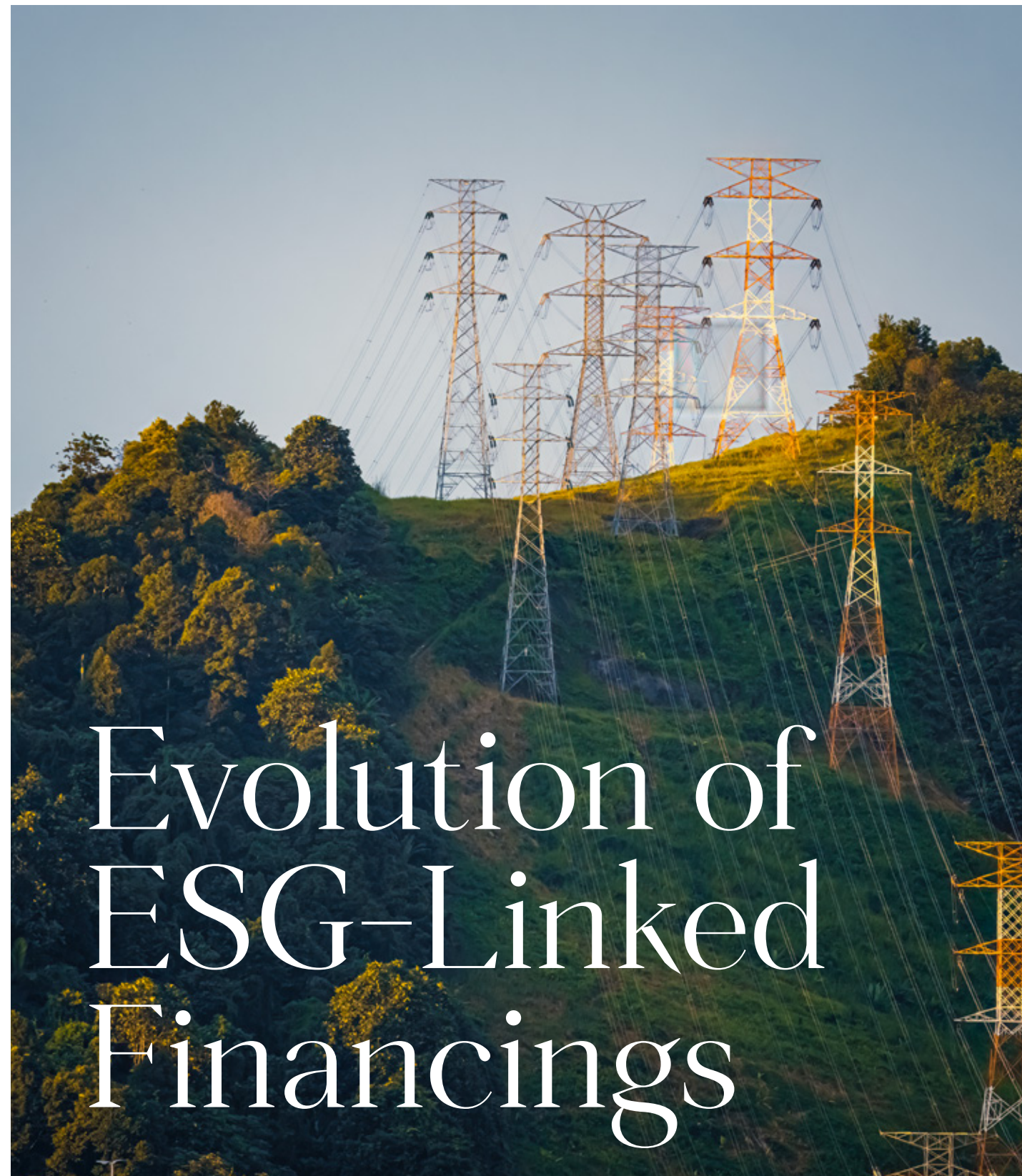
*Scope 3 carbon reduction per metric ton of product commitment by 2035*

# 40%

*Scope 1 and 2 carbon reduction commitment by 2035*

All data has been provided directly by the relevant portfolio company and has not been verified by Carlyle or any third party. References to portfolio companies are not and should not be construed as a recommendation of any particular company or security.





# Evolution of ESG-Linked Financings

## Charting the evolution of ESG-linked financings

In our [2021 Impact Review](#), we highlighted our work as early adopters of ESG-linked financings, which integrate environmental and social targets into funding arrangements to better align investment and sustainability outcomes in innovative ways. Since then, led by our Global Capital Markets and ESG team, we've made significant strides in new financing programs, structuring more than \$25 billion in cumulative ESG-linked financings on behalf of Carlyle and our portfolio companies<sup>1</sup>.

At the portfolio company and borrower level, Carlyle focuses on driving positive change in applicable material ESG factors over time as we believe this may reduce relevant risks and optimize financial value in the long-term. We think that ESG-linked financings can be an effective tool to help structure and incentivize this approach. By tying the achievement of tailored ESG performance targets at the company level to the cost of that business's debt, we believe ESG-linked financing programs can promote lasting change across an organization.

As the global market for ESG-linked financings has grown to \$500 billion—up from \$5 billion in 2017<sup>2</sup>—our use cases for these structures have evolved commensurately. Today, we seek to leverage ESG-linked financings in certain circumstances as a tool to assist with driving progress on sustainability issues and cost savings in three of our business areas: our Corporate Private Equity portfolio companies, our own investment processes, and most recently, our financing activities within our Global Credit platform.

### IN OUR CORPORATE PRIVATE EQUITY PORTFOLIO COMPANIES

Our work in ESG-linked financings began with some of our Corporate Private Equity portfolio companies, serving as an incentive for company level improvements on material ESG factors. In 2019, Carlyle developed

what is regarded as the first European sponsored transaction with pricing on the funded debt directly linked to water savings<sup>3</sup>. Carlyle's Capital Markets and ESG teams continue to partner with portfolio companies and their lenders to seek to secure a lower cost of capital in exchange for meeting material performance measures tailored to their specific business models. For example, in 2021, Carlyle worked with portfolio company Flender, a market leader in mechanical and electrical drive technology, to structure a €1 billion financing, linking a margin ratchet to the wind power generation capacity powered by Flender gearboxes. Successfully hitting these targets will help Flender to achieve a lower cost of capital while simultaneously incentivizing management to accelerate a business line that helps deploy wind power. We believe wind power is a critical component of the energy mix as we transition to a low-carbon economy.

### IN OUR INVESTMENT PROCESSES

Next, we saw an opportunity to expand this work and use ESG-linked financing opportunities within our investment processes for certain funds to seek potential value. By tying certain capital call facilities for Carlyle's investment strategies to ESG key performance indicators (KPIs), we were able to assist the integration of ESG incentives across various parts of our platform through tactics such as supporting the enhancement of portfolio company board diversity and training Carlyle professionals on ESG best practices for board service. We believe continuing to embed material ESG factors into our investment process can contribute to enhanced overall investment outcomes.

For example, in 2022, we structured a \$2.75 billion ESG-linked credit call facility for Carlyle's Asia private equity platform linked to achievement of three platform-level KPIs focused on enhancing value creation during our ownership period:

→ **Conduct carbon footprinting measurement across all in-scope<sup>4</sup> Majority-Owned portfolio companies.** We believe that measuring actual

<sup>1</sup>As of May 2023.

<sup>2</sup>As of 2021. Source: Bloomberg <https://www.bloomberg.com/news/articles/2022-08-31/how-esg-linked-loans-help-to-hold-firms-accountable-quicktake#:~:text=Global%20issuance%20of%20loans%20linked,promote%20themselves%20as%20socially%20responsible>.

<sup>3</sup>As of 2023. Source: S&P Global <https://www.spglobal.com/marketintelligence/en/news-insights/trending/0ww7adcszwbwqnlhzzp4a2>

<sup>4</sup>In-scope companies are defined as Majority-Owned companies beyond six months of ownership.



emissions across portfolio companies provides us with more accurate and comprehensive greenhouse gas (GHG) emissions data. This starting point is critical to developing decarbonization pathways, which we believe are increasingly important for our portfolio companies to thrive in what many consider to be a rapidly decarbonizing world.

→ **Achieve 30% board diversity across all Majority-Owned companies.** We believe that board diversity drives more deliberative decision-making processes and effective governance. Read more about how we help companies meet their diversity goals [here](#).

→ **Provide ESG board training for all Carlyle-employed board of directors on our portfolio company boards.** We believe this training can help improve performance through attention to material ESG issues by equipping board members to utilize their seats at the table effectively. Doing so will enable board members to identify the most relevant ESG topics to focus on to pursue opportunities for value creation and/or risk mitigation.

Similar goals are in place for Carlyle's Europe Private Equity platform. We have also integrated incentive structures for our European Real Estate fund by putting KPIs in place to systematically assess assets for ESG-driven improvements.

**IN OUR FINANCING ACTIVITIES WITHIN GLOBAL CREDIT**

We believe capitalizing on successful decarbonization opportunities to drive value requires meaningful engagement between investors and businesses. That type of connection has historically been more straightforward for equity investors, although we are seeing fast improvements in the credit space, as well.

To this end, in 2022 we expanded our work in ESG-linked financing to our Global Credit platform by launching a decarbonization-linked financing program in certain Global Credit funds. This distinctive program offers a pricing incentive tied to a borrower's achievement of decarbonization targets. As an added benefit, our ESG team offers full-lifecycle support to

program participants, both to measure and manage their carbon footprints and to provide strategies for achieving emissions reduction goals.

This program offers expertise and resources from our ESG team that help borrowers to take effective steps toward decarbonization while helping to defray the associated costs. For example, Carlyle's partnership with Cordstrap, a Dutch company that manufactures security solutions for freight and transportation clients, helped them improve their ESG program. A Carlyle-led workshop with Cordstrap's senior leadership initially kicked off the program to develop a concerted ESG strategy. Further inspired by the decarbonization-linked financing, the company measured its carbon footprint for the first time and put ambitious targets in place. In year one, the company achieved a greater than 25% reduction in carbon intensity per million dollars of revenue<sup>1</sup>. The climate program is complemented by workstreams for waste, employee engagement, and submission for external ESG ratings.

Critically, the process of determining and setting GHG performance measurements helps portfolio companies develop tools and structures that may prove integral to future success, such as calculating emissions accurately. This type of data can fulfill customer requirements for transparency into the climate impact of their direct suppliers.

**LOOKING FORWARD**

We are energized by the uptake of ESG-linked financing programs across Carlyle's global business, and the ways in which the sophistication of the market continues to grow. Since 2022, 10 portfolio companies have participated in the decarbonization-linked financing program; we anticipate this number will continue to increase as we roll out the program across other asset classes, such as infrastructure credit. We listen to feedback from our portfolio companies, borrowers, and banking partners, and continue to evaluate market trends as we refine and build our approach. We seek to identify opportunities at the intersection of sustainability and financial benefits as we create long-term value for our companies, investors, shareholders, and communities.



**VALUE CREATION KPIs<sup>2</sup>**

**100%**  
of Majority-Owned portfolio companies to have carbon footprinting measurements

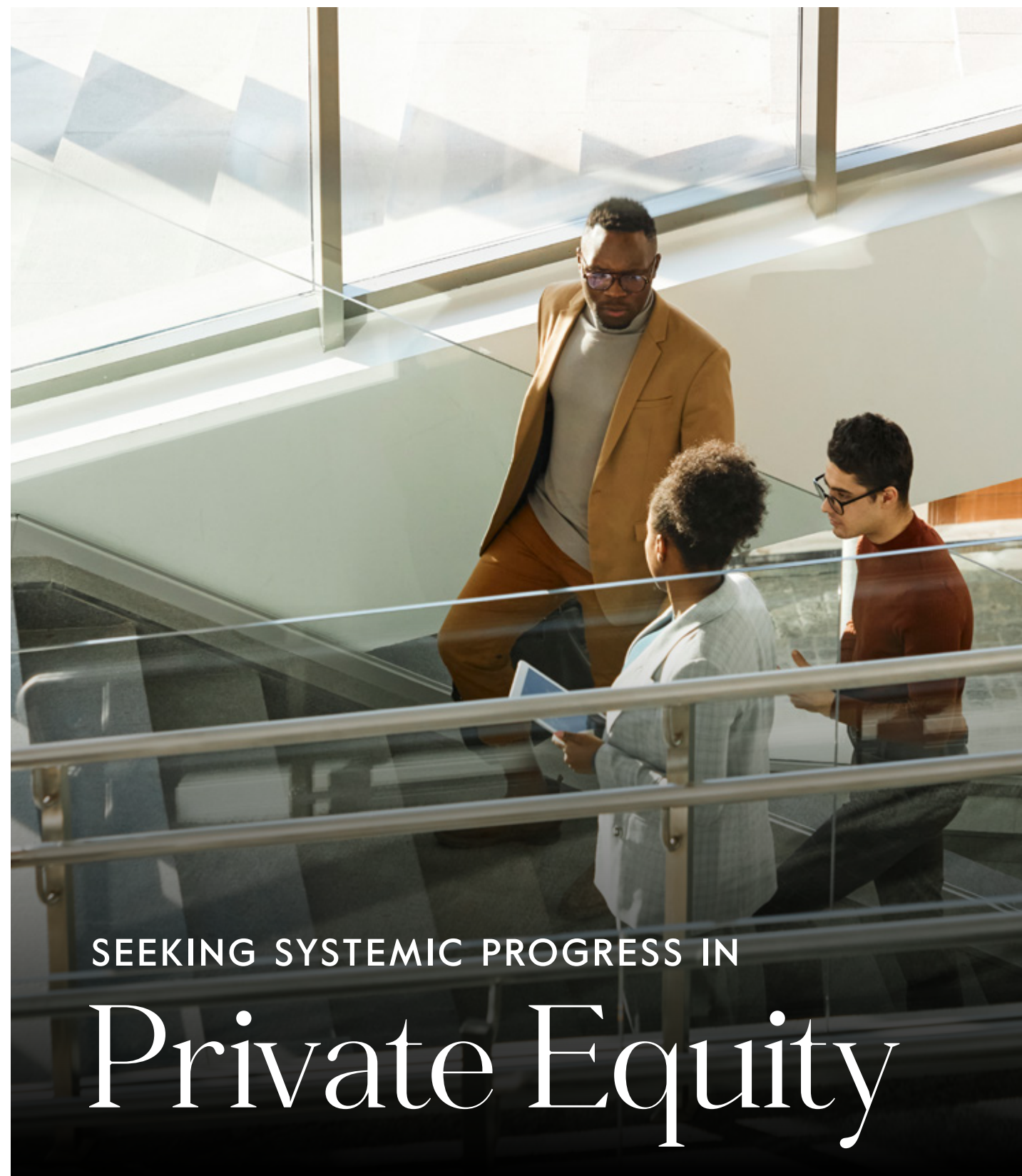
**30%**  
board diversity across Majority-Owned companies to be achieved

**42**  
Carlyle-employed portfolio company board directors provided with ESG training

**10**  
companies have participated in the decarbonization-linked financing program since the 2022 launch

<sup>1</sup>All data has been provided directly by the portfolio company and has not been verified by Carlyle or any third party.  
<sup>2</sup>KPIs are subject to change and no assurance can be given that KPIs will be achieved.





SEEKING SYSTEMIC PROGRESS IN  
**Private Equity**

Although Carlyle considers the application of its ESG framework to be an opportunity to enhance or protect the performance of its investments over the long term, Carlyle cannot guarantee that its ESG program, which depends in part on qualitative judgments, will positively impact the financial, climate, or ESG performance of any individual investment or fund.

**Seeking value systematically across our private equity portfolio**

We have been consistent in our view that ESG is not a separate product or a binary mechanism to distinguish “good” from “bad” companies. We believe that assessing and managing material ESG risks can be a means to attaining an investment edge in a rapidly changing world, driving forward the “EBITDA of ESG.” Capturing this potential investment edge requires the right expertise, tools, and resources to identify and implement material ESG improvement levers during the ownership period. While many of the specific strategies and initiatives that we implement are bespoke, there are a set of scaled solutions we’ve developed that serve as the starting point to measure and work to improve material ESG dimensions across portfolio companies. The following tools serve as mechanisms through which we pursue this change.

**34 ESG DIAGNOSTICS COMPLETED IN 2022**

Our proprietary ESG diagnostic tool is customized by sector and assesses performance across key ESG focus areas such as greenhouse gas emissions and diversity, equity, and inclusion (DEI). We designed the tool to align with common ESG standards and ratings/rankings, and help our portfolio companies navigate the complexity of this profusion through a single, streamlined diagnostic. This diagnostic can be used to form a baseline for value creation or for ongoing monitoring.

**SAMPLE ISSUES**

- **GHG Emissions**
- **Board Diversity**
- **Employee Engagement**
- **ESG Governance**
- **Innovation**

**SEVEN PLAYBOOKS PUBLISHED TO DATE**

To drive scaled value creation, we have developed a suite of seven playbooks to provide detailed guidance and

resourcing on common ESG topics that our companies are navigating; these include Responsible Supply Chain and How to Develop an ESG Strategy. We’ve made these playbooks available to portfolio companies through webinars and in-person workshops.

In 2022, we rolled out the ESG IPO Readiness playbook, providing portfolio companies that are seeking to list in public markets with a five step process to help them get “IPO roadshow ready.” It covers key topics such as ESG ratings and rankings, ESG data, communications, and potential capital market actions.



**25 CARBON FOOTPRINT DEBRIEFS COMPLETED**

Each year, we support the completion of carbon footprinting for Scope 1 and Scope 2 emissions across a subset of our portfolio companies. As part of this process, we develop a tailored carbon footprint debrief document that details results from the exercise, identifies potential decarbonization levers, and evaluates the company’s readiness to set a climate goal. From there, in certain instances, we conduct debriefing meetings with portfolio companies to review findings and identify actionable next steps.

**25** carbon footprint debriefs were conducted across a subset of our portfolio companies





**18 PORTFOLIO COMPANY SUSTAINABILITY REPORTS PUBLISHED WITH THE SUPPORT OF CARLYLE'S ESG TEAM**

We support portfolio companies that want to produce their own sustainability reports and corporate ESG disclosures in order to further enhance ESG governance and transparency. These efforts help companies distill their key, material areas of ESG focus to highlight in the reports, disclose relevant data to measure their performance, identify external service providers to help construct the reports, and provide overall reviews.

**70 SUSTAINABILITY WORKSHOP ATTENDEES REPRESENTING OVER 50 PORTFOLIO COMPANIES**

We strive to provide opportunities that bring portfolio companies together to learn from one another about sustainability and ESG. This includes our Annual Sustainability Workshop, where we leverage internal and external experts as well as portfolio company employees to dive deeper into thematic ESG topics our portfolio companies are navigating.

**22 STRATEGY PROGRAMS CONDUCTED WITH PORTFOLIO COMPANIES**

Consistent with last year's approach, our ESG team has developed a systematic approach to partnering with management teams to craft purpose-built ESG strategies focused on materiality. As part of this process, we host strategy workshops with portfolio companies to determine key focus areas, review competitor and customer benchmarks, perform gap analyses and materiality assessments, and ultimately develop roadmaps for action.



**SPOTLIGHT ON ANNUAL SUSTAINABILITY WORKSHOP**

We held our Annual Sustainability Workshop in May 2022 and 2023 in a hybrid format, with attendees joining in person in Washington, DC and virtually from across the globe. The event brought representatives in ESG roles across our portfolio together to share best practices and hear from experts on how to navigate and integrate the myriad of sustainability and ESG-related issues and opportunities facing companies today. In 2023, sessions included a deep dive into one company's tactical decarbonization strategy, two companies' approaches for leveraging their sustainability credentials to drive sales growth, and an update on the rapidly evolving matrix of ESG regulations and reporting requirements. Key insights from the 2023 workshop were as follows:

→ **Across the board, portfolio companies' feedback was that they derived the most value from learning the specific "why," "what," and "how" of ESG strategy development, goal setting, and levers for implementation.** The "why" refers to the business drivers behind ESG initiatives; the "what" concerns the specific levers that businesses implemented; and the "how" involves tactical discussions about the ways in which companies deployed strategies.

→ **The process of climate goal setting can seem daunting, but it can uncover unexpected risks and/or opportunities.** Portfolio companies cannot manage what they can't measure. Calculating a carbon footprint, identifying decarbonization levers, and selecting fit-for-purpose partners to execute on these strategies in ways that are economically and technologically viable can remove the angst associated with otherwise nebulous or seemingly remote concepts.

→ **Historically seen as a risk mitigant or solely a cost savings mechanism, ESG is emerging as a helpful tool in the arsenal of organizations' sales functions.**

Effective sales force training on the sustainability attributes of a company, product, or service can drive an edge with customers who have prioritized ESG. For example, many major retailers have set net zero targets, which can cover their supply chain. Companies that can clearly articulate the associated sustainability benefits of their offerings may be able to derive stronger relationships with their customers, better shelf space, higher volumes, or longer-term contracts.

→ **Global regulatory focus on ESG remains top of mind for portfolio companies.** As global ESG regulatory regimes grow in complexity, companies have expressed a need to understand which regulations affect them today, which are coming, and how to curate readiness plans to ensure compliance. Importantly, portfolio companies increasingly want to understand the impact of regulations that may not technically apply to them but have a trickle-down effect. For example, businesses that sell their products or services to companies that are regulated and required to disclose their carbon emissions may now have to calculate and report these metrics to their customers.

**70+**  
sustainability workshop attendees

**50+**  
portfolio companies represented in our sustainability workshop

*Portfolio company representatives seemed to derive the most value from learning the specific "why," "what," and "how" of ESG strategy development, goal setting, and levers for implementation.*





**CELEBRATING OUR PORTFOLIO COMPANIES' ESG ACHIEVEMENTS WITH ESG AWARDS**

This year, we launched an initiative to recognize our portfolio companies across three categories, including:

**ESG Fast Mover**

This award goes to the company with the largest improvement in their ESG program.

**Best ESG Program Management**

This award goes to the company with demonstrated excellence in their corporate ESG program and operations.

**Best ESG Innovation**

This award goes to the company with potential ESG benefits in their products or services.

Companies were nominated by investment teams and selected based on our evaluation of a combination of qualitative and quantitative inputs relating to our view on their ESG performance in 2022, with one awardee per global region in each category. Examples of specific criteria included whether a company had improved their ESG maturity level from the prior year, whether a company's ESG program is coordinated, comprehensive, and actionable, and whether the company had launched a new product or service with quantifiable ESG attributes or quantifies ESG attributes of existing products or services.

Our inaugural ESG Awards signify our commitment to highlighting demonstrated practices, stimulating continuous improvement, and championing our portfolio companies' success across regions and sectors. The 2022 ESG Award winners included:

AlphaStruxure

FLENDER

KOKUSAI KOGYO



**Best ESG Innovation (Americas)**

AlphaStruxure, for their pioneering Energy-as-a-Service offering that designs, builds, owns, operates, and maintains energy infrastructure, including microgrids.

**ESG Fast Mover (EMEA)**

Flender, which supplies gearboxes, generators, and services for wind turbines, for their accelerated development of what we believe to be a robust ESG program, with dedicated leadership and what we deem as a deep commitment to sustainability in their operations and products.

**Best ESG Innovation (APAC)**

Kokusai Kogyo, a geospatial technology provider in Japan, for the quantifiable environmental and social benefits of their infrastructure inspection technology, including sustainability-focused urban planning and disaster prevention and risk reduction.

*ESG awards are awarded by Carlyle in its sole discretion and are necessarily based on subjective factors. Only Carlyle portfolio companies are eligible to receive these awards. Quantitative or qualitative inputs were determined by Carlyle and views may differ on sustainability or ESG performance or outcomes. Awards granted to portfolio companies should not be viewed as a recommendation of any particular security or portfolio company. Source: AlphaStruxure, Flender, Tokiwa, Carlyle*



# ESG Data Convergence Initiative



## Using ESG data to accelerate progress on ESG as a Limited Partner

In 2021, Carlyle co-founded the ESG Data Convergence Initiative (EDCI) alongside a group of global general partners (GP) and limited partners (LP). Since the September 2021 launch, the Initiative has reached over 325 GP and LP participants, representing over \$27 trillion in assets with ESG data from over 3,500 private companies. The Initiative is supported by the group's long-term benchmarking and advisory partner, Boston Consulting Group (BCG), as well as the initiative's official Secretariat, the Institutional Limited Partners Association (ILPA).

Carlyle's participation in the EDCI is two-fold, as Carlyle joined in both a GP and LP capacity. As a GP, on an annual basis, we share ESG data from our select funds in our Corporate Private Equity portfolio in a standardized format directly with invested LPs. We also contribute that data in an anonymized format to BCG to generate an aggregated ESG benchmark across GPs in private markets. As an LP, we participate in the initiative via our Global Investment Solutions team, Carlyle's subsidiary private equity asset manager. We sat down with Carlyle Global Investment Solutions' (GIS) Head of Responsible Investment, Maaïke van der Schoot, to better understand the role of an LP in the Initiative, how to operationalize this data in the investment process, and what's next for the EDCI.

### AN INTERVIEW WITH



**MAAIKE VAN DER SCHOOT**  
Head of Responsible Investment, GIS

### Looking back at the first year of the EDCI, what has been most exciting to you as an LP?

**MAAIKE VAN DER SCHOOT:** First and foremost, the momentum and reception from GPs and LPs alike has been incredible. The initiative has grown twentyfold in terms of participating GPs and LPs in 18 months. Importantly, a great deal of this scale has been driven by GPs joining the initiative—GPs are providing the data, so as more GPs join, the dataset grows commensurately, which is very relevant for us as an LP. In its first year, the Initiative collected data from about 2,000 portfolio companies. To me, this demonstrates clearly that there was a void to be filled, and that the solution was actually elegantly simple—to collect data on a smaller set of metrics, in a consistent, agreed-upon format.

The second observation is that the Initiative has run quite seamlessly in the face of this outsized growth. There has been strong commitment by the 16 GP and LP Steering Committee members to build up the Initiative from an idea to action, with the necessary governance and resources. Our partners BCG and ILPA have been instrumental in onboarding new participants, continuing to drive deeper engagement in untapped markets, providing robust, insightful benchmarks across ESG metrics for the private markets, and supporting the Steering Committee and various working groups (for example, how to extend this work into private credit). Simultaneously, together we have stayed true to the core focus of the project—to standardize ESG data in private markets.

### How have you used your seat as an LP within the EDCI to drive progress on standardizing ESG data?

**MAAIKE:** The most prevalent tool we have used within our sphere of influence as LPs is to encourage our GPs globally to join the initiative to expand the availability of this data, both for us as LPs, but also to a centralized database to drive the industry forward. We sent out the request for EDCI data to almost all our GPs that joined the initiative, and we collected over 7,600 portfolio company ESG data points from 50 funds—this is up from essentially zero data points in previous years. The EDCI has made a real difference for us. Part of our role as LPs in the Initiative is to draw out clearly the benefits of joining from a GP's perspective—beyond the Initiative helping GPs to get data that could be helpful in their investment process, there have been additional benefits to joining for GPs. Two examples I commonly cite are that:

**01** The Initiative provides a clearly prioritized set of metrics. Many GPs struggle with the “paralysis effect” of ESG data—when they are inundated with disparate requests, it is hard to know what to orient towards collecting. The EDCI helps to give GPs a starting point as they construct their ESG strategies and approach to data collection and;







**02** A second win for GPs is that BCG Expand, BCG’s data science team, provides quality control checks on submitted data, helping GPs to refine and increase their data quality over time. The Expand team has also partnered with 14 different technology platforms to enable efficient data transmission and facilitate further industry collaboration. Another big success for GPs is that they get access to ESG benchmarks on topics that are relevant for value creation, which helps guide their strategic decision-making. Finally, the more participants there are in this Initiative, the fewer disparate ESG data requests GPs should get over time, cutting down inefficiencies of filling out multiple ESG data requests every year, and freeing up time to focus on the work of ESG integration in the portfolio.

We’ve also worked within the EDCI Steering Committee to drive efforts to broaden the Initiative further. For example, as Steering Committee members, we’ve helped to structure the governance of the Initiative, to elect BCG as the long-term

(three-year) benchmarking and advisory partner, and to add an additional optional metric on C-suite diversity for the 2023 collection year.

Finally, we’ve tried to use our seat at the table at various industry events to expand to more participants. As an example, we held a panel at the PEI Responsible Investment Forum in London that was dedicated to the merits and benefits of joining the EDCI where I shared the LP’s perspective.

**From your seat as an LP having completed the first year of participation in the EDCI, what have been the most useful functionalities you’ve discovered?**

**MAAIKE:** The answer to this question is actually quite simple—we finally have data we can use! By that I mean, the data that comes from participating GPs in the EDCI is standardized, consistent, can be monitored for change over time, and is easy to aggregate and report on. To contextualize this, about three years ago I attempted to collect ESG data from our GPs. The idea was seemingly simple, centered only on emissions data. The challenge we discovered quite quickly was twofold: in most cases, the data simply wasn’t available at all; but when it was available, it was delivered in varying formats that differed from GP to GP, making the data unusable. That left us with no opportunity to operationalize that data—EDCI has changed that.

As I mentioned before, we were able to collect over 7,600 EDCI-related data points from our global GP base this past year—that is a massive improvement from previous years, where we had little to no comparable data points covering ESG metrics across companies and GPs. The ability to also benchmark private companies on performance on issues such as climate and diversity will be helpful in understanding what progress may look like for a company or a portfolio, given that there is now a benchmark with a relevant set of peers for the first time. The results will help to shape engagement with our underlying GPs.

Beyond the functionalities that apply directly to our portfolio, we have appreciated the research component of this work. For the first time, we’re able to [look at correlations](#) between ESG and company performance with a wider set of data than we have ever had in private markets. This enables us to better understand dynamics of relationships between board diversity and earnings—[relationships we’ve examined in our own research](#)—but also comprehend how companies perform on ESG issues when they are publicly versus privately owned.

**You mentioned that the EDCI has helped you to shape GP engagement. How have you been able to utilize the data and findings from the EDCI to drive engagement with GPs?**

**MAAIKE:** We’ve reached out to all of our key GPs to invite them to join, and as of today nearly 80 of our GPs are EDCI members. It is our belief that we will be able to achieve more if we collaborate, and that to be successful, initiatives need to be meaningful, practical, and clearly actionable—or else, they become at risk of becoming “just another framework.” For me, the EDCI is a good example of an Initiative that works. The practical nature of the Initiative has made it easier to use it as a tool with GPs. Collecting EDCI data is one of the key recommendations we give GPs when they ask for advice on how to improve or formalize their ESG programs. We also include it as a leading practice in the GP Responsible Investment Scorecards we detail in this report.

We’ve seen this come to light with one GP in particular. My team had been engaging with them on developing their ESG approach for years, but the group struggled to formalize their approach because they were navigating the morass of frameworks and varying LP requests and expectations. What they saw with the EDCI was the introduction of a practical toolkit, and critically, one that was digestible and broadly supported by LPs. The Initiative served as the foundation of their ESG strategy, and the GP continues to refine their approach.

**What are you most looking forward to in 2024 with respect to the project?**

**MAAIKE:** Looking forward to 2024, we’re eager to receive an expanded data set that will drive more meaningful insight for ourselves and our investors, as well as further increased GP engagement. We want to drive continued growth by reaching out to GPs of ours that haven’t yet joined to encourage them to join and better understand what barriers may exist.

In addition to the robust capabilities the Initiative has provided so far, we hope to continue to see more functionalities for GPs that enable them to drive portfolio company-level progress on ESG issues. This work has already kicked off; BCG and the EDCI team are currently developing high value-added functionalities for GPs and LPs driven by user feedback to further enhance member experience with the benchmark.

For more information or to join the ESG Data Convergence Initiative, please visit [the website](#).

7,600+

EDCI-related data points were collected in 2022 from GIS global GP base

~2,000

private companies contributed EDCI-related data points in the first year of the Initiative



# Advancing DEI in Our Spheres of Influence





# DEI as a Competitive Advantage

Every day I hear from our leaders about the diverse and complex challenges that they are navigating: disruptive automation; uncertain economic environment; geopolitical challenges amid further globalization of markets; shifting demographic trends; and heightened stakeholder expectations.

In parallel, I hear consistent and compelling evidence that having access to a diversity of perspectives and experiences is requisite to their ability to respond to these challenges effectively and at pace.

In light of this feedback and the rigorous analysis we have done on our own portfolio, we have and are inspired to stay the course with respect to DEI, despite the complexity of the current business landscape. We will continue to focus on:

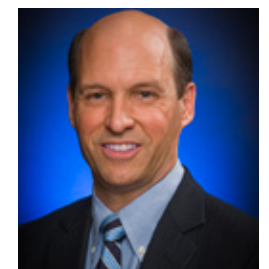
- **Understanding how DEI enhances business performance to maintain momentum;** our recently published white paper provides further evidence of how diversity contributes to enhanced decision-making and outcomes in our investments.
- **Equipping leaders with evidence-based insights that enable them to unlock the power of DEI** within their own spheres of influence through platforms like our DEI Leadership Network and partnering with leaders to create bespoke DEI action plans for each business group within Carlyle.
- **Collaborating with peers across our industry** through a commitment to transparency and developing industry-wide standards as well as contributing to joint initiatives such as The Milken Institute’s DEI in Asset Management program.

In times of uncertainty and challenge, it’s especially important to commit to demonstrated strategies, and at Carlyle, we’ve shown through data and experience, that diversity can drive results and helps us deliver for our investors and broader stakeholders.



**KARA HELANDER**  
Chief Diversity, Equity, and Inclusion Officer

*“Over the last 10 years, we’ve grown from 13 sites in three countries to 55 sites in 12 countries; we’ve quadrupled the complexity of the business. We deal across 12 different cultures, languages, and regulatory environments on a daily basis. International business moves so quickly, we must have a diverse set of experiences and skills to react and respond quickly to the needs of our customers.”*



**RUSSELL FORD**  
StandardAero CEO



At Carlyle, we cultivate diverse teams to seek better results.

We are taking action to advance DEI across our spheres of influence because we believe that leveraging the unique perspectives and backgrounds of talented people helps us make better decisions and, in turn, deliver better results.

As we ignite action at Carlyle—both in our investments and the broader business community—we are making near-term progress and laying the foundation for even greater impact in the future.

**OUR FIRM**

We continue to strengthen our firm by equipping our people with the insights and tools to make DEI action oriented, credible, and driven by all of us. The progress we are making is tangible and inspires individuals across all levels. At Carlyle, we cultivate diverse teams to seek better results. In a company-wide employee engagement survey taken in 2022, 82% of Carlyle employees agreed that “my manager takes action to foster a diverse and inclusive team.” Increased levels of engagement were observed globally, but the most notable gains were among Black/African-American professionals and women.

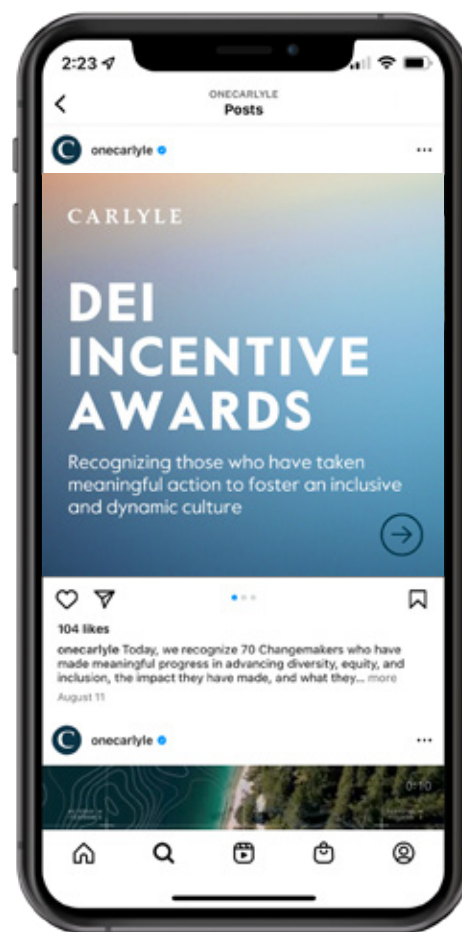
This sentiment was also reflected in our annual DEI Incentive Awards, which recognize colleagues at all levels who make a measurable impact on DEI within the firm. In 2022, we saw a 27% increase in the number of award nominations, driven primarily by a higher number of submissions for middle managers. As middle management is traditionally one of the hardest organizational layers to mobilize in any change effort, this increase underscores the commitment of the firm and progress in inspiring and equipping our managers to take action.

This year, we also launched the third cohort of our Career Strategies Initiative, a program that pairs high-performing women and underrepresented<sup>1</sup> Vice Presidents and Principals with a career strategist and executive sponsor to provide the access, inspiration, and support needed to advance and expand their impact. Through this initiative’s tailored support and management skills training, promotion rates for participants in the program were double that of the firm average in 2022. A selection of executive sponsors and their sponsees presented to portfolio company leaders and LPs as part of our DEI Leadership Network Expert Speaker Series.

We understand that managers and sponsors have a significant impact in developing and leading diverse teams, and we have committed to deepening that impact by equipping our people with inclusive leadership and management skills. Last year, more than 70 senior leaders attended in-person sessions on how they can use their influence to maximize the performance of diverse teams. An increasing number of employees also became members and allies of our Employee Resource Groups (ERGs), which reported a 68% increase in membership year-over-year.

**EMPLOYEE RESOURCE GROUPS**

- DiverseAbility
- LGBTQ+
- Multicultural
- NextGen
- Veterans
- Women’s
- Working Parents



**BETHANY DE LUDE**  
 MANAGING DIRECTOR  
 GLOBAL TECHNOLOGY & SOLUTIONS  
 WASHINGTON, DC



Bethany created the Women of GTS group to support leadership development, skill building and strengthen a sense of community. Her leadership has impacted the employee engagement of women within the division, which reached 90% in 2022.

CARLYLE DEI INCENTIVE AWARDS

**CONOR KEEVEY**  
 SENIOR ASSOCIATE  
 GLOBAL CREDIT  
 NEW YORK



Conor was instrumental in the on-cycle recruiting process for Global Credit, speaking with almost every candidate and setting up coffee chats. In addition to hiring diverse talent to the team, he shared top candidates with other groups across Carlyle who were able to incorporate them into their recruitment processes.

CARLYLE DEI INCENTIVE AWARDS

**ERIKO KONDO**  
 ANALYST  
 GLOBAL PRIVATE EQUITY  
 TOKYO



Eriko actively participates on her team’s Culture Committee and engages in external events focused on women. Eriko also proactively connects with female professionals who recently join the firm.

CARLYLE DEI INCENTIVE AWARDS

**DAVID PAREJA**  
 VICE PRESIDENT  
 ALPINVEST  
 NEW YORK



David engages prospective candidates from the Out 4 Undergrad Business Conferences and serves as co-chair of the LGBTQ+ ERG. David’s impact includes representing the ERG at recruiting events, orientation for new joiners and being a proponent of active allyship at the firm. His efforts have helped Carlyle score 100% on the Human Rights Campaign’s Corporate Equality Index which we’ve maintained five years in a row.

CARLYLE DEI INCENTIVE AWARDS

**SAMANTHA MESKIN**  
 VICE PRESIDENT  
 ALPINVEST  
 AMSTERDAM



Samantha informally mentors to junior women within Investment Solutions and shares her experiences and insights with members of the Europe Women’s ERG.

CARLYLE DEI INCENTIVE AWARDS

**YUSUKE WATANABE**  
 MANAGING DIRECTOR  
 GLOBAL PRIVATE EQUITY  
 JAPAN



Yusuke hired the first female senior advisor in Japan which had a strong impact. Yusuke also added two female executives on the board of one portfolio company which achieved a 33% diversity ratio. He is contributing to the firm’s global 30% board diversity goal, providing role models for women within CJP, exemplifying inclusive leadership.

CARLYLE DEI INCENTIVE AWARDS

<sup>1</sup>For the purposes of the Career Strategies Initiative, we define underrepresented minority as female globally. In the U.S., we also include Black or African American, Hispanic or Latinx.



**OUR INVESTMENTS**

We are not only providing our portfolio companies with tools and resources to capture the economic edge that we believe diverse leadership offers, but we are also seeing tangible progress toward goals as a result of our efforts. In 2020, we announced our goal to have diverse executives occupy 30% of all board seats in controlled, corporate, private equity portfolio companies around the world by year-end 2023. Since establishing the goal, we have filled more than 340<sup>1</sup> portfolio company board seats with diverse directors.

Our focus also extends to portfolio company leadership. In 2022, we launched the DEI Leadership Network, a coalition of CEOs within our portfolio, to empower them to share DEI best practices, learn from one another’s experiences, and provide tools and tangible strategies to effectively lead with DEI at the forefront. The network spans North America,

Europe, and Asia, representing approximately 140,000 global employees. Feedback from participating CEOs illustrates the profound impact that the coalition has had so far—two participating CEOs shared their insights on leveraging diversity as a driver of performance during our 2022 Global Investor Conference.

In addition, our Global Investment Solutions platform introduced a section in its responsible investment questionnaire dedicated to DEI. This new section, which GPs complete in addition to the broader survey, allows us to better track and influence DEI progress within the industry. We found that nearly three-quarters of commitments (74%) went to GPs we rated as intermediate or higher in their DEI efforts; most notably, the amount of capital allocated to GPs who we ranked as advanced in DEI increased from 9% in 2021 to 30% in November 2022<sup>2</sup>.



CEOs Sandra Wu and Reid Jackson join Kara Helander on a panel at Carlyle’s 2022 Investor Conference

**OUR COMMUNITIES**

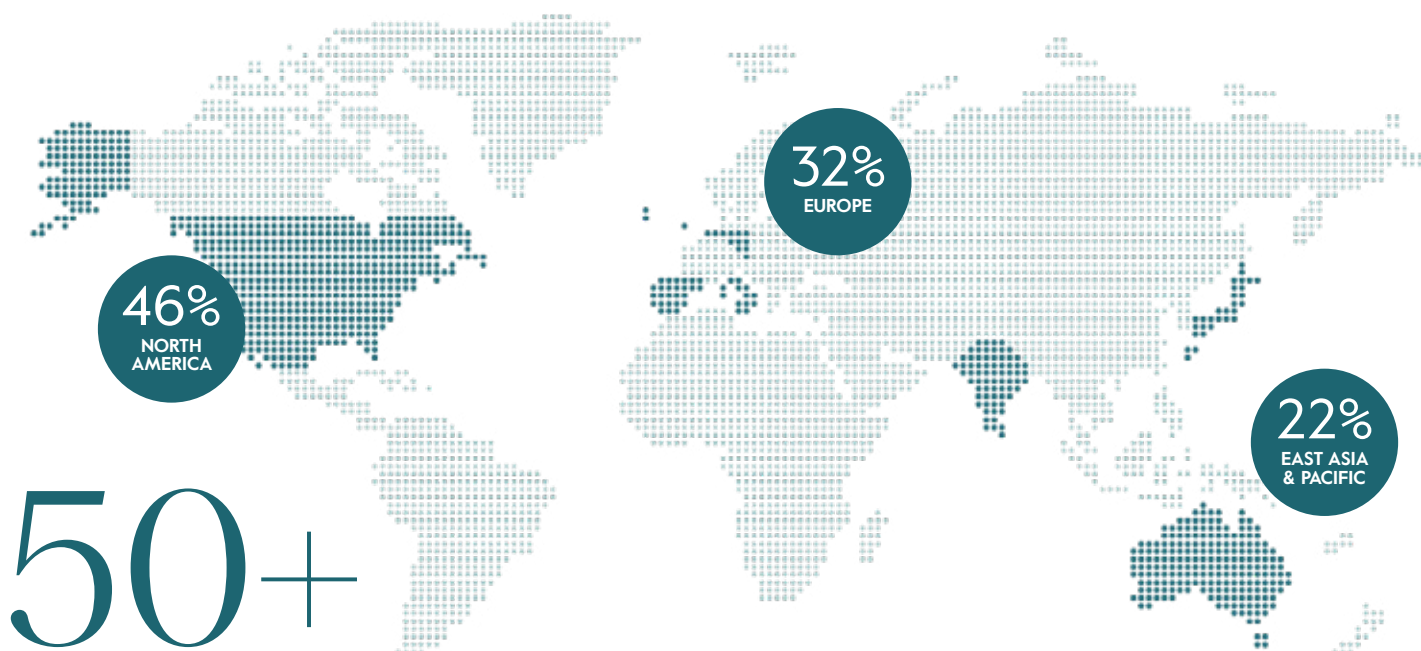
With a commitment to strengthening DEI across the asset management industry, we partnered with The Milken Institute as the inaugural underwriter of the DEI in Asset Management Program. This program was designed to improve diversity and inclusion within asset management institutions for women and Black, Indigenous, and People of Color. The advisory board—which features 33 senior leaders from limited partners (LPs), peer firms, and academia—published its first report in December 2022, titled [The Path to Inclusive Capitalism: An Asset Owner Guide for Investment Portfolios](#).

In the United Kingdom, we continue to support the #10000 Black Interns initiative and hosted participants within our Europe buyout fund for six-week internships. Carlyle also supported the Respect for Marriage Act<sup>2</sup>, which codifies marriage benefits and protections for all Americans.

**LOOKING AHEAD**

As DEI continues to be a vital component of successful organizations, we are committed to delivering on the value creation, innovation, and competitive advantage that diversity brings. We are proud of our progress and remain committed to the work ahead. We will further empower our people, our portfolio companies, and the broader community to advance DEI and drive performance.

**DEI LEADERSHIP NETWORK CEO LOCATIONS**



50+

CEOs across all our sector opted-in to the DEI Leadership Network

<sup>1</sup>Carlyle as of 2023.

<sup>2</sup>Carlyle is a supporter of the Respect for Marriage Act, which was signed into law and guarantees the federal rights, benefits and obligations of marriages in the federal code for same-sex couples; repeals the discriminatory Defense of Marriage Act (DOMA); and affirms that public acts, records, and proceedings should be recognized by all states. It also codifies the same rights for interracial couples.

340+

portfolio company board seats with diverse directors as of March 31, 2023

~140K

global employees represented by the DEI Leadership Network

**DEI LEADERSHIP NETWORK**

Feedback from participating CEOs

*“The DEI Leadership Network has been most impactful, and not just for me, but for my whole team that participates. When you are focused in the operator role, having the network to continue to provide high-quality relevant training—we wouldn’t do it otherwise, it would get crowded out.”*

*“Thank you for the enlightening discussion and for the overall commitment and road map for DEI...It is great to be able to network with the other CEOs and to have more time to get into details on best practices.”*



In 2018, we established our global DEI Council, which is comprised of 17 senior leaders. Carlyle's DEI Council meets at least three times a year to review and refine the firmwide DEI strategy, help create inclusive environments, and work to build the systems needed to promote diversity and inclusion across our business segments.

■ North America
 ■ Europe
 ■ Asia
 ■ Global Chair



**HARVEY SCHWARTZ**  
Chief Executive Officer



**RUULKE BAGIJN**  
Head of Global Investment Solutions



**BRUCE LARSON**  
Chief Human Resources Officer



**CURT BUSER**  
Chief Financial Officer



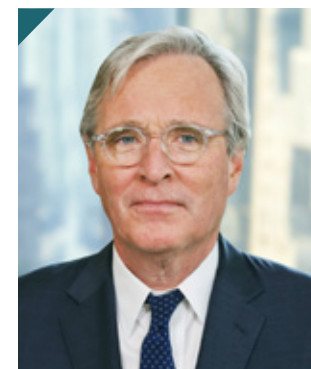
**ROB STUCKEY**  
Head of U.S. Real Estate



**LEIGH FARRIS**  
Global Head of Corporate Communications



**MACKY TALL**  
Chair of Global Infrastructure



**CHRISTOPHER FINN**  
Chief Operating Officer



**DAVID MCCANN**  
Global Head of Investor Relations



**KARA HELANDER**  
Chief Diversity, Equity, and Inclusion Officer



**PATRICK MCCARTER**  
Global Head of Technology Investing



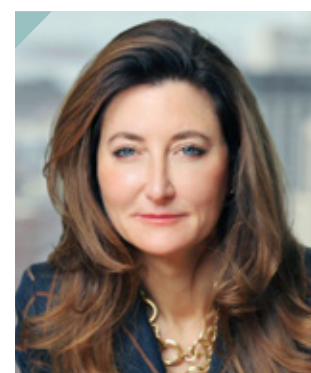
**SANDRA HORBACH**  
Co-Head of Americas Corporate Private Equity



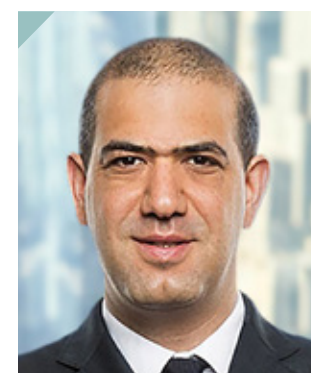
**REGGIE VAN LEE**  
Chief Transformation Officer



**MARK JENKINS**  
Head of Global Credit



**HEATHER MITCHELL**  
Chief Risk Officer and Head of EMEA



**JONATHAN ZAFRANI**  
Co-Head of Carlyle Europe Partners



**KAZUHIRO YAMADA**  
Co-Head of Carlyle Japan



**X.D. YANG**  
Chairman of Carlyle Asia



## StandardAero: Interview with CEO Russell Ford, and Chief Human Resources Officer Malisa Chambliss

### Why is DEI Important for StandardAero in particular?

**RUSSELL FORD:** Any organization is made up of people, who are a collection of their experiences. As a company, the broader the pool of experiences you can draw from, the more learning you are able to tap into when looking for a solution. For StandardAero, over the last 10 years, we've grown from 13 sites in three countries to 55 sites in 12 countries and have quadrupled the complexity of the business. We deal across 12 different cultures, languages, and regulatory environments on a daily basis. That's a clear reason and need for us to have a broad set of experiences to draw from to operate effectively. For us, diversity drives business value. International business moves so quickly that we must have a diverse set of experiences and skills to react and respond quickly to the needs of our customers. 42% of our current executive leadership team (ELT) identifies as diverse—and what that really brings to this organization is improved problem-solving and strategic capability.

#### AN INTERVIEW WITH



**RUSSELL FORD**  
StandardAero CEO



**MALISA CHAMBLISS**  
StandardAero CHRO

### Russell, you've been an active member of Carlyle's DEI Leadership Network. How has the network benefitted you in your role?

**RUSSELL:** A professor told me once, "there are many ways to solve an engineering problem but only one way that's the most elegant," and that's what you are looking for in business. It requires interacting with other perspectives in a way that's respectful, as well as listening and hearing what others have experienced, looking for that elegant solution. Any time I have an opportunity to tap into another leader's experience base, I want to take it, and the network provides that opportunity.

The Carlyle team, among the private equity firms I have worked for in my career, probably is the best at creating a network effect and communication across the portfolio. And Carlyle has done a good job leading with the numbers that reinforce a need for diversity. For engineers, that is especially important. To be a good leader, you have to see the business through the numbers.

### In one of our sessions, you mentioned how StandardAero has used metrics on your DEI roadmap. Have there been any outcomes from tracking your progress that are particularly prominent for you?

**RUSSELL:** If you want to really understand something, including DEI, you have to measure it. Whenever I hear the phrase, "this is an art, not a science," I chuckle. Anything that can be measured, replicated, and studied is a science, which means it can be improved. If you don't measure, you can't know how effective your actions are, and we are always trying to gauge effectiveness, whether we should replicate or pursue a different course of action.

We (StandardAero) are very detailed, precise people—we build airplanes, which always make me feel safe [laughs]. The people we have here sweat the details and the process; you have to approach those people with facts, not opinions, and give them the data.

And if you aren't making progress, you need to change the play. Time is critical in private equity, which doesn't mean doing things in a cavalier fashion or being sloppy. It just means you need to be able to make smart, informed decisions at speed, and facts and data accelerate that.

**MALISA CHAMBLISS:** We've also engaged the board with our data, but you must drive the data deeper into the organization. Each business and function reviews their DEI metrics regularly and the actions they are taking based on those metrics. We also firmly believe in taking a "tone from the top" mentality, and last year we had a real focus on diversifying our ELT.

### Can you share a little bit more about that?

**MALISA:** We believe that if you want a diverse population you have to hire and cultivate diverse managers. That's how you start building change. Russell has been vocal about that—and we would never hire someone who wasn't the most qualified, that's a given—but he has been explicit about the effort we are willing to put in to find the right breadth of candidates.

### Any parting words?

**RUSSELL:** This is not something we are going to do and be done; it's a continuous effort. So, we needed a roadmap to take us to a maturity level that includes interim steps along the way. To me, our approach to diversity looks a lot like quality and safety in the business. I've learned that a leading factor in creating a safe and quality environment is keeping it in front of people all the time, keeping people constantly thinking about it. If you do that, you will influence the business in a much more impactful way. This is a cultural change at StandardAero that has permanency, and we've built a process to enable that.



*"Whenever I hear the phrase, 'this is an art, not a science,' I chuckle. Anything that can be measured, replicated, and studied is a science, which means it can be improved. If you don't measure, you can't know how effective your actions are, and we are always trying to gauge effectiveness, whether we should replicate or pursue a different course of action."*

**RUSSELL FORD, CEO**

55

sites across 12 countries compared to 13 sites across three countries 10 years ago

42%

of ELT members identify as diverse

All data has been provided directly by the portfolio company and has not been independently verified.



# Case Studies

*All data has been provided directly by the portfolio company and has not been independently verified. Case studies are provided for illustrative purposes only and to demonstrate how certain ESG targets and activities are implemented in Carlyle portfolio companies. There is no guarantee that any ESG target or related projection will be met, that any ESG activities will be implemented to the same degree for each investment, or that they will create a positive ESG or financial impact.*



Target to be able to supply at least

40%

of total sales volume with low carbon footprint products by 2025, compared to 2020

100%

reduction in direct carbon emissions by 2040 goal, with a goal of 50% reduction by 2030

100K

metric tons of salt reused by 2025 goal under Nobian's circularity workstream

All goals are compared to a 2020 baseline

*Nobian has developed specially designed salt caverns to store renewable energy in the form of compressed air energy storage, which will aid the energy transition in the Netherlands by providing access to renewable energy despite the absence of wind and sunlight.*

CASE STUDY

# Nobian

Using an innovative decarbonization strategy to benefit their company and country

**Nobian** is a leading European producer of salt, essential chemicals, and energy solutions for many end industries. The Netherlands-based company's products play an integral role in accelerating the energy transition. The chemicals they produce are used in solar cells, at-home battery storage systems, sustainable window and door frames, and many other everyday applications. Already a key developer of underground energy storage caverns for natural gas and hydrogen, Nobian aims to become one of the most sustainable chemical companies in Europe. We believe Nobian's efforts explained below are positioned to support sales and revenue growth in addition to a greener future.

**GREENING OPERATIONS**

A critical part of their overall decarbonization strategy, Nobian has ambitious climate goals and seeks to reduce direct carbon emissions by 50% by 2030 and 100% by 2040. Additionally, the company aims to reduce their indirect emissions by 50% by 2040, while being fully powered by renewable energy. These goals are tied to a financing that Carlyle worked alongside Nobian to put in place as part of an accredited sustainability-linked bond, which incentivizes accountability toward these goals and positively affects the company's interest rate where these goals are achieved.

To reach these goals, Nobian has developed a concrete pathway to electrify their production processes including through the use of innovative and proven technologies. In addition, setting a 100% renewable energy use target by 2040 may help Nobian become a carbon neutral company in the same year. Nobian also has plans to reuse 100,000 metric tons of salt by 2025 under its circularity workstream.

The transition to a wind- and solar-based sustainable energy system may make the energy supply and demand balance more volatile, challenging the electricity grid's stability. By applying Industry 4.0<sup>1</sup> concepts, Nobian's electrolysis plants operate with the flexibility to help stabilize the grid. Furthermore, Nobian aims to make 25% of its electricity-based production capacity available for grid stabilization by the end of 2023.

Nobian recognizes the power of collaboration in driving sustainable innovation. Its first "Grow Greener Together" innovation challenge invited 43 start-ups to pitch product ideas that focused on energy storage flexibility, balancing energy volatility, CO2 free heat and steam, and improved heat integration. These focus areas are key for Nobian as they seek to decarbonize their operations. Out of these, four companies were selected for a two-day workshop to co-develop their innovative solutions with Nobian's engineers. The start-ups also banked an important customer that ultimately facilitated their scale as climate-oriented solutions providers and received access to Nobian's global network of experts, bridging the gap between cutting-edge innovation and scaled application.

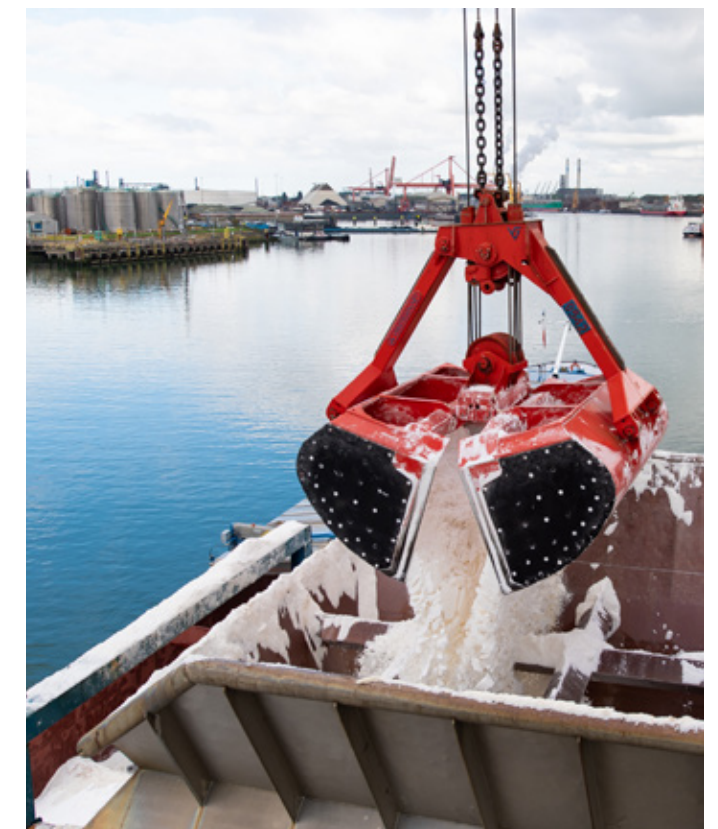
**DEVELOPING NEW COMMERCIAL OPPORTUNITIES**

Beyond driving operational efficiencies, Nobian is unlocking new commercial opportunities at the forefront of the green chemical movement. The company has a goal to have 40% of total sales volumes available with low carbon footprint products by 2025. One such product is chlor-alkali, which is integral to the electrolysis process when hydrogen is manufactured. In anticipation of increasing demand for green hydrogen, Nobian started supplying certified green hydrogen in 2021 as the first certified chlor-alkali plant in Germany under TÜV Süd CMS 70. The company is also piloting the use of blockchain technology to further cement their leadership in traceability and transparency.

In addition to developing their own portfolio of green products, the company seeks to support the creation of new value chains that drive sustainable use and reduce their global carbon footprint. Nobian entered a strategic partnership with Vulcan Energy to produce lithium hydroxide from a carbon neutral geothermal lithium source and is working to reduce the carbon footprint of cement. Nobian is also working towards repurposing their own assets to unlock new business opportunities, including developing specially designed salt caverns to store renewable energy in the form

of compressed air energy storage with a partner company. This is intended to aid the energy transition in the Netherlands by providing access to renewable energy despite the absence of wind and sunlight. The pilot phase caverns can supply 150,000 households per annum energy.

Collectively, these can yield tangible results for the company and country. Salt mining is now an activity of "strategic interest" in The Netherlands. Strategic customers have expressed interest in Nobian's certified low carbon chemicals. For example, Nobian is working with the Dutch government to develop projects to further accelerate their decarbonization roadmap by as much as 10 years. A key part in this will involve the electrification of the energy-intensive salt production process. Delivering on all projects could amount to 1% of the government's own carbon reduction target for the industrial sector<sup>2</sup>.



<sup>1</sup>Source: McKinsey <https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-are-industry-4-0-the-fourth-industrial-revolution-and-4ir>  
<sup>2</sup>Source: Nobian

Low carbon footprint products are defined by Nobian. Goals are subject to change and no assurance can be given that goals will be achieved.



35%

of energy consumption sourced by renewable energy at data centers

109,612

tCO<sub>2</sub>e GHG emissions mitigated in FY 2023

*“Sustainability will continue to be a significant focus area, given the large energy requirements of data centers and the purchasing demands from our existing and potential customers. To publicly demonstrate our commitment, we have made a pledge to reach net zero emissions by 2031.”*



**ASHISH ARORA**  
Nxtra CEO

CASE STUDY

# Nxtra

## Utilizing ESG to meet data-related demand and attract more customers

Data underpins the modern digital economy and, likewise, we believe data centers are the necessary architecture that support this new economic paradigm. Although the data center industry grows at about 2% globally per annum<sup>1</sup>, the investment opportunity in India is even greater. Here, average growth rates for the industry are over 11%<sup>2</sup>, fueled both by an overall increase in data itself and a shift by many companies to house data in the cloud.

At Carlyle, we believe [Nxtra](#) by Airtel is well-positioned to take advantage of these trends. Offering India’s largest network of 12 large and 120 edge data centers<sup>3</sup>, Nxtra deploys tailor-made data center solutions that help Indian and international customers utilize future-ready IT infrastructure. The company aims to increase installed capacity by 2X to over 400 MW in the next few years. Doing so will meet the anticipated surge in demand and could help India become a digital-first economy, which is a strategic priority for the country. The question isn’t whether we will need more data centers; it’s how much capacity is required.

But data centers are massive consumers of energy, and there is significant pressure to make data centers more sustainable in a decarbonizing world. Consider the competing pressures at play—a hyperscale<sup>4</sup> data center can use as much power as 80,000 households<sup>5</sup> and leading technology companies are some of the world’s largest operators and users of data centers with demand growing year-over-year. At the same time, these companies have committed to being more environmentally sustainable. Microsoft, for example, has made a significant push into greening their operations and supply chain as part of their pledge to be carbon negative by 2030<sup>6</sup>; similarly, Google has pledged to run their data centers on carbon free energy<sup>7</sup>.

These industry-wide commitments have implications for data center partners such as Nxtra, whose customer base includes some of the world’s largest tech companies. Carlyle acquired a 25% stake in Nxtra in 2020, setting the stage for

close collaboration between Nxtra and Carlyle’s ESG and investment teams. Through our partnership, Carlyle helped Nxtra strengthen their ESG strategy by conducting peer benchmarking, mapping out ESG-specific material issues pertinent to business operations, and investigating requisite certifications in the data center space (for example, International Standard for Organization certifications). With this refined strategy, Nxtra is taking a proactive approach to meet evolving customer requirements, transitioning to lower-carbon energy sources and identifying climate-related risks and opportunities. As a result, Nxtra now has a comprehensive ESG strategy that will enable them to anticipate evolving requirements for both current and future customers.

This ambition sets out to be more than a purely aspirational goal for Nxtra, showcased by their various measures to optimize data center operations, in part through their partnership with Carlyle. In fact, Nxtra recently became the first data center company in India to install a hydrogen-ready fuel cell-based captive power plant to provide clean energy to data centers<sup>8</sup>. Moreover, to date, Nxtra has<sup>9</sup>:

- Sourced more than 35% of energy consumption by renewable energy at core data centers;
- Improved average Power Usage Efficiency by 20% in the last five years;
- Mitigated over 109,612 tCO<sub>2</sub>e greenhouse gas emissions in FY 2023; and
- Ensured all core data centers are ISO 50001 (Energy Management System) certified.

Nxtra’s commitment extends beyond carbon. Focused on curbing water consumption and enhancing conservation, Nxtra is actively upgrading its cooling protocols through innovative, technological

solutions. In fact, the company aims to achieve 100% wastewater recycling at all data centers through digital enablement (IOT) that will track real-time water efficiency (Water Usage Effectiveness) and other water quality parameters. As another key step, all Nxtra data centers harvest rainwater and reuse treated wastewater. And as it aims to achieve 100% landfill diversion rate and attain “Zero Waste to Landfill” Certification, Nxtra is reducing the amount of waste generated and incorporating holistic and circular waste disposal and recycling options.

The digital economy is only becoming more extensive and intertwined in our daily lives—a trend that will mean more data and a need for more data centers to house it. In part through their partnership with Carlyle, Nxtra has adopted a forward-leaning approach to ESG that helps position the company to meet this growing demand, and retain and expand their customer roster in the years to come. We believe the result will be the best of all worlds—cleaner, more sustainable, and better returns in the future.



<sup>1</sup><https://www.gray.com/insights/the-data-center-industry-is-booming/>

<sup>2</sup><https://www.mordorintelligence.com/industry-reports/india-data-center-market> (India)

<sup>3</sup>Edge data centers are smaller facilities, typically located closer to the end user; large data centers are bigger, more centralized facilities.

<sup>4</sup>A hyperscale data center is a mission-critical facility that supports robust and scalable workloads. Hyperscale data centers are often associated with large companies that require vast data processing and storage requirements.

<sup>5</sup><https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/investing-in-the-rising-data-center-economy>

<sup>6</sup><https://blogs.microsoft.com/blog/2020/01/16/microsoft-will-be-carbon-negative-by-2030/>

<sup>7</sup><https://cloud.google.com/sustainability>

<sup>8</sup>Source: FuelCellsWorks <https://fuelcellworks.com/news/nxtra-by-airtel-to-become-the-first-data-center-company-in-india-to-install-fuel-cell-technology-to-provide-clean-energy-2/#:~:text=I,Nxtra%20by%20Airtel%20to%20Become%20the%20First%20Data%20Center%20Company,significant%20reduction%20in%20carbon%20emissions.>

<sup>9</sup>Some of these initiatives began prior to Carlyle’s ownership period.



63%

of menopausal women say their career has been negatively affected by symptoms

One Million

undertreated women expected to receive access to menopause treatment through Theramex

*“With Theramex, we invested in a business that addresses significant unmet medical needs and helps women around the world live better lives. We are excited about the partnership among Carlyle, PAI, and Theramex to advance Theramex’s ESG program as part of our value creation plan in support of better care for women.”*



**LUBNA QUNASH**  
Managing Director,  
Carlyle Europe Buyout

CASE STUDY

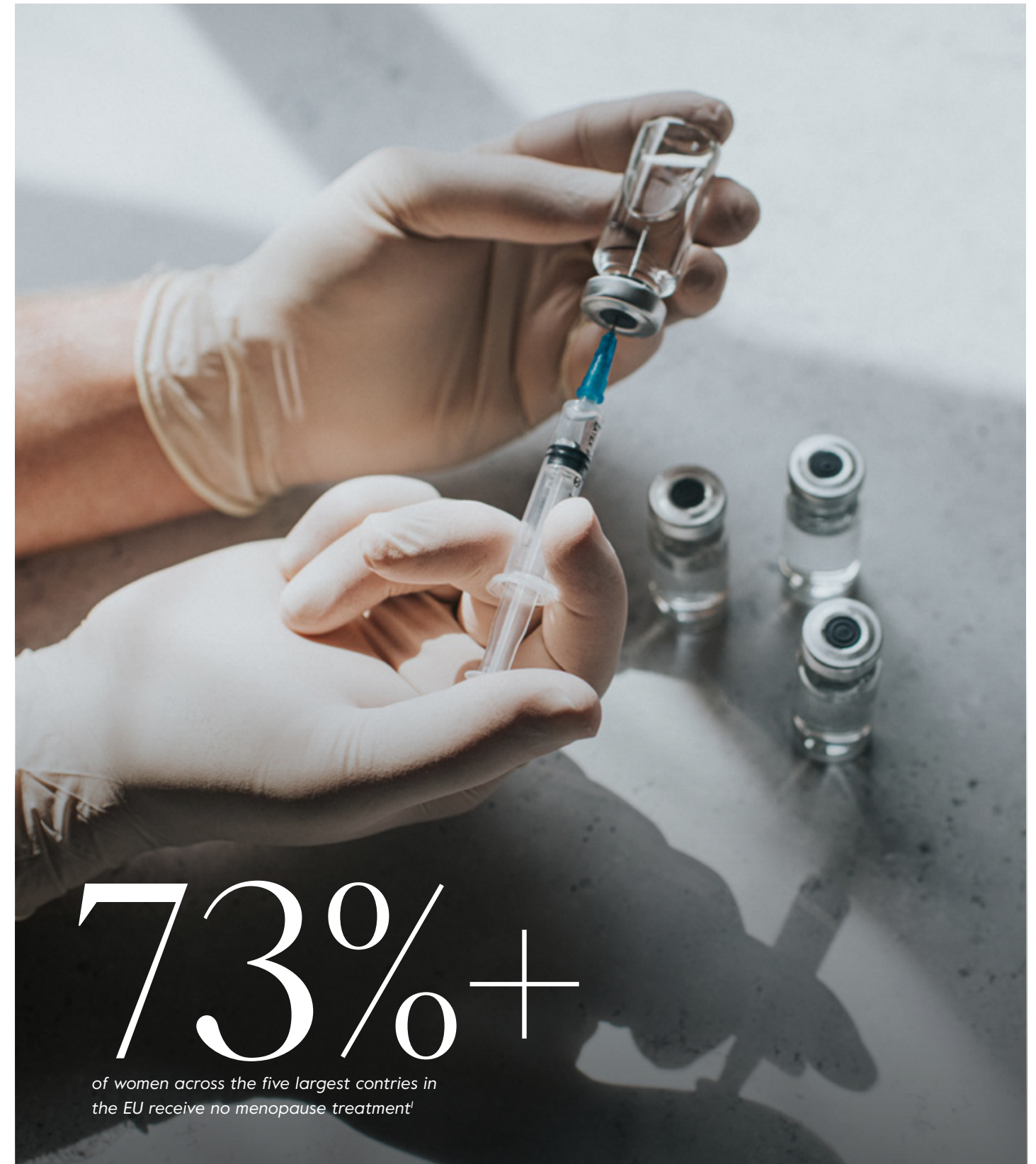
# Theramex

Empowering women with access to better healthcare products and treatments

**Theramex** is a global specialty pharmaceutical company committed to supporting women’s health needs through every stage of life. The company’s portfolio of healthcare products and treatments addresses contraception, fertility, menopause, and osteoporosis, and plans to expand into uterine health in the near term. Theramex sells around 50 products, serving more than six million patients in 57 countries worldwide<sup>1</sup>.

Conditions such as menopause and osteoporosis—a disease that develops when bone mass and mineral density decrease—can have a significant impact on women’s everyday lives. Yet, the traditional healthcare system underserves and undertreats both conditions. Around 73% of women across the five largest countries in the EU who suffer from menopause symptoms receive no treatment<sup>2</sup>, and roughly the same percentage of women receive no treatment for osteoporosis<sup>3</sup>. Undiagnosed or undertreated health issues can have knock-on effects on other dimensions of women’s lives, such as reducing economic empowerment and exacerbating inequality, with 63% of menopausal women saying the symptoms have negatively affected their careers<sup>4</sup>. Theramex has set out to provide treatment options and raise awareness about these issues by supporting women with the right solutions at the right time.

To help accelerate Theramex’s work, the Carlyle Capital Markets and ESG teams, alongside co-investor PAI, partnered with the company to negotiate an ESG-linked financing facility that ties the cost of capital to increased access for more than one million undertreated women suffering from menopause symptoms. The core focus of Theramex’s business—empowering women—extends to their own organization as well, as women comprise more than 50% of Theramex’s workforce<sup>5</sup>. Theramex is also working to improve the ESG governance of the company and is working closely with the Carlyle ESG team to build a dedicated sustainability function to drive Theramex’s ESG strategy.



<sup>3</sup>Source: BUPA, Chartered Institute for Personnel and Development

<sup>4</sup>Source: Forth With Life <https://www.forthwithlife.co.uk/blog/menopause-in-the-workplace/>

<sup>5</sup>Source: Theramex



1,600  
MWh  
of capacity in clean  
energy systems

*“Carlyle was instrumental in helping us with this critical construction-to-term loan. Carlyle introduced us to the lenders, provided support as we negotiated terms, and assisted with due diligence, all part of Carlyle’s ongoing value-add to us as our lead investor.”*



DAVID ARFIN  
NineDot Energy CEO

CASE STUDY

# NineDot

Supporting a more resilient electric grid in the New York City metro area

**NineDot Energy** (NineDot), a Carlyle portfolio company, is an innovative energy solutions development company focused on Downstate New York. With one of the largest active portfolios of community clean energy projects in the New York City metro area, Ninedot concentrates on building community-scale battery storage sites. These sites can support the increasing amount of renewable energy coming onto electricity grids, accelerating the retirement of older, carbon-intensive “peaker” plants<sup>1</sup>. Along the way, distributed battery storage sites can make the grid more resilient, less costly, and more equitable—all critical outcomes for the communities most impacted by GHG emissions from traditional energy sources.

As corporate and government climate commitments cover more than 90% of the world’s GDP, the demand for renewable and sustainable energy continues to grow commensurately, with 44% of U.S. states establishing clean power generation goals<sup>2</sup>. In 2022, New York state set a goal to achieve 100% zero-emissions electricity by 2040, including 70% renewable energy generation by 2030. Battery energy storage projects are critical infrastructure for achieving these goals<sup>3</sup>. As part of this effort, New York state updated its energy roadmap in 2023 to include targets of six gigawatts of energy storage by 2030<sup>4</sup>.

**THINKING GLOBALLY, WORKING LOCALLY**

NineDot focuses on projects that are small enough to provide hyper-local power grid benefits that can maximize reliability and resiliency, but large enough to gain economies of scale. The company combines this approach with local expertise and real-world experience to help solve one of renewable energy’s most prevalent challenges: bringing renewable energy to the grid in densely-populated urban areas.

The company’s name, derived from the classic mathematical puzzle, reflects how NineDot looks for out-of-the-box solutions to make urban grids cleaner, cheaper, and more resilient. Their distinct positioning and approach to solving the urban clean energy puzzle underscores this.

The challenge is that developing storage sites in a city such as New York requires working effectively and efficiently across a complex energy ecosystem. Stakeholders

include landowners providing sites for energy solutions; subscribers who can benefit from clean energy credits; regulators seeking committed developers; policymakers focused on concrete renewable energy projects to improve their communities; technology providers looking for partners who can execute projects; and communities seeking to replace older power generation with cleaner, locally-sourced energy. Though a relatively young company, NineDot’s founders have worked together for more than 10 years, building extensive relationships with key constituencies that knit together the components required to successfully execute on project siting, financing, and construction.

**EXPANDING NINEDOT’S REACH**

With an active pipeline of battery site projects, we believe the company is working toward meeting or exceeding their goal of installing 1,600 megawatt hours of capacity in clean energy systems by the end of 2026, meaningfully contributing to the state’s nation-leading energy storage goals. Some recent achievements include:

→ On August 9, 2022, NineDot unveiled their breakthrough solar and storage site in the Bronx with up to three megawatts of capacity, celebrating the beginning of the community-storage vision. New York City’s first, the project represents the first community-scale Tesla Megapack installation, the first remote-crediting battery storage host site, and the first high-tension distributed energy resource interconnection.

→ Two weeks later, NineDot demonstrated their vehicle-to-grid (V2G) charging system in Brooklyn in partnership with Fermata Energy, a Carlyle portfolio company focused on V2G solutions, and Revel, an electric transportation technology company. V2G could play a major role in supporting grid reliability by using the batteries in electric vehicle (EV) fleets to supply energy to the grid during times of peak electricity demand. NineDot’s strategy allows EVs to charge overnight, when grid demand is lower, and then send that energy back to the grid during high-demand hours (e.g., when people return from work in the early



\$85  
Million

construction-to-term loan for new community-scale projects

<sup>1</sup>Peaker plants are power plants that generally run only when there is a high demand for electricity.  
<sup>2</sup><https://www.cesa.org/projects/100-clean-energy-collaborative/guide/table-of-100-clean-energy-states/>

<sup>3</sup><https://www.governor.ny.gov/news/governor-hochul-announces-new-framework-achieve-nation-leading-six-gigawatts-energy-storage>  
<sup>4</sup><https://www.governor.ny.gov/news/governor-hochul-announces-new-framework-achieve-nation-leading-six-gigawatts-energy-storage>





<sup>1</sup>Source: NineDot

evening). This rebalances energy supply and demand to enable greater renewables penetration into the energy grid.

→ We believe that New York City and state energy and decarbonization roadmaps, coupled with the Inflation Reduction Act, provide strong tailwinds for NineDot moving forward. The company is expanding to meet this demand, growing the platform to originate, construct, finance, and manage their clean energy assets. Specifically, NineDot has prioritized high-quality team construction and an orientation toward diversity, equity, and inclusion. About half the team has advanced degrees in a technical or analytical field, and roughly half are trained in an engineering field. More than two-thirds of the team have prior experience related to the design, development, operations, finance, or marketing of clean energy, having worked on real projects that generate, use, drive with, or store clean energy. Notably, NineDot maintains above-industry-average figures for diversity, with approximately 40% of the team identifying as female or non-binary, and a similar percentage hailing from historically underrepresented communities.<sup>1</sup>

→ In 2022, Carlyle's Capital Markets team partnered with NineDot to secure an \$85 million construction-to-term loan for 11 new community-scale projects across the Bronx, Staten Island, and Queens from clean energy project lenders CIT, a division of First Citizens Bank, and SMBC.

#### COMMUNITY ENGAGEMENT

Community engagement is a central part of NineDot's ethos and strategy, critical for the successful development, construction, and operation of renewable energy projects and deeply aligned with their values and culture. This is exemplified through the company's relationship with the Bronx Charter Schools for Better Learning (BBL), located across the street from one of NineDot's battery project sites. As construction began, NineDot engaged with BBL to ensure they were aware of what was being built and why. The relationship grew

from there—NineDot employees began teaching in a BBL STEM enrichment program to educate students on how clean energy works, among other sustainability topics. In the summer of 2023, the company and BBL will unveil an on-site, NineDot-sponsored mural, painted by students, that shows how green electrons are transported onto the grid.

NineDot recognizes that the company's projects affect their communities. The company wants to ensure this impact goes beyond the benefits of battery storage. In addition to BBL, NineDot has begun interacting with, educating, and supporting a number of community organizations, including the Brooklyn Chamber of Commerce; the New York League of Conservation Voters; the RETI (Resilience, Education, Training, and Innovation) Center; and many other industry and advocacy groups. In all, NineDot is taking an active approach, engaging the broader community in building the New York state electricity grid of the future.

#### WHAT'S NEXT FOR NINEDOT?

These 11 projects represent the early innings of NineDot's near-term plan. The company intends to bring a much larger pipeline to life. Harnessing an understanding of the nuances and technical underpinnings that support distributed, community-scale battery storage in a complex urban jurisdiction, NineDot plans to expand geographically beyond New York City into Long Island and Westchester County, broadening the reach of their hyper-localized approach.



**\$9,800**

average savings per expert medical opinion<sup>2</sup>

**66%**

of members experienced treatment changes resulting in better health outcomes<sup>2</sup>

*“Included’s EMO offering allows our portfolio company employees and their family members to more effectively navigate some of the most challenging health conditions. This allows our companies to provide the best care and attention to those that need it most. It’s the right thing to do.”*



**AARON WURST**  
Head of Healthy Benefits Initiative

CASE STUDY

# Included Health

Expanding medical expertise and access to portfolio company employees

At Carlyle, we focus on the key dimensions of ESG that we believe drive better businesses.

One of these dimensions is employee health and wellbeing. Central to improving long-term employee outcomes, innovative healthcare solutions can also help to drive cost savings and other financial benefits within portfolio companies. These are core drivers behind Carlyle’s Healthy Benefits Initiative, which helps portfolio companies manage their healthcare benefits and represents approximately 200,000 employees across over \$1.1 billion in healthcare claims as of December 31, 2022. We estimate that this initiative helps our participating portfolio companies save over \$200 million annually.

In last year’s report, we highlighted the expansion of this program to include mental health benefits as part of the Healthy Benefits Initiative. Since then, we’ve grown to include fertility and musculoskeletal benefits to continue driving progressive healthcare solutions because we believe they can lead to more productive, healthier, satisfied employees.

Most recently, we partnered with our portfolio company, [Included Health](#) (“Included”), to bring Expert Medical Opinion (“EMO”) services to Carlyle’s portfolio companies—free of charge—helping portfolio company employees and their family members to access full support if, and when, they need to navigate a difficult or complex diagnosis.

Healthcare decisions—particularly those associated with specialty care—are complicated and can create a significant burden for employees and their families. Over 12 million Americans suffer each year from a diagnostic error in a primary care setting—33% of which result in serious or permanent damage or death<sup>1</sup>.

Without guidance and access to the right specialists, employees may face misdiagnosis, mistreatment, and ultimately, poor health outcomes.

This program was implemented to 1) deliver wraparound member support during the most difficult circumstances, 2) lower cost of care through accurate diagnosis and high-quality care, and 3) bring tangible savings to employers and health plans by addressing complex and costly conditions. Additionally, Included’s EMO offering brings access to second opinion consults from 4,000 of the top clinical specialists and subspecialists nationwide.

Second opinion consults allow employees and their family members to gain additional knowledge about their conditions and potential treatment options, and ultimately can drive more informed decisions. Further, understanding the array of potential options can allow for cost optimization, benefitting both patients and their employers. This work has driven real results—based on Included’s data, customers saved \$9,800 per expert medical opinion on average, and 66% of members experienced a change in treatment recommendations leading to better health outcomes.

Included Health’s mission is to raise the standard of healthcare for everyone. As their name suggests, the company takes the “everyone” part seriously. Included recognizes that a “one size fits all” approach to healthcare does not work, and that people deserve personalized support for difficult care scenarios through offerings like EMO.

As part of its broad portfolio and through its work with some of the nation’s top employers and health plans, Included Health also supports millions of LGBTQ+ and Black Americans to connect to high-quality, culturally competent care. Included Health’s Communities offering provides advocacy for traditionally marginalized populations and has bridged gaps in care in unprecedented ways with members reporting a 99% satisfaction rating for the overall experience and a 98% satisfaction with

provider recommendations. The member experience is high-touch and data-driven, led by a dedicated team that is representative of the communities they serve. At a time when 45% of LGBTQ+ individuals report difficulty finding a primary care physician and 35% of Black employees have experienced race-related bias in healthcare, Included Health is advancing clinically and culturally connected whole-person care.

This is work that we at Carlyle are proud to amplify and accelerate—partnering with Included Health, a new kind of healthcare company, to guide and deliver care differently to treat people better.



**\$200 Million**

estimated to be saved annually by our Healthy Benefits Initiative participants<sup>3</sup>

<sup>1</sup><https://www.fiercehealthcare.com/hospitals-health-systems/jhu-1-3-misdiagnoses-results-serious-injury-or-death>

<sup>2</sup>Source: Included Health  
<sup>3</sup>Source: Carlyle



# Task Force on Climate- related Financial Disclosures



# Our Climate Progress

While we announced our climate goals in February 2022, the foundational work to set and achieve these goals began years beforehand.

## 2018

We were one of the first major private equity firms to announce and achieve our goal to be **carbon neutral in our operations**<sup>1</sup>.

## 2019

We launched our **Renewable and Sustainable Energy platform**. As of December 31, 2022 Carlyle funds have invested over \$1.45B in renewable and sustainable energy investments.

## 2020

We conducted our **first year of carbon footprinting** for Scope 1 and Scope 2 emissions across Majority-Owned portfolio companies in our major buyout funds (US Buyout, Europe Buyout, Asia Buyout).

We became one of the first major private equity firms to **publish a TCFD report**.

## 2021

We co-founded the **ESG Data Convergence Initiative (EDCI)**, driving transparency on carbon emissions in private equity.

We commissioned a **comprehensive analysis of our oil and gas holdings** to determine potential decarbonization pathways and climate resilience interventions, conducted by an external consultant. We believe this analysis shows that a potential absolute operational emissions reduction of almost 50% across the portfolio is possible, which would outpace reduction targets of most major international O&G companies.

## 2022

We set **ambitious, firmwide climate goals** including Net Zero by 2050 or sooner across our Direct Investments, and associated Near-Term Climate Goals<sup>2</sup>.

We introduced a **climate risk triage** as part of our due diligence process within our Global Private Equity platform. Most potential investments within this platform undergo a climate risk triage that considers elevated exposures to sector risk, physical risk, carbon-related regulatory considerations, and other considerations.

We published a **70+ page decarbonization playbook** available to portfolio companies.

Our Global Credit platform launched a **decarbonization-linked financing program**, providing an incentive for borrowers to reduce GHG emissions or achieve other climate-related targets, further detailed [here](#).

## 2023

We continue to work with portfolio companies to help support them in setting and achieving climate goals. To date, **22 current portfolio companies** have set Paris-Aligned Climate Goals<sup>2</sup>.

We published our **third TCFD report**.

We **formalized our partnership** with Watershed, a technology platform, on corporate and select portfolio company carbon footprinting.

<sup>1</sup>Please see page 67 for additional information on our approach to carbon neutrality, including the role of carbon offsets. On an annual basis, Carlyle measures and offsets the carbon footprint of our operational greenhouse gas emissions inclusive of the following categories: office utilities (Scope 1 and Scope 2), data centers (Scope 2), and employee business travel (Scope 3, category 6).  
<sup>2</sup>Please see the Glossary and TCFD report sections of this document for additional information.



This document applies to Carlyle's Direct and Majority-Owned investments by Global Private Equity and Direct investments by Global Credit, unless otherwise stated.

As we have long articulated, we believe that climate change is one of the most pressing issues of our time, creating unprecedented risks and opportunities for businesses across all industries.

As a global investment firm we work together to seek long-term value for our investors, and also companies, shareholders, people and communities. In order to do that, we believe that better understanding and managing of the emerging risks and opportunities that arise from climate change is an important component of our work.

In addition to several improvements we made to managing material climate risks and opportunities across our investment portfolio since our last TCFD report, we have two more significant updates.

First, in early 2022 Carlyle was proud to announce our Long-Term Climate Goal to achieve net zero GHG emissions by 2050 or sooner across direct investments, along with a set of Near-Term Climate Goals for In-Scope Companies<sup>1</sup>. In the TCFD section of this ESG Report, we disclose on our first year of progress against our Near-Term Climate Goal #1. Since we publicly announced our goals, 22 companies have set a climate goal that meets the criteria Carlyle has defined as achieving a Paris-Aligned Climate Goals<sup>2</sup>, as further defined in the Carlyle Climate Goals section of this document.

Secondly, since publishing our first and second TCFD reports in 2020 and 2021, Carlyle has sought to

continually strengthen our approach to addressing material climate risks and opportunities across our portfolio—and to report to our stakeholders. Given our decision to combine several types of ESG reports into a single, unified firmwide ESG report this year, we shifted the timing of our TCFD report to align with this annual reporting cycle. Hence this TCFD report covers activities from both 2021 and 2022, as well as updates from 2023. Where possible, we denote the time-period of the activities described. In the future, we intend to publish Carlyle's TCFD report on an annual cadence as an integrated part of Carlyle's firmwide ESG Report.

Climate change is complex, and it is challenging to analyze or predict the exact interrelated impacts it may have on an investment portfolio, although data and insights continue to evolve our understanding. We are focused on improving our insights while developing strategies that we believe will make our investments more resilient to a wide array of potential outcomes. Importantly, transparency and disclosure remain critical components to articulating our learnings and challenges to stakeholders.

# \$25 Billion

structured in cumulative ESG-linked financings

<sup>1</sup>There is no guarantee that any ESG target, projection or goal will be met, that any ESG activities will be implemented to the same degree for all funds, or that they will create a positive ESG or financial impact.  
<sup>2</sup>Please refer to page 3 of Carlyle's 2023 ESG Report for important definitions used herein.  
<sup>3</sup>Information on climate goals is provided by portfolio companies and is not validated by a third party. While Carlyle believes the data received from portfolio companies to be reliable, we do not attest to the accuracy of the information received.

## TCFD Metrics

### GLOBAL HIGHLIGHTS

Total invested in renewable and sustainable energy development platforms by Carlyle funds as of December 31, 2022 \$1.45BN

Total installed capacity in clean energy systems via Carlyle's Renewable and Sustainable Energy platform as of December 31, 2022 833MW

### ESG-LINKED FINANCINGS

HCP's (Carlyle portfolio company) credit facility with interest rate tied to post-consumer recycled and bio-plastic packaging procured as a proportion of total plastic packaging produced \$605MN

Cepsa's (Carlyle portfolio company) credit facility with interest rate linked to Cepsa's 2030 carbon targets: by 2030 (versus 2019), a 55% decrease in absolute Scopes 1 and 2 emissions, and a 15-20% decrease in the carbon intensity index of its energy products sales including Scope 3; a third KPI is aligned with Cepsa's gender diversity goal of having 30% of leadership positions held by women by 2025 €2.0BN

Carlyle Asia Subscription Facility's ESG-linked credit facility for Carlyle's Asia private equity platform linked to GHG footprinting portfolio companies, as well as goals related to diversity, and ESG-competent board training for Carlyle board directors \$2.75BN

### GREENHOUSE GAS FOOTPRINTING *all data as of December 31, 2022*

Years of work to footprint Scope 1 and Scope 2 CO<sub>2</sub>e emissions for Majority-Owned portfolio companies across the most recent vintages of our three primary corporate private equity strategies: US Buyout, Europe Buyout, and Asia Buyout, as well as the majority of our International Energy platform; the work was accomplished through a partnership with a GHG footprinting and ESG data collection technology platform and our dedicated ESG team Three<sup>3</sup>

In US Buyout, our coverage of GHG footprints increased from 22% of Majority-Owned companies in 2018 to 100% in 2022 100%

In Europe Buyout, our coverage of GHG footprints increased from 35% of Majority-Owned companies in 2018 to 100% in 2022 100%

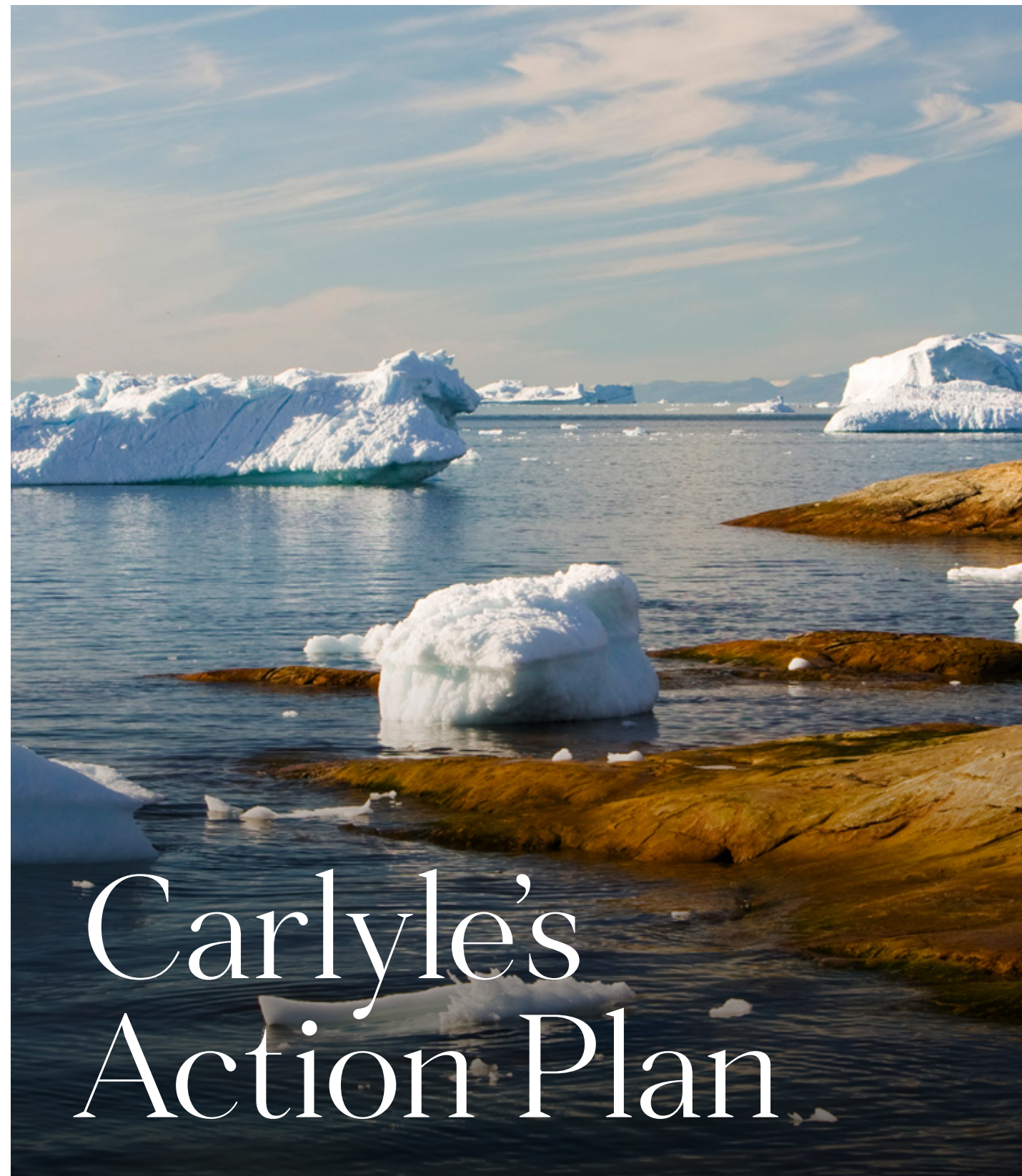
<sup>3</sup>Please note this data is as of December 31, 2022. In 2023, we completed our fourth year of carbon footprinting across the aforementioned scope. Data as of December 31, 2022 unless otherwise stated

*“As private market investors, we will continue to seek to invest in attractive assets that may also accelerate progress on climate change and the energy transition. By using our capital, expertise, and global resources to help companies across industries become more climate resilient and strive to capitalize on the energy transition, we believe there is significant investment opportunity over the long term.”*



**HARVEY SCHWARTZ**  
Chief Executive Officer





Carlyle's action plan on climate change incorporates the recommendations from "TCFD for Private Equity General Partners: A Technical Guide", which addresses each pillar of the TCFD in turn, and outlines a series of priority actions in each specific pillar. We have highlighted the corresponding actions taken by Carlyle over 2021-2022 in support of these pillars.

#### GOVERNANCE

##### Objective

Raise climate awareness throughout the organization and broader field

##### Carlyle Actions

Carlyle played an active role in raising climate awareness in the broader field. For example, we:

- 01** Continued our leadership in the [ESG Data Convergence Initiative](#) as co-head of the Initiative's Steering Committee. The initiative has reached over 325 global LP and GP participants representing more than \$27T in AUM. The group's focus is to catalyze convergence towards reporting on a standard set of ESG metrics for private companies, including greenhouse gas emissions and renewable energy use. In 2023, we are additionally serving on the EDCI's net zero Working Group.
- 02** Contributed to FCLT's "Grey-to-Green Working Group" and research report.
- 03** Contributed as a member of the One Planet Private Equity Funds Initiative, a group of private investment firms focused on integrating climate change into



our investment stewardship, including through our participation in ongoing working groups, leadership summits, and the 2022 [deliverables](#).

- 04** Joined the Initiative Climat International (iCI) Europe, a global, practitioner-led community of private equity firms and investors that seek to better understand and manage the risks associated with climate change.
- 05** Spoke at BloombergInvest, The Energy Intelligence Forum's "How Will Finance Balance net zero Pressure with the World's Energy Needs?" session, Insider's Financing a Sustainable Future roundtable, Barclays Sustainable Finance Conference, the BVCA Forum, the UK Transition Plan Task Force Private Equity Roundtable, as well as multiple industry conferences on climate change and ESG more broadly.
- 06** Directly engaged with Ceres, the Institutional Investors Group on Climate Change, iCI, and other leading organizations on identifying leading practices in integrating climate change considerations as part of the investment process.
- 07** Promoted climate integration in higher education by speaking at climate and ESG-focused events such



as London Business School's 2022 Energy Summit and Princeton University's Impact Capital Club.

**08** Submitted comments to IIGCC's net zero Implementation Framework guide (NZIF) and ICI's draft guidance for net zero for private equity.

**Carlyle Actions**

Carlyle also implemented several initiatives to raise climate awareness throughout our organization:

**01** Conducted systematic ESG training sessions with a set of investment teams and provided investment teams with an overview of potentially significant ESG issues, such as climate change.

**02** Hosted a discussion on Climate Risk and Opportunity at Carlyle for our annual Finance Training Day attended by about 40 Carlyle professionals.

**03** Published our second annual impact report for investors in our Renewable and Sustainable Energy strategy, quantifying the climate-related impacts of the underlying investments such as new installed capacity and total energy generated.

**04** Held targeted educational sessions, such as a workshop for our European private equity investment team focused on GHG emissions and footprinting.

**05** Provided 40+ Carlyle-employed portfolio company board directors with ESG training tailored to board members, including an interactive section on climate change covering topics such as climate risk and decarbonization.

**Carlyle Actions**

Finally, we engaged with our portfolio companies and management teams on climate change issues through several different means. We:

**01** Held thematic webinars to help educate our portfolio companies on issues such as decarbonization pathways.

**02** Engaged I:I with a subset of our portfolio companies to help them understand their greenhouse gas footprint and actionable ways to seek to reduce it (please see the [Risk Management section](#) for more information), and also engaged I:I with certain portfolio companies that are working to set decarbonization targets and action plans.

**03** Hosted a sustainability workshop welcoming over 70 portfolio company attendees, covering key climate and ESG topics such as how to develop a GHG management strategy, how to set GHG reduction targets, and climate-related regulation.

**04** Requested climate-related data points from our Global Private Equity portfolio companies (see [Risk Management section](#) for more detail).

**05** Developed new educational materials for portfolio companies centered on climate-related issues, including green information technology, which was rolled out via a webinar welcoming ~60 attendees.

**06** Presented on climate change and the energy transition at portfolio company-hosted events and conferences to promote climate education within various levels of their organizations, including Beautycounter's Raise the Impact Forum.

**07** Helped 22 companies set their own Paris-Aligned Climate Goals, as further described in the [Carlyle Climate Goals section](#) of this document.

**08** Launched a decarbonization-linked financing program across segments of our Global Credit platform, providing an electable incentive for borrowers to reduce GHG emissions or achieve other climate-related targets. Please see [the ESG-linked financings section of this document](#) for additional information.

**09** Shared Responsible Investment scorecards with GPs in our Global Investment Solutions portfolio that provide practical tools and suggestions on how to improve performance on climate issues, and other ESG practices.

**GOVERNANCE**

**Objective**

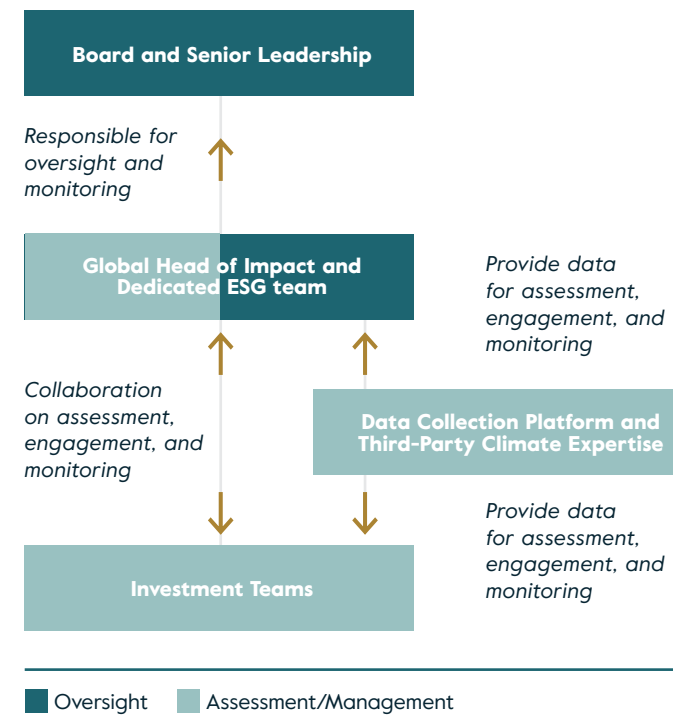
Define climate-related oversight and governance

**Carlyle Actions**

**01** In 2020 Carlyle formally established oversight for our ESG activities, including our approach to climate risks and opportunities, through The Carlyle Group Board of Directors. The Board receives regular updates on the firm's ESG strategy and investment implications, which have included Carlyle's approach to climate risk and opportunity. One of the members of our Board of Directors has been appointed by the Nominating and Corporate Governance Committee of the Board as the ESG lead, directly responsible for oversight of the firm's work in this area.

**02** Carlyle's Global Head of Impact is directly responsible for Carlyle's climate strategy and reports into the firm's Chief Operating Officer.

**03** Please see the below graphic, which details our climate governance.



**STRATEGY**

**Objective**

Develop an implementation plan

**Carlyle Actions**

Our current climate strategy includes the following aspirational steps at both the firm-level and within our funds' portfolios:

**Firm:**

**01** Identify how climate risks and opportunities can impact portfolio holdings, and in some instances, establish strategy-specific recommendations.

**02** Establish appropriate governance, oversight, and resourcing work toward building resilience against climate change recommendations.

**03** Finalize standardized operating procedures for existing climate goals and any relevant verification, as well as establish further governance initiatives.

**04** Continue to build out and enhance capabilities to monitor the climate exposures of portfolio holdings with more detail, and continue progress towards climate-change related goals for the firm.

**05** Report on our activities and progress towards our goals through an annual TCFD report.

**Portfolio:**

**01** Depending on the materiality of climate risks and/or opportunities, initiate deeper diligence—integrate third-party expertise where necessary and appropriate.

**02** Track climate-change related data points for Global Private Equity investments annually over our hold period.

**03** Partner with select portfolio companies on tailored plans to seek climate change-related value creation.

**04** During due diligence, understand how third-party fund managers in our GIS portfolio consider climate change in their investment activities and reporting.



### Carlyle Actions

The Carlyle strategy for managing climate risk and opportunity is complemented by several robust climate-related activities across the firm. Carlyle:

- 01** Became one of the first major private equity firms to set a net zero by 2050 goal with associated Near-Term Climate Goals.
- 02** Invested over \$1.45B in renewable and sustainable energy as part of our Global Infrastructure portfolio as of December 31, 2022.
- 03** Achieved operational carbon neutrality as a firm for the 6th year<sup>1</sup>.
- 04** Became one of the first major PE firms to publish TCFD report in 2020.
- 05** Launched several portfolio-level initiatives, including supporting decarbonization pathway development with multiple portfolio companies, the decarbonization-linked financing program noted in the Governance section of this document, and the launch of our “Energy + Carbon Playbook” for portfolio companies in October 2021, a step-by-step resource to work toward profitably decarbonizing.
- 06** Developed a transition readiness assessment for all portfolio companies in the Carlyle International Energy Partners platform with targeted recommendation for the fund[s] and each portfolio company. Work was carried out in partnership with Baringa Partners’ energy and ESG team and informed by the Bank of England’s climate stress testing methodology. We held debrief calls with each company and encouraged each to report progress toward the recommendations at a 2022 Board meeting.

### STRATEGY

#### Objective

Conduct materiality analysis on a subset of current portfolio holdings to identify climate risk exposure

#### Carlyle Actions

**01** In 2022, Carlyle partnered with two Big Four global accounting firms to develop an internal standard operating procedure (“SOP”) document that outlines the scope, definitions, calculation methods, documentation, data quality guidance and verification, governance responsibilities, and reporting protocol for our climate goals. This analysis has helped to identify areas of high potential value-at-risk from near-term energy transition risks. In addition, we are working with a technology and consulting firm to generate emissions proxy calculations for certain portions of our investment portfolio where bottom-up greenhouse gas footprinting may not be feasible.

#### NOTE ON SCOPE

This document covers Majority-Owned direct equity and credit investments made by The Carlyle Group. Due to our different business model, this policy does not apply to related entities AlInvest (Global Investment Solutions) or NGP. More information on Global Investment Solutions’ ESG approach can be found at the [following link](#).

### RISK DEFINITIONS

*In assessing the potential risks from climate change, we look to the definitions established by the TCFD, as set forth below. Given the average hold period of our typical investment, we focus most on potential material acute physical risks, and policy & legal, technology, market, and reputation transition risks. The broader set of risks are important components of longer-term strategy*

#### Physical risks resulting from climate change:

##### Acute risks:

*Event-driven exposures, including the increased severity of extreme weather events (cyclones, hurricanes, floods, etc.); and*

##### Chronic risks:

*Longer-term shifts in climate patterns (e.g., sustained higher temperatures) that may cause sea-level rise or chronic heat waves, for example.*

#### Transition risks resulting to the transition to a lower-carbon economy:

##### Policy and legal risks:

*The evolution of regulations and potential litigation or legal risk;*

##### Technology risks:

*Technological improvements or innovations that support the transition to a lower-carbon, energy-efficient economic system;*

##### Market risks:

*The effects of climate change on supply and demand; and reputation risks: changing customer or community perceptions related to climate considerations.*



<sup>1</sup>Please see page 67 for additional information on our approach to carbon neutrality, including the role of carbon offsets.



**RISK MANAGEMENT**

**Objective**

Define key climate performance indicators for a subset of portfolio holdings

**Carlyle Actions**

**01** We track certain ESG key performance indicators (KPIs) that we believe are relevant across diverse geographies and assets for our Global Private Equity investments. These KPIs may include a dedicated greenhouse gas emissions module and several climate-related questions, such as if a company purchases renewable energy and/or has a target for purchasing renewable energy, if a company monitors energy usage and/or greenhouse gas emissions and reports on their footprint, if a company purchases carbon credits, and if a company has set energy efficiency or greenhouse gas emissions reduction targets.

**02** Additionally, for a subset of investments made by our Renewable and Sustainable Energy funds, in which climate metrics are closely linked to the core businesses



of the portfolio companies, we perform a qualitative and quantitative analysis<sup>1</sup> of the climate impact of each investment as part of our due diligence process, which is included in our Investment Committee memos. As an example, we estimated the total carbon emissions abatement capacity potential of a pipeline of solar projects in various stages of development. This quantitative approach helps us refine our investment analysis and evaluation and more effectively underwrite our renewable and sustainable energy investments. These calculations are tracked and aggregated annually at the portfolio company and strategy levels.

**Carlyle Actions**

**Portfolio greenhouse gas footprinting:**

**01** Importantly, we recently completed our fourth year of work to footprint Scope 1 and Scope 2 CO<sub>2</sub>e emissions for Majority-Owned portfolio companies across the most recent vintages of our three primary corporate private equity strategies: US Buyout, Europe Buyout, and Asia Buyout, as well as the majority of our International Energy platform. The work was accomplished through a partnership with a greenhouse gas footprinting and ESG data collection technology platform and our dedicated ESG team. In cases where we were unable to complete the greenhouse gas footprint, we used estimations and assumptions to calculate a GHG footprint, for example by using square footage, location, and activity data exercise due to circumstances such as exits from the portfolio<sup>2</sup>.

**02** Our portfolio GHG footprinting methodology is consistent with the Greenhouse Gas Protocol's Corporate Accounting and Reporting Standard and Scope 2 Guidance developed by the World Resources Institute. It includes the portfolio company Scope 1 emissions from owned or controlled sources as well as portfolio company Scope 2 emissions associated with purchased energy for the 2022 reporting year, expressed in MT CO<sub>2</sub>e. We did not systematically gather data on Scope 3 emissions. Where material,

we encourage portfolio companies to calculate Scope 3 emissions, but recognize this may not be feasible for many companies at this time.

**03** For most companies, we assisted in completing and calculating the greenhouse gas footprint using data provided to us. For businesses that already undertake a greenhouse gas footprint exercise annually, we were able to review the data to determine completeness and accuracy.

**Carlyle Actions**

We believe this greenhouse gas footprinting exercise can help companies better understand their climate impact, exposure and resilience, as well as better prepare them for potential climate-related policy changes, to help them comply with GHG emissions reduction and reporting requirements from customers and regulators, to understand risks, and to better position themselves for growth in a business and consumer context that is increasingly focused on climate change.

**01** Through this exercise, we observed that there are increasing market pressures for consumer-facing companies to disclose and reduce carbon emissions. Investors, employees, and customers are increasingly interested<sup>3</sup> in the climate positioning of the companies they invest in, work for, and buy from. By calculating and publishing carbon data, companies may be able to improve transparency, bolster their credibility and reputation among stakeholders, and improve profitability through identifying cost savings and operational efficiency measures. Strategic carbon management can potentially be leveraged as a value proposition that brings a competitive advantage.

**02** We hope to continue to share the learnings and challenges we experienced with our peers and stakeholders, to help advance this work across the investment field.



# Fourth Year

*in a row of work as of 2023 to greenhouse gas footprint Scope 1 and Scope 2 CO<sub>2</sub>e for certain portfolio companies*

<sup>1</sup>In certain instances, we are unable to perform a quantitative climate impact analysis where credible factors, estimates, or abatement models do not exist.  
<sup>2</sup>Beginning in 2020, Carlyle sought to obtain GHG emissions for Majority-Owned investments, based on cumulative fully diluted ownership, in US, European, and Asian Buyout funds. Where a company included in this group does not already calculate GHG emissions, Carlyle has urged the portfolio company to calculate its emissions via a third-party tool using primary data. While primary data is preferred, it is recognized this is not always possible to collect and reasonable estimates using proxy figures or extrapolation (e.g. building area) are accepted. Where a company does not calculate its emissions, Carlyle partners with a third-party provider to estimate emissions.  
<sup>3</sup>Source: PwC <https://www.pwc.com/gx/en/news-room/press-releases/2022/investors-continue-to-prioritise-climate-action-despite-lacking-trusted-information.html>



## RISK MANAGEMENT

### Objective

Integrate climate considerations within the investment process

### Carlyle Actions

#### Carlyle Global Private Equity (GPE) Process:

**01** Carlyle developed a climate risk triage and materiality analysis, which we began integrating into diligence in 2021

**02** We use a risk-based approach based on investment type, sector, location/geography, exposure to carbon-related regulations, intended hold duration, and likelihood of climate-related considerations potentially impacting the exit process

**03** Where a potential investment triggers issues with respect to two or more of these categories, we recommend additional climate change risk and opportunity review, in some cases leveraging third party expertise

#### Carlyle Global Credit Process

**01** Our Global Credit platform rolled out a proprietary ESG Materiality Analysis tool at the beginning of 2021 which is now used to evaluate select investments prior to when Investment Committee or Credit Committee investment decisions are made. The tool focuses on climate change in three ways. First, it draws on the SASB framework to focus on material climate change-related risks for a given sector and industry, second it suggests some targeted engagement questions to use in any conversations with management on material ESG risks, including climate change, where relevant, and third, it incorporates a third-party data set that highlights the potential physical risks of climate change based on the geography of the borrower's operations and/or supply chain. A summary of the ESG Materiality Analysis is included in the investment committee memo for relevant strategies. In certain instances, climate change-related risks have been a contributing factor in our decision to decline a potential investment. We recently began incorporating an ESG Risk Rating into the ESG Materiality Analysis as well.

#### Carlyle Global Investment Solutions

**01** Our Global Investment Solutions platform adopted a climate change approach in 2020.

**02** In 2021, a dedicated climate change section was added in the due diligence questionnaire used when making new primary fund commitments which aims to establish how third-party fund managers consider climate change in their investment activities and reporting.

**03** In 2022, we developed an assessment tool to help identify potentially material sustainability risks, including climate change, during diligence of co-investment and certain secondary investments. The tool has been developed based on the Sustainability Accounting Standards Board (SASB) framework as well as country risk indices. It focuses on certain material sustainability risks related to key company characteristics such as industry / sector and geography of operations / supply chain. Typically, the conclusions of the sustainability risk analysis are included in the investment proposal that is presented to the investment committee.



## METRICS AND TARGETS

### Objective

Support holdings with tools and recommendations to address climate risk and opportunity

### Carlyle Actions

We have worked to significantly expand the support we are able to provide to portfolio companies as they work to address climate change. Some examples of our work done in 2022 include:

**01** Collected the greenhouse gas footprint for 113 of our portfolio companies

**02** Benchmarked GHG footprint performance and outlined potential steps to accelerate progress on GHG emissions reduction and ran dedicated engagement sessions on these topics with 25 portfolio companies

**03** Developed and launched the Green Information Technology Playbook which provides detailed information on how technology leaders can contribute to decarbonization and sustainability efforts at their organization. This playbook was launched in December 2022 via a webinar with ~60 attendees including technology, ESG and energy management professionals from portfolio companies.

**04** Held regular direct calls with a subset of our higher carbon intensity portfolio companies to support them individually in setting climate goals, identifying and implementing decarbonization levers, understanding and reporting on progress, and more. In addition to our in-house expertise, we have built a roster of external advisors and consultants to assist companies in setting and executing climate goals.

**05** Hosted informational events for portfolio companies, such as our 2022 and 2023 Sustainability Workshops, which included sessions on developing resilient climate strategies and setting climate goals. The workshop welcomed over 70 portfolio company attendees.

## RISK MANAGEMENT, METRICS AND TARGETS

### Objective

Conduct yearly reviews of portfolio holdings to assess progress towards climate objectives

### Carlyle Actions

Our portfolio monitoring approach is still in progress, as we work to identify the most useful information to help inform our understanding of the composition of the portfolio, how to focus our portfolio engagements, and our efforts to track progress over time. A few important components of this development include:

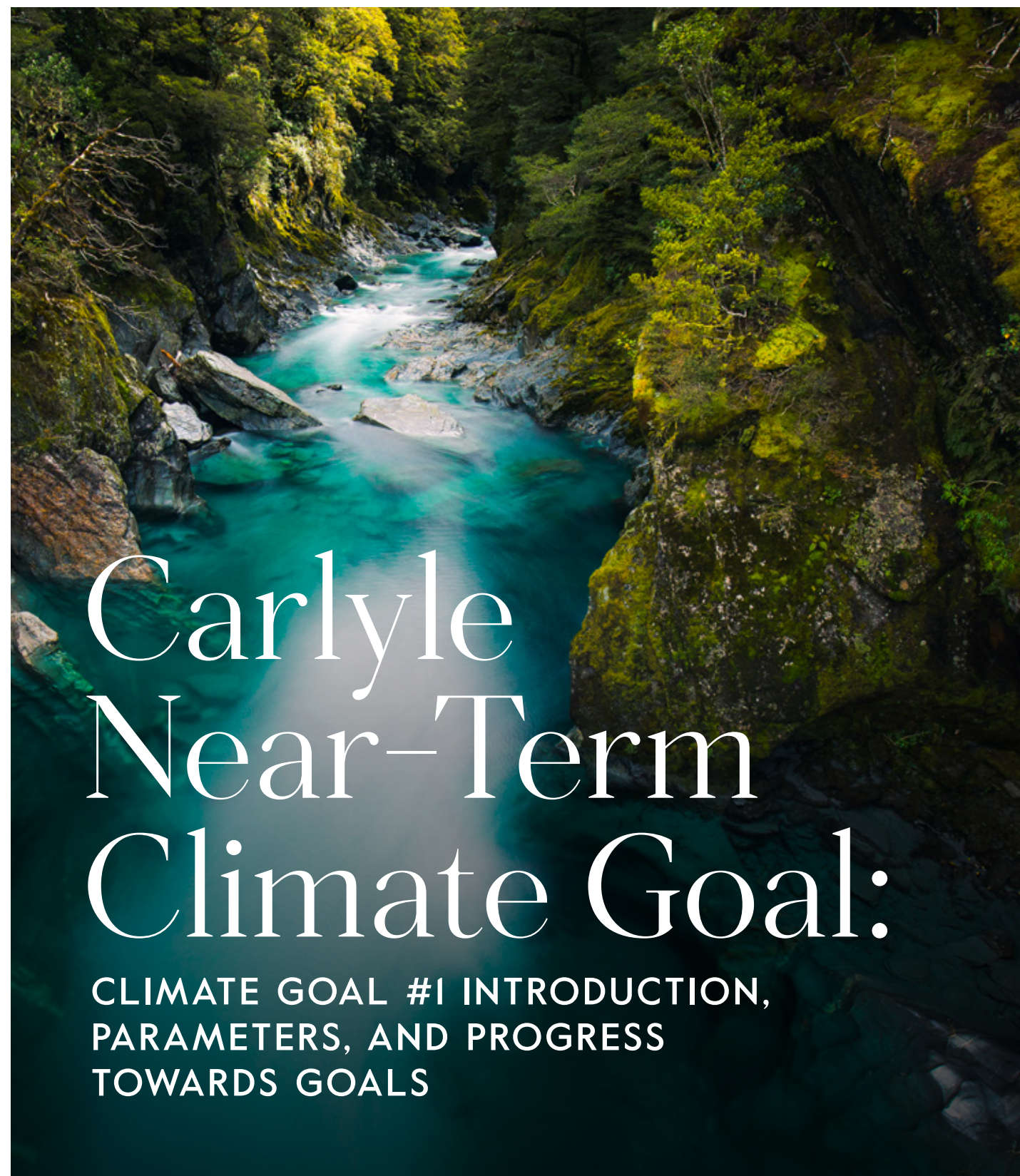
**01** As mentioned previously, this past year we partnered with two Big Four global accounting firms to develop an internal standard operating procedure ("SOP") document that outlines the scope, definitions, calculation methods, documentation, data quality guidance and verification, governance responsibilities, and reporting protocol for our climate goals. This, combined with our greenhouse gas footprinting work as detailed in the Risk Management section of this document, has helped to further identify what we believe to be the areas of highest potential value-at-risk from near-term energy transition risks and associated value creation initiatives.

**02** We also track a series of data points for our Global Private Equity investments which focus the maturity of climate change-related management practices. We use this data, in part, to understand the progress of investments towards climate objectives and in some instances, to report this progress to our Limited Partners.

**03** Within GIS, we have set up our own in-house investment data solution to capture climate and other ESG portfolio company metrics that are reported to us by third-party fund managers. This will help us to better monitor, measure, evaluate, and report to our investors on climate and other ESG performance as more data becomes available.

*In certain circumstances, this tool may not be applicable and as a result may not be used. For example, our Aviation Finance team does not use this tool, given the bespoke nature of that investment strategy. We are happy to share our approach to ESG/climate risks and opportunities for our Aviation Finance strategy separately.*





# Carlyle Near-Term Climate Goal:

CLIMATE GOAL #1 INTRODUCTION,  
PARAMETERS, AND PROGRESS  
TOWARDS GOALS

In February 2022, Carlyle announced our Long-Term Climate Goal to achieve Net Zero GHG emissions by 2050 or sooner across direct investments, along with a set of Near-Term Climate Goals. Our first Near-Term Goal (herein known as Goal #1) is for 75% of Carlyle’s In-Scope portfolio companies’ aggregated Scopes 1 and 2 emissions to be covered by Paris-Aligned Climate Goals by 2025.

The scope of Goal #1 is Carlyle’s Majority-Owned corporate private equity, power, and energy portfolio companies (companies defined as “In-Scope Companies”), set as of December 31, 2021. In partnership with these portfolio companies, we are pleased to report that we have made meaningful progress towards Goal #1 over the past year.

We are committed to driving real emissions reductions within certain portfolio companies to position them competitively in a decarbonizing global economy and achieve better financial outcomes<sup>1</sup>. We strive to be transparent and therefore seek to publicly report on progress toward Goal #1 and our work to achieve it. Through actively engaging with stakeholders across the field on this important topic, collaborating to develop better information disclosure and calculation frameworks and methodologies, and sharing our learnings and tools, we hope to move the industry forward.

**CLIMATE GOAL #1 PARAMETERS**

We have worked to clearly define how we measure our progress towards Goal #1. Specifically, Carlyle has developed an internal SOP document that outlines the

scope, definitions, calculation methods, documentation, data quality guidance and verification, governance responsibilities, and reporting protocol for our portfolio company’s climate goals. These procedures were informed by leading standards including, The Greenhouse Gas Protocol—A Corporate Accounting and Reporting Standard (“GHG Protocol”), Partnership for Carbon Accounting Financials (“PCAF”) Global GHG Accounting and Reporting Standard for the Financial Industry, Institutional Investors Group on Climate Change (“IIGCC”), and Initiative Climate International (“iCI”) guidance on GHG Accounting for Private Equity. The SOP has been independently reviewed by two third-party Big Four accounting firms to assess and provide recommendations on several components including comparison against the aforementioned GHG accounting standards, technical rigor, and processes and controls. Additionally, our auditor, EY, has conducted an assurance readiness to determine consistency and completeness.

The scope of Goal #1 includes Carlyle’s Majority-Owned corporate private equity, power, and energy portfolio companies (companies defined as “In-Scope Companies”), set as of December 31, 2021. A company may subsequently be deemed out of scope based on defined criteria in our SOP including a change in ownership type (i.e., moving from majority to minority interest based on fully diluted ownership), a change in investment status (i.e., moving from an unrealized to a realized investment), or other major event.

# 75%

*of our In-Scope portfolio companies’ Scope 1 and 2 emissions to be covered by Paris-Aligned Climate Goals by 2025*

<sup>1</sup>Please see “Carlyle’s Near-Term Climate Goal” for the scope of this commitment.



**GOAL #1 CRITERIA**

A non-power portfolio company is counted towards the achievement of Goal #1 when it meets the following three criteria:

**Baseline:**  
Calculates a baseline GHG footprint, independently assured or verified by a third-party where possible.

**Targets:**  
Sets clearly defined short- and long-term GHG reduction targets aligned with the Paris Agreement<sup>1</sup>.

**Reporting:**  
Publicly reports on progress, ideally aligned with the TCFD.

88

companies were in-scope for Climate Goal #1

22

companies, representing 56% of Scope 1 and Scope 2 emissions, have met the Goal #1 criteria

Goal #1 is measured against a baseline of the GHG data for each In-Scope Company for the calendar year 2021. Carlyle collects total Scope 1 and Scope 2 GHG emissions from In-Scope Companies (not allocated based on an attribution factor) through one of three methods:

- 01** The company calculates the emissions, either in-house or via a third-party, and submits the data to Carlyle<sup>2</sup>,
- 02** Carlyle assist the company with calculating its emissions or
- 03** Carlyle engages a third-party to perform a proxy calculation using factors which may include revenue, sector, and geographic location.

The criteria for counting a company towards Goal #1 were selected based on a number of factors including alignment with the rapidly evolving set of aforementioned carbon accounting frameworks, leading industry practices, the diversity of our underlying portfolio companies, the varying levels of company maturities with regards to GHG management, and the intent to enable near-term progress while setting the foundation for long-term scalable success. While we believe it is not feasible to fully decarbonize a business during our hold period, we believe our role can be a catalyst for setting qualifying portfolio companies on the path towards decarbonization using a science-based approach, as we think this will lead to stronger long-term competitive positioning for our portfolio companies<sup>3</sup>.

**CLIMATE GOAL #1 PROGRESS TOWARDS GOALS**

As of June 30, 2023, in our judgment, 88 portfolio companies were in-scope for Climate Goal #1, and 22 companies, representing 56% of Scope 1 and Scope 2 GHG emissions of such companies have met the Goal #1 criteria. We are pleased with the progress achieved in the first year the goal was in effect. While there is more work to be done, we believe our proactive engagement and collaboration with portfolio companies will continue to enable forward progress. Our engagement with portfolio companies includes providing companies with guidance and support, activating trusted third-party vendors for bespoke support, offering direct assistance from the Carlyle ESG team (in certain instances), and assisting in structuring decarbonization-linked financings for select portfolio companies.

There are number of challenges our portfolio companies can face when pursuing an effective decarbonization pathway. This includes obtaining comprehensive data to accurately measure and identify significant sources of emissions, competing internally for appropriate budget and resourcing amongst a broadening set of corporate priorities, locating economically viable low-carbon reduction technologies, and implementing emissions reduction activities in places where a company has influence versus control (e.g., leased properties or supply chain). In the next year, we seek to continue to help our portfolio companies address these

challenges by employing a tactical set of solutions, potentially including technology-enabled carbon measurement platforms, preferred partnerships with decarbonization specialty firms, and leveraged purchasing opportunities with companies that provide carbon mitigation instruments (e.g., renewable energy credits), as appropriate.

**LOOKING AHEAD**

We recognize that this is just the beginning. To date, we have focused our near-term work on the most carbon intensive Majority-Owned companies within our Global Private Equity portfolio, as well as where we believe we have the strongest potential to affect change through majority ownership. Future progress may entail building out plans for executing on our net zero goals across our other investment strategies. As we continue on this journey, we welcome feedback and engagement with stakeholders and seek to continually improve our approach.

**CASE STUDIES**

The following pages detail two portfolio companies who have achieved Carlyle's definition of a Paris-aligned climate goal, and as a result have qualified for inclusion as part of the 22 companies that have achieved this goal during our ownership period.

<sup>1</sup>The approach for operating thermal power assets may differ based on evolving guidance and methodologies.  
<sup>2</sup>Carlyle encourages but does not require applicable companies to use The GHG Protocol Corporate Accounting and Reporting Standard using the operational or financial control method when calculating GHG footprint and to obtain assurance or verification. While Carlyle believes the data received from portfolio companies to be reliable, we do not attest to the accuracy of the information received.  
<sup>3</sup>While we recommend that portfolio companies consider aligning with globally recognized frameworks (e.g., SBTi) when setting GHG reduction targets, we do not require alignment with a single framework or standard.





Aspire to  
**Net Zero**  
 by 2050 with 2030 Scope 1 and Scope 2 targets

**100%**  
 eco-efficiency tracking in place at all manufacturing facilities

**Five**  
 carbon neutral manufacturing sites in Brazil (Scopes 1 & 2)

**34%**  
 of revenues from Eco-Premium solutions

**77%**  
 of R&D product pipeline focused on solutions with sustainability benefits

CASE STUDY

# Nouryon

## Seeking sustainable innovation in specialty chemicals

Nouryon is a global [specialty chemicals](#) leader. Markets and consumers worldwide rely on their solutions to manufacture everyday products, such as personal care, cleaning goods, paints and coatings, agriculture and food, pharmaceuticals, and building products. The global company's customer-centric business model provides tailored solutions designed to improve the performance, quality, and sustainability of its customers' products, which comprise essential items for millions of consumers.

Given the scale, necessity, and carbon-intensive nature of some of the end markets that specialty chemicals companies supply, we believe making the industry more sustainable is integral to a lower-carbon future. Accordingly, Nouryon's growth strategy looks to provide customers sustainable specialty chemicals solutions that address their specific use cases. To further incentivize progress and accountability internally, the company has set robust, time-bound targets to improve environmental performance and will continue to challenge itself to reduce environmental impacts, mitigate risks, and harness growth at the forefront of sustainable innovation. In addition to its aspiration to be a net zero organization by 2050, Nouryon targets a 40% reduction in its absolute Scope 1 and 2 greenhouse gas (GHG) emissions by 2030 from a 2019 base year. By the end of 2030, the company also seeks to reduce its total waste intensity and freshwater consumption intensity by 10% from a 2019 base year.

To meet their GHG goals, Nouryon developed a carbon business strategy with a long-term horizon and clear oversight. In 2022, the company established a GHG emissions roadmap with tangible actions across four key areas, detailed below. In order to help develop and accelerate the strategy, the Carlyle ESG team participated as part of the decarbonization strategy session.

**Energy Transition:** Renewable energy plays a key role in reducing Nouryon's emissions and creating a clear path to its 2030 goals. Nouryon was fortunate to start its decarbonization journey from a strong position in renewable energy in Sweden and Brazil. Building on this, recent on-site renewable electricity projects and agreements in Guangzhou, China, Mons, Belgium, and a planned project in Morris, Illinois are achievements that are creating momentum for Nouryon.

**Innovation:** With 77% of Nouryon's R&D product pipeline focused on sustainability benefits, the company continues to innovate to provide products that help customers achieve their sustainability needs. For example, using Nouryon's Expancel® microspheres to make packaging lighter drives transportation fuel efficiency and reduces transportation-related emissions. Similarly, the company's solutions are important for renewable energy-related products such as lightweight composite parts in wind turbines and insulation for high-quality, high-voltage cables; they also help make solar panels more durable and efficient.

**Carbon Operational Excellence:** Nouryon is working to improve its operational efficiency and optimize its fuel mix. For example, the company has partnered with Adven in Kvarntorp, Sweden, to source steam produced from renewable wood pellets instead of on-site fossil fuels. Similarly, five manufacturing sites in Brazil that the company operates are carbon neutral in Scope 1 and Scope 2 through customer partnerships and a unique, integrated manufacturing model (see call-out box below).

**Value Chain Collaboration:** Through supplier and customer partnerships, Nouryon plans to reduce indirect GHG emissions across its value chain and is currently evaluating lower-carbon raw materials suppliers and raw materials. In 2023, Nouryon announced it has joined Together for Sustainability (TfS), a global initiative of companies committed to raising sustainability standards throughout the chemical industry. In addition, Nouryon is meeting a growing demand from customers for product life cycle assessment (LCA) data—for example, product carbon footprints that can be used to help assess potential reduction opportunities.

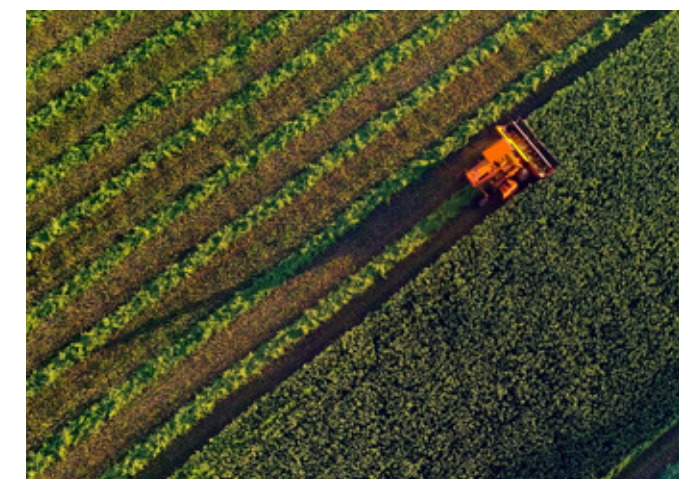
This work is starting to drive results. Between 2019 and 2022, the company reduced its absolute Scope 1 and 2 GHG emissions by 1.3% while growing revenue. In 2022, the company sourced 34% of its energy from renewable

sources such as hydro, wind, solar, biomass for power, and waste biomass steam.

Nouryon has been widely recognized for its work in sustainable chemistry. Nouryon achieved a Platinum EcoVadis rating<sup>1</sup> for its sustainability performance in 2022, placing Nouryon in the top 1% of companies then rated by the global sustainability ratings provider.

Also, the American Chemistry Council honored Nouryon's Agrilan® IO15 biodegradable liquid dispersant with its 2022 Sustainability Leadership Award for Product Safety, Innovation, and Transparency<sup>2</sup>, recognizing its value to growers globally seeking more sustainable ways to protect their crops. Growers use this multipurpose, non-persistent, biodegradable solution for aqueous crop protection and seed-treatment applications to help active ingredients dissolve more easily and enhance formulations. In addition, the dispersant does not contain risk or classified ingredients and is a non-endocrine disruptor.

Looking ahead, Nouryon aims to continue to prioritize value creation through its sustainability goals and innovate along the carbon business strategy's four themes, accelerating the specialty chemicals sector toward a more sustainable future.



Data shown has been provided directly by the portfolio company and has not been independently verified. There is no guarantee that the portfolio company will successfully implement its business plan or meet stated commercial or ESG targets. There can be no assurance that any trends described herein will continue. Past performance is not indicative of future results.

<sup>1</sup>Such rankings are based on methodology and criteria created by EcoVadis or the American Chemistry Council (as applicable), which are not known to Carlyle.  
<sup>2</sup>Source: Suzano, Nouryon <https://www.suzano.com.br/en/suzano-to-invest-2-8-billion-in-the-first-fossil-free-pulp-plant-in-brazil/#:-:text=The%20%242.8%20billion%20project%20is,to%20commence%20in%20Q1%202024;>

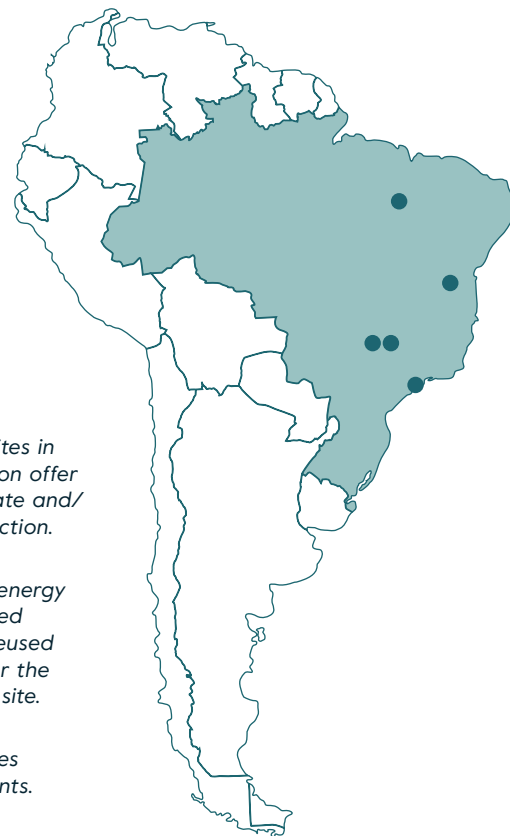


**INTEGRATED MANUFACTURING MODEL**

Nouryon's Integrated Manufacturing Model (IMM) helps deliver solutions that bleach pulp as raw material for tissue products directly to its customers' sites in Brazil. The company receives electricity from its customers generated from renewable biomass (eucalyptus) fuel. It uses this electricity in its electrochemical processes for making bleaching products. This on-site production eliminates the need for transport, helping to reduce transportation-related emissions. In 2021, five of these sites achieved carbon neutrality in Scopes 1 and 2. Nouryon also signed a long-term supply agreement with Suzano, a leading global eucalyptus pulp producer, for a new IMM in Mato Grosso do Sul, Brazil. Details about the partnership, which comprises one of the largest private sector investments currently under development in Brazil, can be found in Nouryon's most recent [sustainability report](#).

**CARBON NEUTRAL SITES IN BRAZIL**

- Imperatriz
- Eunápolis
- Três Lagoas (2)
- Jacareí



The five carbon neutral sites in Brazil operated by Nouryon offer on-location sodium chlorate and/or chlorine dioxide production.

Nouryon uses renewable energy from our customers sourced primarily from biomass. Reused resources effectively lower the carbon footprint of each site.

On-site production reduces transportation requirements.



10%

reduction goal in total waste intensity and freshwater consumption intensity by 2023

34%

of Nouryon's energy comes from renewable sources such as hydro, wind, solar, biomass for power, and steam from waste biomass

22%

of organic raw materials are derived from renewable sources

*Nouryon has been widely recognized for its work in sustainable chemistry. Nouryon achieved a Platinum EcoVadis rating for its sustainability performance in 2022, placing Nouryon in the top 1% of companies then rated by the global sustainability ratings provider<sup>1</sup>.*

<sup>1</sup>Source: Suzano, Nouryon [https://www.suzano.com.br/en/suzano-to-invest-2-8-billion-in-the-first-fossil-free-pulp-plant-in-brazil/#:~:text=The%20%242.8%20billion%20project%20is,to%20commence%20in%20Q1%202024.](https://www.suzano.com.br/en/suzano-to-invest-2-8-billion-in-the-first-fossil-free-pulp-plant-in-brazil/#:~:text=The%20%242.8%20billion%20project%20is,to%20commence%20in%20Q1%202024.;)



**\$3.5 Billion**

goal to expand in investments by 2026, with two-thirds invested in sustainable energies

*“Energy provides access to a better life and can be a driving force for prosperity. The exciting thing about our industry is that it is in the perfect convergence of innovation, disruption and opportunity. Our new ONE VARO Transformation strategy is our journey to achieve a just transition, and environmental, social and governance (ESG) commitments are a fundamental part of this approach.”*



**DEV SANYAL**  
VARO CEO

CASE STUDY

# VARO

## Balancing energy transition and energy security as part of business transformation

Founded in 2012 by Atlas and Vitol, VARO is a leading European energy company that manufactures, stores, and distributes conventional fuels and sustainable energies and services. Given its scale, we believe VARO plays a key role in facilitating Europe’s energy transition. In 2013, a fund managed by Carlyle acquired the company alongside the Vitol Group. Since then, both teams have worked closely with management to develop and implement a transformation strategy designed to capture opportunities associated with the energy transition, “future-proof” the company, and respond to the needs of employees, customers and governments.

VARO aims to be the energy transition partner of choice for reliable, accessible, and sustainable energy solutions, and is distinctly positioned to empower customers to pursue their own decarbonization efforts. VARO is playing its own part in this effort, with a goal to achieve net zero emissions by 2040. VARO plans for this ambitious goal to involve the following steps:

- 01** Expanding CAPEX investments to USD \$3.5 billion between 2022 and 2026—with at least two-thirds invested in biofuels, biomethane and bio-liquefied natural gas (bio-LNG), hydrogen, e-mobility and carbon removals;
- 02** Targeting to have 50% of group EBITDA come from the Sustainable Energies business by 2026;
- 03** Setting a near-term reduction goal of 40% absolute reduction of Scope 1 and Scope 2 greenhouse gas emissions by 2030 and 15% reduction in Scope 3 greenhouse gas emissions intensity by 2030, each against a 2022 baseline.

With these ambitions in mind, the company announced its ONE VARO Transformation strategy in July 2022, laying out its path to provide customers the sustainable and reliable energy solutions needed to reach net zero. VARO’s “twin engine” strategy seeks to balance both energy security and energy transition requirements for all segments of its customers’ businesses. Here, “Engine 1” represents the Conventional Energies business while “Engine 2” refers to VARO’s Sustainable Energies business.

In order to help accelerate progress on this strategy, we worked alongside the VARO team to serve as a thought partner in the overall construction of the strategy. We also helped to recruit their current CEO, Dev Sanyal who has a demonstrated track record in this work from his previous role as EVP of Gas and Low Carbon Energy at BP.

Engine 1 consists of manufacturing, storage, trading, marketing, and distribution. This segment’s priority is to continue to operate safely and reliably, reduce carbon emissions and intensity, and provide the energy security that is essential for customers.

Moreover, VARO established a process to optimize its energy consumption process and continue investing in energy efficiency modifications and process improvements. For example, in 2017 VARO invested around \$5 million to implement several energy projects at one of its main manufacturing hubs; these efforts have subsequently allowed the company to save energy and reduce its CO<sub>2</sub> emissions. VARO achieved a 6.6% energy efficiency improvement in 2022 compared with 2014—towards their target to increase energy efficiency by 6.8% in 2023. Some of the identified projects included:

- 01** Modifying the processing unit (vacuum distillation furnace), which has saved an estimated 40,000 MWh of energy and cut emissions by 7,750 metric tons of CO<sub>2</sub> between 2017 and 2020.
- 02** Reducing the production of out-of-specification products (“slops”) by nearly 40%, which lowered the energy consumption needed for heating during the desulphurization process. Since 2017, this initiative has saved 35,000 MWh of energy and avoided 6,775 metric tons of CO<sub>2</sub> emissions. In addition, slops reduction lowers the amount of low-quality by-product, which normally accumulates in the tanks and requires further reprocessing.
- 03** Adjusting the Hydrogen Manufacturing Units so that natural gas, rather than butane, can be used in



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the hydrogen generation process. Natural gas—which has a lower carbon content—has also replaced butane as a fuel feedstock for the furnace. Together, these modifications have reduced carbon emissions, saving 110,000 metric tons of CO<sub>2</sub> since 2017.

Engine 2 consists of five strategic growth pillars that VARO believes have the most attractive low carbon growth potential while also capitalizing on VARO's core strengths. The five pillars include:

**Biofuels:** VARO seeks to become an integrated producer of 2G<sup>1</sup> advanced biofuels, including Sustainable Aviation Fuel (SAF). Leveraging existing biofuels expertise, VARO aspires to build new renewable manufacturing facilities and, in time, repurpose older assets. The company is targeting Biofuel production of more than 250,000 metric tons per year by 2026 with a long-term goal of more than 500,000 metric tons per year. Most recently, VARO deepened its partnership with Lufthansa to explore the production and supply of SAF through a potential agreement for VARO to sell SAF volumes to Lufthansa beginning as early as 2026. The companies also plan to jointly investigate the use of non-edible biogenic feedstock to produce green hydrogen for potential later stage use in SAF production.

**Biomethane & LNG:** Aiming to be a leading producer of biomethane and bio-LNG, VARO aspires to develop its portfolio through both acquisition and greenfield development. Doing so should strengthen offers to industrial and road transport sectors. One recent step VARO has taken is the acquisition of 80% of the shares in Bio Energy Coevorden BV (BEC) in The Netherlands, a biogas manufacturer. VARO plans to double the current facility capacity from 300 GWh to 650 GWh by 2026. After the expansion, the site will be among the 3 largest biogas facilities in Europe. Furthermore, VARO acquired Renewable Energy Services (RES) through which it further expanded its biogas trading capabilities across 10 European countries.

**Hydrogen:** Utilizing its position as a hydrogen consumer to develop hydrogen production hubs, VARO has an existing project to invest in an electrolyzer at Bayernoil Refinery, with offtake meeting part of the demand from the refinery. Additional green and biogenic production could lead to offtake opportunities for industry, heavy transport, and synthetic fuels.

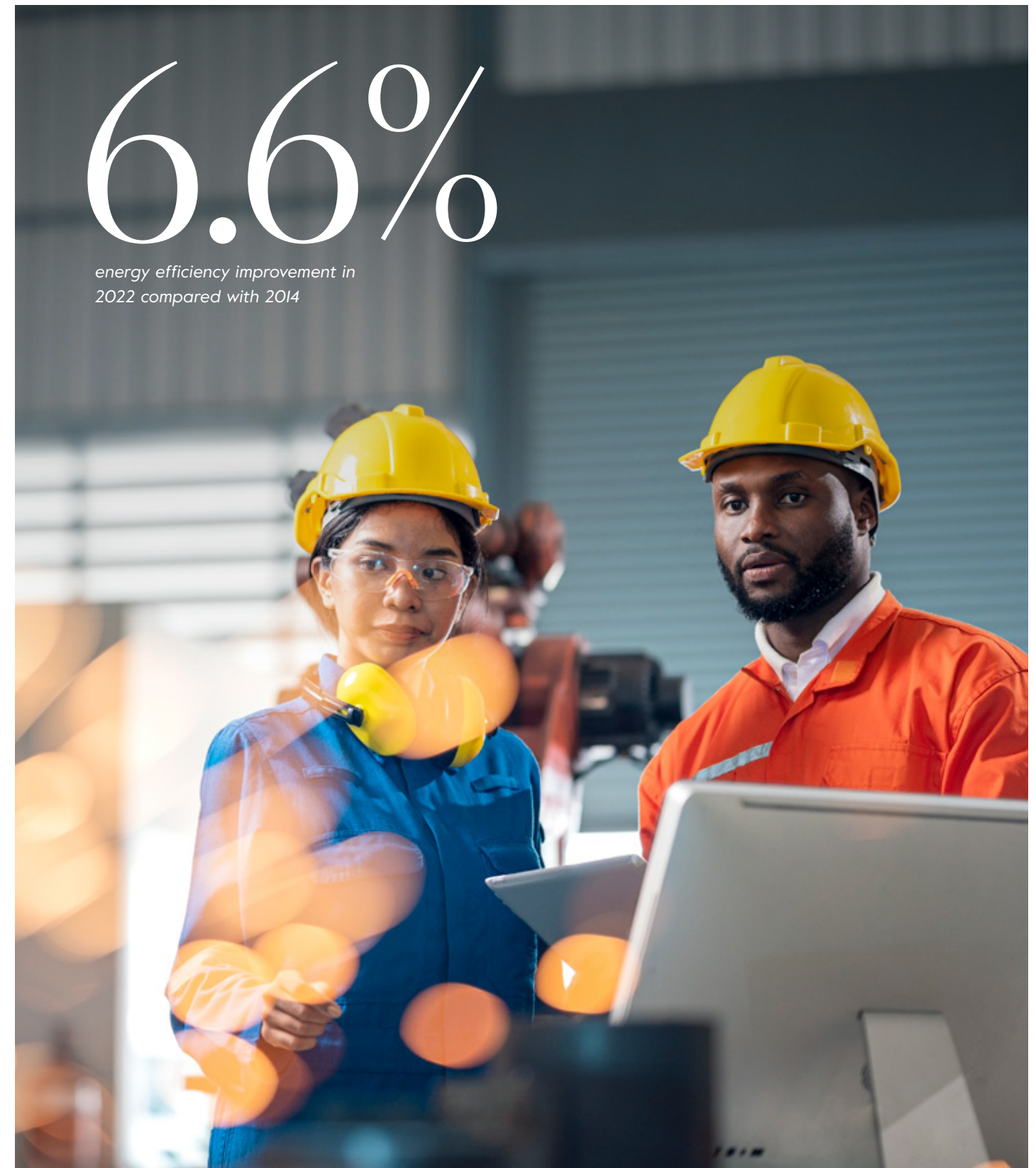
**E-mobility:** With the goal of growing its turnkey charging solution for customers transitioning to E-mobility, VARO plans to focus on further partnerships and acquisitions to create new businesses and enter new, less mature markets. Through its acquisition of stakes in [E-Flux](#), VARO is already at the heart of the EV ecosystem.

**Carbon Removal:** VARO aims to develop a fully integrated carbon removal offering. Building upon its existing expertise in carbon removal from its majority stake in [SilviCarbon](#), VARO plans to invest in forestry projects to generate high-quality nature-based carbon removal credits over the next five to ten years, and will look to optimize these efforts through advisory and trading.

#### LOOKING AHEAD

In order to support this change, VARO is focused on accelerating progress within key organizational building blocks. Carlyle works closely with VARO's management to support the implementation of this strategy and the advancement of its ambitious ESG agenda along key pillars including leadership and governance, partnerships, and motivated employees.

VARO looks forward to making progress on its strategy, which is central to its plan to create value over the long term. In a changing world, VARO believes that reorienting the company into the high growth, low-carbon sector will generate EBITDA growth, and place VARO at the forefront of the energy transition.



<sup>1</sup><https://www.mckinsey.com/capabilities/sustainability/our-insights/the-future-of-second-generation-biomass>



Climate change has critical implications for us as a global investment firm, creating both risks and significant investment opportunities.

We believe that companies that can navigate these emerging challenges—from physical risks to policy shifts and technological disruptions—and seize the mounting opportunities of the energy transition, will have the climate resilience to thrive in a changing world.

Our two previous TCFD reports have reflected our commitment to enhance our governance, strategy, risk mitigation, and metrics and targets regarding climate change over time. This year's report builds on that commitment and is centered on how we create and operationalize tools and resources to help accelerate progress to more effectively navigate the complex risks and opportunities of climate change as a firm and within our portfolio companies.

We learn a tremendous amount from our stakeholders in this important work and look forward to incorporating new insights and approaches as we seek to continually improve our thinking. Thank you to all of the external organizations mentioned in this report for being a part of that process. Addressing climate change takes tremendous work across numerous parties, and we are

grateful to all of our partners who have shared their time and expertise to drive our practice.

**MILESTONE ACHIEVEMENTS**

In 2018, we became the one of the first major private equity firms to set and achieve a goal of carbon-neutral operations offsetting our emissions from 2017. 2022 marks the sixth consecutive year we have been carbon neutral across our 29 global offices and ~2,200 employees.

In 2022, we updated our methodology<sup>2</sup> for calculating our operational greenhouse gas footprint, and enlisted Watershed to calculate our operational footprint for 2022. This updated methodology was retroactively applied to 2021 emissions as well. The calculations for our 2021 and 2022 operational emissions are reported in the Corporate Disclosures section of our 2023 ESG Report and reflect the updated approach. Watershed's calculation methodologies and emission factors undergo updates and third-party review that results in a statement of limited assurance twice per year. These updates include incorporating newer data, improving the granularity of measurement approaches, and creating custom methodologies to assist customers with needs outside the standard sector guidance.

Our operational emissions for 2021 and 2022 are detailed in the table below. As a complement to our decarbonization efforts, Carlyle offset its operational emissions in 2021 and 2022 by purchasing carbon credits through Varo, a Carlyle portfolio company, Respira, a carbon credit market, and Anthesis, a sustainability consulting firm and carbon offset brokerage firm. Before selecting the providers and projects, we conducted thorough diligence that included reviewing publicly available project documentation, in-depth conversations with experts and interviews with several voluntary carbon markets brokerages. We also used a framework for quality

control developed by a reputable third-party firm specializing in carbon credit ratings. Based on this diligence and advice, we selected a portfolio of projects and providers which we believe represents a mix of high integrity avoidance and removal credits. This year, we focused our carbon credit purchases on nature-based solutions and projects with co-benefits for local communities and biodiversity. We also intentionally selected a mix of projects from around the world acknowledging the need to mitigate and adapt activities globally.

To offset Carlyle's 2021 and 2022 emissions, we elected to support four projects:

**01** Delta Blue Carbon, located in Pakistan. The world's largest blue carbon project is protecting and restoring 350,000 hectares of tidal river channels and creeks, low-lying sandy islands, mangrove forests and inter-tidal areas on the south-east coast of Sindh in Pakistan and has been developed in collaboration with the local Government. This project generates credits certified under Verra's Verified Carbon Standard (VCS) and maintains a triple gold Climate, Community, and Biodiversity (CCB) standard<sup>3</sup>.

**02** Jari/Para REDD+<sup>4</sup>, located in Brazil. The main objectives of the JariPará project are to avoid GHG emissions by reducing the amount of deforestation within the project boundaries and to provide employment opportunities and skills development to local communities. The project is VCS and CCB certified<sup>5</sup>.

**03** Freres Biochar, located in the western U.S. Biochar is a versatile material that can improve agricultural soils, increase water infiltration, promote microbial populations and reduce smoke and wildfires. It also stores captured carbon for hundreds to over a thousand years. It is independently audited and its carbon negative lifecycle assessments independently verified by ACT commodities<sup>7</sup>.

**04** Keo Seima Wildlife Sanctuary REDD+<sup>4</sup>, located in Cambodia. Keo Seima Wildlife Sanctuary is accredited by VCS and has significant biodiversity and a storehouse of forest carbon. Spanning over 290,000 hectares, the protected area is home to a diverse array of wildlife, including 84 globally threatened species. The project is a collaboration between the Royal Government of Cambodia and the Wildlife Conservation Society. The projects aim is to reduce deforestation. It has also created jobs, supported education and training initiatives, and established an ecotourism venture that supports local communities. The project has also distributed nearly \$1 million through its Cash for Communities program, a mechanism that shares the revenue of carbon credits sales. These funds go directly to local communities<sup>6</sup>.

Category	2021 (MT/CO <sub>2</sub> e)	2022 (MT/CO <sub>2</sub> e)
Scope 1	3,099	3,058
Scope 2	2,827	2,954
Scope 3	4,977*	14,889*
Total Emissions	10,903	20,900

For 2022 London and NY offices, Q4 electricity consumption was proxy calculated using 2021 figures since utility bills are not yet available.

\*Employee business travel does not include data from Alplinvest or Aviation Partners, nor any transactions booked outside the Concur Travel & Expense platform.

<sup>1</sup>On an annual basis, Carlyle measures and offsets the carbon footprint of our operational greenhouse gas emissions inclusive of the following categories: office utilities (Scope 1 and Scope 2), data centers (Scope 2), and employee business travel (Scope 3, category 6).  
<sup>2</sup>Carlyle has adopted the calculation-based quantification methodology to estimate emissions, as appropriate emission factor guidelines have been released by authoritative sources covering Carlyle's reported activities. Our selected unit measurement for emissions will be CO<sub>2</sub>e throughout our GHG footprint calculation. Activity data is collected from key internal and external data sources including, for example, invoices, reports provided by suppliers (such as building managers and travel suppliers) and internally generated consumption reports (such as expenses claimed). Carlyle calculates Scope 2 emissions utilizing a location-based methodology based on the emissions factors. The location-based method involves applying a "national grid average" emission factor which is an average that relates to the grid on which electricity consumption occurs. Employee business travel does not include data from Alplinvest or Aviation Partners, nor any transactions booked outside the Concur Travel & Expense platform.  
<sup>3</sup>Source: Respira <https://www.respira-international.com/portfolio/delta-blue-carbon/>  
<sup>4</sup>A UN-backed program, 'REDD' stands for 'Reducing emissions from deforestation and forest degradation in developing countries. The '+' stands for additional forest-related activities that protect the climate, namely sustainable management of forests and the conservation and enhancement of forest carbon stocks.  
<sup>5</sup>Source: Varo  
<sup>6</sup><https://registry.verra.org/app/projectDetail/VCS/1650>  
<sup>7</sup>Anthesis



GLOBAL INVESTMENT SOLUTIONS

CARLYLE | ALPINVEST

# Responsible Investing Update





# Introduction from Ruulke Bagijn

*The SDGs are aspirational in nature. The analysis involved in determining whether and how certain investments may contribute to or support the SDGs is inherently subjective and dependent on a number of factors and Alpinvest makes no commitment or guarantee that it is investing in companies that have a formal commitment or plan or take specific actions to support or contribute to the SDGs. There can be no assurance that reasonable parties will agree on a decision as to whether certain investments contribute to or support a particular SDG. Accordingly, investors should not place undue reliance on Alpinvest's application of the SDGs, as such application is subject to change at any time and at Alpinvest's sole discretion.*

With over \$63 billion assets under management (AUM), Alpinvest—part of Carlyle's Global Investment Solutions (GIS) segment—seeks to provide investors with access to global private markets through primary, secondary, and co-investment opportunities across a range of strategies.

At Alpinvest, we take our responsible investment (RI)-related responsibilities seriously, recognizing the importance of embedding RI considerations in everything we do. Our RI journey started 15 years ago, and our commitment remains as strong as ever. In the evolving RI landscape, we continuously strive to achieve more, and seek to deliver value to our investors who are increasingly looking for more sustainable investment solutions.

With growing demand from investors for increased ESG reporting on their portfolios, we deploy our innovative technology to measure and assess the ESG data we collect and share our insights. The data we collect through the ESG Data Convergence Initiative (EDCI) allows us to report on a variety of key climate metrics like greenhouse gas (GHG) emissions and renewable energy, as well as Diversity, Equity, and Inclusion (DEI) metrics, such as board diversity and employee engagement. Although the EDCI is relatively new—it launched in late 2021—this year, we have already collected ESG portfolio company metrics from nearly 50 funds and over 7,600 data points that we can use for benchmarking to help us provide valuable portfolio insights to investors.

We increasingly see interest in investments that target positive sustainability outcomes alongside financial returns. We seek to be our clients' gateway to sustainable and impact investing and are currently tracking more than 300 funds with a focus on various impact themes. In our co-investment portfolio, we track companies whose products and services seek to generate a positive impact in line with the United Nations' Sustainable Development Goals (SDGs)<sup>1</sup>.

Situated between GPs and LPs, Alpinvest's distinct role in the private equity industry provides an opportunity to connect both groups on key RI themes in a way that drives both progress and returns. For example, DEI

remains an important pillar of our culture at Alpinvest. There is growing evidence of how diversity contributes to enhanced decision-making and outcomes in our investments; as such, we continue to collect information on DEI practices during due diligence to help inform our GP engagement efforts. We lead and actively participate in industry initiatives on DEI to help advance progress across the broader industry, including the Institutional Limited Partner Association (ILPA) DEI Council and the Hong Kong Venture Capital Association's Diversity & Inclusion Committee.

At the same time, we are committed to creating an inclusive environment for our own staff. In an employee survey conducted in 2022, 84% of GIS employees agreed that their manager takes action to develop a diverse and inclusive team, and 16 GIS employees have received a Carlyle DEI Incentive Award since the program's launch in 2021, which rewards colleagues for outstanding contributions to DEI.

As we reflect on the progress we have made on behalf of our LPs, GPs, and our business internally, we recognize there is more to be done. We look forward to capitalizing on the momentum we've generated so far.

Looking ahead, we believe our RI goals are ambitious but attainable. They demand not only an ongoing commitment, but also an agile and innovative mindset. Our investors rightly have high expectations of our performance; likewise, the regulatory environment demands our utmost professionalism at all times. Although the bar is high, we are proud to work diligently and remain true to RI and the standards it entails.

Sincerely,



**RUULKE BAGIJN**  
Head of Carlyle Global  
Investment Solutions

June 28, 2023



## SYNTHESIZING GP AND LP PERSPECTIVES TO

# Support & Accelerate Change

We believe AlInvest plays a distinct role in the private equity universe because of two key elements: our position situated between GPs and LPs and our constructive integration of technology. Engaging regularly with GPs and drawing from our LP expertise, AlInvest brings together insights from both sides and combines them to seek to drive RI-related progress and returns.

Despite having access to a wide range of information, several years ago we identified an industry-wide challenge to tracking comparable ESG portfolio metrics at scale due to inconsistent data. This was a real problem for many LPs and GPs; the former could not rely on comparable data across their portfolios while the latter strained to juggle a myriad of ESG data requests. Moreover, portfolio companies had to sift through a complex selection of ESG frameworks.

Facing this need, AlInvest helped to develop a solution to standardize useful and actionable ESG-related data. In partnership with 15 leading global GPs and LPs, we established the ESG Data Convergence Initiative (EDCI), a strategic effort to collect, track, and report on ESG metrics and trends across the asset management space. Since launching in 2021, the EDCI has expanded rapidly. As of June 15, 2023, over 325 LPs and GPs have participated globally, collectively representing around \$27 trillion in AUM.

The EDCI tracks GHG emissions, renewable energy usage, board and C-suite diversity, work-related injuries, net new hires, and employee engagement. The use of a standard template and reporting guide reduces the burden on participants who no longer need to create their own definitions.

Moreover, the EDCI is a living project, as metrics can be adjusted and should be continuously refined. In 2022, we

collected over 7,600 portfolio company data points covering EDCI-set metrics from almost 50 funds.

In addition to the EDCI, AlInvest continues to push ahead with technological advancements to further enhance our RI mission. In the last year, we set up our own in-house investment data solution to capture ESG and other sustainability outcome metrics. Because of this tool, financial and non-financial data points on portfolio companies—as reported by GPs—are now accessible alongside each other. As a result, AlInvest has access to ESG data, and has the technology in place to better monitor, measure, evaluate, and report on ESG and impact performance.

### GP AND PORTFOLIO COMPANY ENGAGEMENT

RI has been a consistent focus at AlInvest in the last 15 years because we believe that integrating these considerations into our investment activities can support better and more sustainable returns for investors and shareholders. Since becoming a signatory of the Principles for Responsible Investment (PRI) in 2009, we continue to seek to lead and participate in establishing industry standards and practical guidance.

Likewise, we believe it is crucial that our GP partners share our mindset. As part of our work, AlInvest devotes significant time and resources to our partnerships with GPs and portfolio companies across the globe. This engagement spans a wide range of sectors and industries, and we use our influence to encourage and improve the RI performance of GPs and portfolio companies as well as the adoption of more useful RI reporting.

Since 2009, RI has been an integral part of all due diligence processes for new primary fund commitments as well as secondary and co-investment transactions. RI due diligence findings are presented in the investment proposal provided to AlInvest's Investment Committee. In all, we have conducted RI-related diligence on over 970 deals, and each AlInvest investment in 2022 underwent RI due diligence.



In line with our efforts to aim for consistency and transparency across our own RI efforts, we have strategy-specific RI due diligence processes and tools in place. In 2022, we further refined our approach by developing a materiality assessment tool for our co-investment and secondaries strategies; this helps identify key sustainability risks for prospective investments. The tool illustrates Alpinvest's rigor and seriousness while assessing investments, underscoring our comprehensive and data-driven approach.

For primary fund commitments, Alpinvest assesses individual GPs with scores structured around three key areas: ESG, DEI, and climate change. In these sections, we evaluate existing performance as well as how policies set each partner up for future success. For the scoring itself, we classify GPs as Beginner, Intermediate, or Advanced in their approach. For example, 58% of European GPs assessed in 2022 scored as advanced on climate change.

58%

European GPs assessed in 2022 scored as Advanced on climate change

71%

GPs assessed in 2022 ranked either Intermediate or Advanced for DEI

Communication with GPs is key as they continue to develop RI strategies. We ultimately share the findings from our RI due diligence and provide practical tools and suggestions about how to improve RI practices. Specifically, we shared RI scorecards with 72 GPs to which we made new primary commitments between 2020-2022.

We also place individual scores into context, comparing them to the rest of our portfolio. Particularly for DEI, Alpinvest looks at both the GP and their portfolio companies to evaluate progress in this category. In 2022, 71% of the assessed GPs ranked either Intermediate or Advanced for DEI.

Our goal is constructive transparency. We have found that these scorecards are an important step in facilitating an active dialogue with GPs—one that can further elaborate the necessary and practical steps we can take together to improve our approach to ESG.

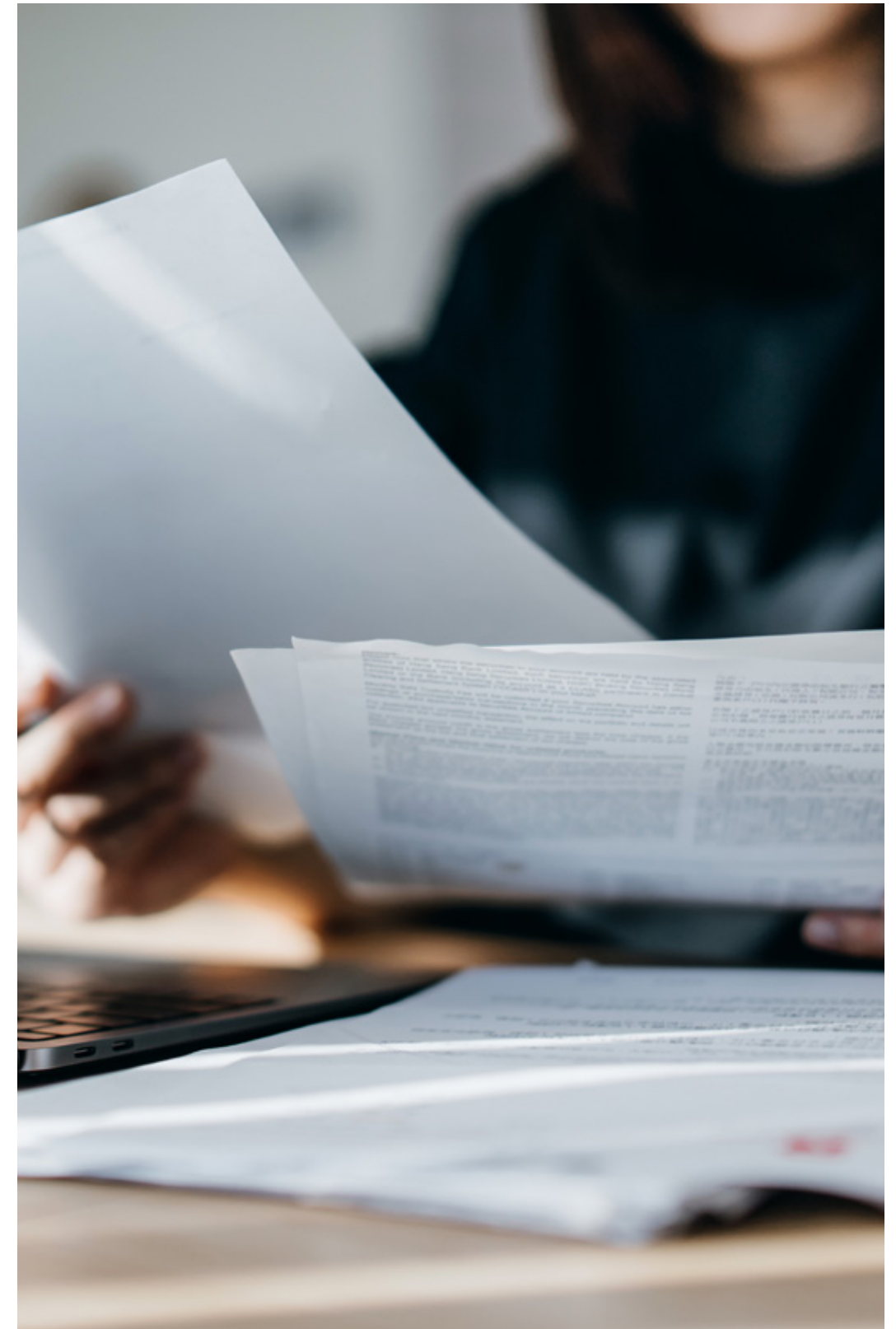
**LP ENGAGEMENT**

Our extensive experience and consistent commitment to RI have driven our thought leadership within the industry as well as our engagement with investors. We understand that our clients have placed their trust in us to safeguard their capital; we also recognize that investor interest in responsible investing has increased over the years. Our longstanding history with RI provides us with the necessary insights to identify the right opportunities in the market.

We believe that sharing best practices can help to drive change in the industry. In 2022, we published a white paper on impact investing that provided an overview of the current state of the impact market as well as our observations of key trends. We also organized a second "Impact Investing" roundtable for LPs where we provided a platform to discuss the state of the impact investing industry.

Moreover, there is a continuous need to provide better ESG insights to our investors through clear, rigorous, and proactive communication. We have updated quarterly presentations to include more ESG-related insights. In these cases, such information has included the ESG scores of the underlying managers and exposure to co-investments in companies whose products and services seek to generate positive impact in line with the United Nations' Sustainable Development Goals (SDGs)<sup>1</sup>. We also shared insights from our Global Investments Solutions GP Benchmark with LPs and GPs we invest with, scoring our fund commitments based on their ESG, DEI, and climate change progress.

Finally, while these steps have proven helpful, we are always evolving. Investor expectations are likely to continue to increase in scope and sophistication as they have in the past. To keep pace with demand, we, at Alpinvest, are constantly adapting our internal tools and processes.



<sup>1</sup>The United Nations' SDGs are aspirational in nature. The analysis involved in determining whether and how certain investments may contribute to or support the SDGs is inherently subjective and dependent on a number of factors and Alpinvest makes no commitment or guarantee that it is investing in companies that have a formal commitment or plan or take specific actions to support or contribute to the SDGs. There can be no assurance that reasonable parties will agree on a decision as to whether certain investments contribute to or support a particular SDG. Accordingly, investors should not place undue reliance on Alpinvest's application of the SDGs, as such application is subject to change at any time and at Alpinvest's sole discretion.



**PROMOTING DEI ACROSS OUR FIRM, PORTFOLIO, AND INDUSTRY**

A key element of AlInvest’s approach to RI is our commitment to DEI, both within our organization and across the industry. Established in 2019, AlInvest’s DEI taskforce draws from various offices and departments and seeks to create an inclusive culture for our team members. Our global AlInvest team included 42% women and 41 nationalities as of December 31, 2022. Our DEI taskforce also meets regularly with several other DEI business leads at Carlyle.

AlInvest’s larger DEI story follows a similar path of greater integration and collaboration within Carlyle. Last year, we formed a Multicultural Employee Resource Group (ERG) in our Amsterdam office, echoing an initiative that had been set up a few years earlier in Carlyle’s U.S. offices. The Multicultural ERG provides a platform to celebrate and communicate cultural milestones as well as learn from global colleagues. AlInvest strongly encourages our employees to participate in other Carlyle ERGs, such as the Women’s ERG and those for the LGBTQ+ and Veteran communities.

Participation however is only one step; recognizing individuals for their achievements is also crucial. This is why we thoroughly support measures such as Carlyle’s DEI Incentive Award Program, which rewards colleagues for outstanding contributions to DEI progress at the firm, including 16 GIS employees since the since the program’s launch in 2021.

AlInvest’s commitment to driving the industry forward on RI matters also extends to DEI. We are active participants in a wide range of important industry initiatives. These include the Institutional Limited Partners Association Diversity in Action Initiative, the Hong Kong Venture Capital Association’s Diversity and Inclusion Committee, and Level20. Such visible engagement is essential to drive meaningful progress.

AlInvest is actively focused on sourcing the next generation of diverse talent. For example, we took part

in the Carlyle Collegiate Series to educate students about Carlyle and potential career paths. Through these events, we aim to foster greater diversity in and access to AlInvest’s recruiting pipelines as well as the larger private equity industry.

**LOOKING AHEAD**

Despite the progress we’ve made, we understand that we cannot press pause. AlInvest’s RI accomplishments require sustained momentum as we look to the future. As we continue to collect and standardize RI-related data, the impetus to draw more sophisticated lessons will continue to grow, as well. Sharing these data-driven insights with our investors helps to inform their decision-making. And as we engage with our GPs, we need to be able to provide actionable guidance that will directly enhance their RI practices. We believe doing so is key to propelling the industry forward in the years and decades to come.



*Responsible investing has been a consistent focus at AlInvest in the last 15 years because we believe that integrating these considerations into our investment activities can support better and more sustainable returns for investors and shareholders.*

**42%**  
of AlInvest’s global team are women

**41**  
nationalities are represented by AlInvest’s global team



# Corporate Disclosures



## Materiality Assessment Methodology

For this year's report, we used the Global Reporting Initiative (GRI) Standards, which provides an internationally recognized framework to communicate our material ESG issues as a firm to our stakeholders with improved disclosure and transparency. In 2021, we began reporting according to the World Economic Forum's (WEF) ESG metrics. The WEF metrics were developed in an effort to identify a core set of material ESG metrics that can be reported on a consistent basis across industries, sectors, and countries.

In our 2020 Impact Review, we developed a materiality assessment that we continue to employ. As part of our initial materiality assessment, we took into account the expectations and requirements of our stakeholders, the knowledge and experience of our in-house ESG team members, and the Sustainability Accounting Standards Board (SASB) Asset Management & Custody Activities Standards. These inputs helped us identify the material topics to be covered in this report, while also taking into account the degree to which Carlyle has control over each issue. We also included topics that are important to Carlyle (for example, through enhanced disclosures on diversity, equity, and inclusion, and climate change). Details of the material issues we identified for our firm can be found on the right.

### ECONOMIC

Economic issues are core to our business. As a global investment firm we work together to create long-term value for our investors, companies, shareholders, people, and communities. Economic factors have the potential to impact both our own operations, as well as our investment portfolio. Stewarding capital is a key aspect creating both opportunities and risks. We therefore believe that the following GRI "economic topics" are the most material to our organization:

- 01 Direct economic value generated and distributed.
- 02 Infrastructure investments and services supported.

- 03 Communication and training about anti-corruption policies and procedures.

### ENVIRONMENTAL

As a global investment firm, the majority of our direct operations are office-based; hence we are keenly aware that our environmental impacts as a firm are relatively small. However, as referenced in the Climate Resilience section of this report and in our [Taskforce on Climate-related Financial Disclosures report](#), Carlyle believes that climate change is one of the most pressing issues of our time, creating unprecedented risks and opportunities for businesses across all industries. To respond to this challenge and to provide greater transparency on our direct environmental impacts, we believe the following GRI "environmental topics" are the most material to our organization:

- 01 Energy consumption within the organization.
- 02 Energy intensity.
- 03 Direct (Scope 1) greenhouse gas (GHG) emissions.
- 04 Energy indirect (Scope 2) GHG emissions.
- 05 Other indirect (Scope 3) GHG emissions.
- 06 Non-compliance with environmental laws and regulations

### SOCIAL

We aim to ensure that every colleague feels that they matter, are valued, and have access to high quality benefits and opportunities for learning and development—so we can all contribute. We believe that the continued development of our employees at every level in our organization, as well as our focus on enhancing diversity and inclusivity, are areas of competitive strength at Carlyle. We therefore consider that the following GRI "social topics" are the most material to our organization:

- 01 Benefits provided to fulltime employees that are not provided to temporary or part-time employees.
- 02 Programs for upgrading employee skills and transition assistance programs.
- 03 Percentage of employees receiving regular performance and career development reviews.
- 04 Diversity of governance bodies and employees.

- 05 Incidents of noncompliance concerning marketing communications.

### STAKEHOLDER ENGAGEMENT

The chart on the right illustrates our key stakeholders, as well as our channels for directly engaging with each of those stakeholders on ESG-related matters. Our direct stakeholders are increasingly interested in understanding more about the broader environmental and social impacts of our business and our portfolio companies, and to see Carlyle leadership on key global challenges such as climate change, and diversity and inclusion. Our progress on these topics is highlighted in this report.

### DISCLOSURES

#### GRI 102

General Disclosure is used to report contextual information about an organization and its sustainability reporting practices. This includes information about an organization's profile, strategy, ethics and integrity, governance, stakeholder engagement practices, and reporting process.

#### GRI 103

Management Approach is used to report information about how an organization manages a material topic. It is designed to be used for each material topic in a sustainability report, including those covered by the topic specific GRI Standards (series 200, 300, and 400) and other material topics.

#### Topic-specific Standards 200 series (Economic topics) and 300 series (Environmental topics), and 400 series (Social topics)

The 200, 300, and 400 series include numerous topic-specific Standards. These are used to report information on an organization's impacts related to economic, environmental, and social topics (e.g., Indirect Economic Impacts, Water, or Employment).

## CARLYLE'S STAKEHOLDERS AND RESPECTIVE CHANNELS OF ENGAGEMENT

### Shareholders

- Annual ESG Report
- GRI reporting and ESG data
- Public filings and one-to-one conversations
- Investor Day

### Broader Public

- Annual ESG Report
- Regulatory compliance and audits
- Engagement with industry and issue groups
- Investor Day

### Employees

- ESG trainings across functional teams
- Centralized ESG resources on firm intranet
- Dedicated internal personnel on ESG, diversity and inclusion, human capital, cyber security, and more
- Ongoing mentoring and employee engagement programs (detailed in GRI Standard 404-2)
- ESG-linked compensation

### Limited Partners

- LP meetings and engagements
- Updates via our LP Connect portal
- ESG research publications
- Investor Conferences
- Quarterly and ad-hoc reporting

### Portfolio Companies

- Annual Sustainability Workshop
- ESG data collection and analysis
- One-to-one engagement with ESG team
- ESG Action Plan and value creation support
- Quarterly ESG updates via newsletter
- Thematic webinars



## General Disclosures

DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
IO2-1	Name of the organization	The reporting organization shall report the following information: a. Name of the organization.	The Carlyle Group Inc.
IO2-2	Activities, brands, products, and services	The reporting organization shall report the following information: a. A description of the organization's activities. b. Primary brands, products, and services, including an explanation of any products or services that are banned in certain markets.	Please see pages 7-12 in Carlyle's 2022 Annual Report on Form IO-K ( <a href="https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585">https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585</a> ).
IO2-3	Location of headquarters	The reporting organization shall report the following information: a. Location of the organization's headquarters.	Washington, D.C.
IO2-4	Location of operations	The reporting organization shall report the following information: a. Number of countries where the organization operates, and the names of countries where it has significant operations and/or that are relevant to the topics covered in the report.	Please see page 7 in Carlyle's 2022 Annual Report on Form IO-K ( <a href="https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585">https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585</a> ) and a list of our global offices here ( <a href="https://www.carlyle.com/contact-us">https://www.carlyle.com/contact-us</a> ).
IO2-5	Ownership and legal form	The reporting organization shall report the following information: a. Nature of ownership and legal form.	Please see page 15 in Carlyle's 2022 Annual Report on Form IO-K ( <a href="https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585">https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585</a> ) and page 88 of our 2023 Proxy Statement ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a> ).
IO2-6	Markets served	The reporting organization shall report the following information: a. Markets served, including: i. geographic locations where products and services are offered; ii. sectors served; iii. types of customers and beneficiaries	Please see pages 7-19 in Carlyle's 2022 Annual Report on Form IO-K ( <a href="https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585">https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585</a> ) and page 13 of our Form ADV ( <a href="https://adviserinfo.sec.gov/firm/summary/IIII28">https://adviserinfo.sec.gov/firm/summary/IIII28</a> ).
IO2-7	Scale of the organization	The reporting organization shall report the following information: a. Scale of the organization, including: i. total number of employees; ii. total number of operations; iii. net sales (for private sector organizations) or net revenues (for public sector organizations); iv. total capitalization (for private sector organizations) broken down in terms of debt and equity; v. quantity of products or services provided	Please see pages 7, 15-19, 20 and the audited financial statements included in Carlyle's 2022 Annual Report on Form IO-K ( <a href="https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585">https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585</a> ).
IO2-8	Information on employees and other workers	The reporting organization shall report the following information: a. Total number of employees by employment contract (permanent and temporary), by gender. b. Total number of employees by employment contract (permanent and temporary), by region. c. Total number of employees by employment type (full-time and part-time), by gender. d. Whether a significant portion of the organization's activities are performed by workers who are not employees. If applicable, a description of the nature and scale of work performed by workers who are not employees. e. Any significant variations in the numbers reported in Disclosures IO2-8-a, IO2-8-b, and IO2-8-c (such as seasonal variations in the tourism or agricultural industries). f. An explanation of how the data have been compiled, including any assumptions made.	Please see information on diversity within our teams here ( <a href="https://www.carlyle.com/impact/diverse-teams">https://www.carlyle.com/impact/diverse-teams</a> ).  Please see pages 20-21 in Carlyle's 2022 Annual Report on Form IO-K ( <a href="https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585">https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585</a> ).

DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
IO2-9	Supply chain	The reporting organization shall report the following information: a. A description of the organization's supply chain, including its main elements as they relate to the organization's activities, primary brands, products, and services.	As a global investment firm, Carlyle works with a number of third party service providers that support its day-to-day business operations. Please see our Supplier Code of Conduct ( <a href="https://www.carlyle.com/sites/default/files/2022-04/Carlyle%20Supplier%20Code%20of%20Conduct.pdf">https://www.carlyle.com/sites/default/files/2022-04/Carlyle%20Supplier%20Code%20of%20Conduct.pdf</a> ). Additionally, in our dealings with third party vendors, Carlyle applies the principles, values, standards, and norms of behaviour as summarized in our Code of Conduct ( <a href="https://ir.carlyle.com/static-files/8132f9b6-c813-4834-ba03-7771deb2a6c2">https://ir.carlyle.com/static-files/8132f9b6-c813-4834-ba03-7771deb2a6c2</a> ). Our Form ADV also provides additional information ( <a href="https://adviserinfo.sec.gov/firm/summary/IIII28">https://adviserinfo.sec.gov/firm/summary/IIII28</a> ).
IO2-10	Significant changes to the organization and its supply chain	The reporting organization shall report the following information: a. Significant changes to the organization's size, structure, ownership, or supply chain, including: i. Changes in the location of, or changes in, operations, including facility openings, closings, and expansions; ii. Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations); iii. Changes in the location of suppliers, the structure of the supply chain, or relationships with suppliers, including selection and termination.	As a global investment firm, we have a small operational footprint, and as a result, supply chain. Please see pages 7-12, III, and 179 in Carlyle's 2022 Annual Report on Form IO-K ( <a href="https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585">https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585</a> ).
IO2-12	External initiatives	The reporting organization shall report the following information: a. A list of externally-developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes, or which it endorses.	Alternative Investment Management Association American Investment Council British Private Equity and Venture Capital Association Business for Social Responsibility Business Roundtable CEO Action for Diversity ESG Data Convergence Initiative European Leveraged Finance Association Focusing Capital on the Long-Term German Private Equity and Venture Capital Association Global Private Capital Association (founded as EMPEA) Initiativ Climat International - UK Chapter Institutional Limited Partners Association - Diversity in Action Initiative International Sustainability Standards Board - Investor Advisory Group InvestEurope Loan Syndications and Trading Association One Planet Private Equity Funds Initiative Renewable Energy Buyers Association Sustainability Accounting Standards Board Task Force on Climate-related Financial Disclosures The 30% Coalition UN Principles for Responsible Investment
IO2-13	Membership of associations	The reporting organization shall report the following information: a. A list of the main memberships of industry or other associations, and national or international advocacy organizations.	Please see our response to IO2-12.
IO2-14	Statement from senior decision-maker	The reporting organization shall report the following information: a. A statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy for addressing sustainability.	Please see page 5 of this report.



## General Disclosures

DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
102-15	Key impacts, risks, and opportunities	The reporting organization shall report the following information: a. A description of key impacts, risks, and opportunities	Please see pages 20-102 in Carlyle's 2022 Annual Report on Form 10-K ( <a href="https://ir.carlyle.com/static-files/dcea0020-8c53-49b1-826b-ad8f32e64585">https://ir.carlyle.com/static-files/dcea0020-8c53-49b1-826b-ad8f32e64585</a> ). Please also see pages 7-8 and pages 22-24 of our 2023 Proxy Statement for additional information on impacts and risks ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a> ).
102-16	Values, principles, standards, and norms of behaviour	The reporting organization shall report the following information: a. A description of the organization's values, principles, standards, and norms of behaviour.	Carlyle's Global Code of Conduct is available to all employees and all Fund Investors ( <a href="https://ir.carlyle.com/static-files/8132f9b6-c813-4834-ba03-7771deb2a6c2">https://ir.carlyle.com/static-files/8132f9b6-c813-4834-ba03-7771deb2a6c2</a> ). We train both full-time and part-time employees on the Code of Conduct. Additionally, please see our ESG policy ( <a href="https://www.carlyle.com/sites/default/files/Carlyle-ESG-Policy.pdf">https://www.carlyle.com/sites/default/files/Carlyle-ESG-Policy.pdf</a> ) and Guidelines for Responsible Investment ( <a href="https://www.carlyle.com/sites/default/files/Guidelines_for_Responsible_Investment.pdf">https://www.carlyle.com/sites/default/files/Guidelines_for_Responsible_Investment.pdf</a> ).
102-17	Mechanisms for advice and concerns about ethics	The reporting organization shall report the following information: a. A description of internal and external mechanisms for: i. seeking advice about ethical and lawful behaviour, and organizational integrity; ii. reporting concerns about unethical or unlawful behaviour, and organizational integrity.	<p>The mechanisms for advice and reporting concerns are summarized in our Code of Conduct (<a href="https://ir.carlyle.com/static-files/8132f9b6-c813-4834-ba03-7771deb2a6c2">https://ir.carlyle.com/static-files/8132f9b6-c813-4834-ba03-7771deb2a6c2</a>) and our Process for Reporting of Concerns Regarding Accounting and Other Matters (<a href="https://ir.carlyle.com/static-files/d63f7142-e03e-4084-a118-57bc0ca506b8#:~:text=Employees%20may%20make%20a%20report,Committee%2C%20as%20promptly%20as%20practicable.&amp;text=The%20firm%20strictly%20prohibits%20any,law%2C%20ethics%20or%20firm%20policy">https://ir.carlyle.com/static-files/d63f7142-e03e-4084-a118-57bc0ca506b8#:~:text=Employees%20may%20make%20a%20report,Committee%2C%20as%20promptly%20as%20practicable.&amp;text=The%20firm%20strictly%20prohibits%20any,law%2C%20ethics%20or%20firm%20policy</a>).</p> <p>Our Whistleblower Policy is published internally for employees to review. This policy is included as part of training during onboarding. Additionally, an Ethics and Compliance hotline is available to all employees. The requirements for reporting of known or suspected violations of Carlyle's Code of Conduct or illegal or unethical behavior are detailed below.</p> <p>Reporting of Known or Suspected Violations or Illegal or Unethical Behavior Employees must either (1) promptly contact Carlyle's Office of the General Counsel or Chief Compliance Officer or (2) submit an anonymous report using one of the alternative reporting options outlined in the Carlyle Whistleblower Policy if they are concerned that a Covered Party (as defined in the Code) may have violated the Code or that other illegal or unethical conduct by a Covered Party has occurred or may occur.</p> <p>Carlyle will take measures to protect the confidentiality of any report made, subject to applicable law, regulation or legal proceedings. Carlyle will not permit or tolerate retaliation of any kind by or on behalf of Carlyle and its personnel against employees who make good faith reports or complaints regarding violations of the Code or other illegal or unethical behavior.</p>

DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
102-18	Governance structure	The reporting organization shall report the following information: a. Governance structure of the organization, including committees of the highest governance body. b. Committees responsible for decision-making on economic, environmental, and social topics.	<p>Carlyle's Board of Directors oversees the business and affairs of Carlyle, and has three standing committees: the Audit Committee, the Compensation Committee, and the Nominating and Corporate Governance Committee. See pages 23-25 of our Proxy Statement (<a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a>).</p> <p>Carlyle's Global Head of Impact reports directly to the firm's Chief Operating Officer and provides regular updates to Carlyle's Board of Directors. Carlyle's Board maintains oversight of ESG and Impact activities. Carlyle has designated an independent board lead on ESG, Linda Filler (<a href="https://www.carlyle.com/about-carlyle/team/linda-h-filler">https://www.carlyle.com/about-carlyle/team/linda-h-filler</a>).</p> <p>See page 22 of our 2023 Proxy Statement (<a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a>).</p>
102-19	Delegating authority	The reporting organization shall report the following information: a. Process for delegating authority for economic, environmental, and social topics from the highest governance body to senior executives and other employees.	<p>Carlyle's Board of Directors receives information about material ESG issues for the firm. The members of the Board are publicly listed here: (<a href="https://ir.carlyle.com/corporate-governance/board-of-directors">https://ir.carlyle.com/corporate-governance/board-of-directors</a>). In April 2022, Linda Filler was appointed to serve as the ESG and Impact Lead to enhance the Board's oversight of ESG and Impact efforts. See page 25 of our 2023 Proxy Statement (<a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a>).</p> <p>Carlyle's Global Head of Impact reports directly to the firm's Chief Operating Officer and provides regular updates to Carlyle's Board of Directors. ESG topics are covered in at least one Board meeting annually, with written updates on ESG provided to the Board monthly. Additionally, Carlyle's ESG team provides regular updates on the firm's ESG and Impact work to the firm's Chief Executive Officer. See page 25 of our 2023 Proxy Statement (<a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a>).</p> <p>There is a firmwide ESG Review Committee focused on ESG risks that is comprised of the Chief Operating Officer, the Chief Risk Officer, the Global General Counsel for Investments, and the Global Head of Impact.</p>
102-20	Executive-level responsibility for economic, environmental, and social topics	The reporting organization shall report the following information: a. Whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental, and social topics. b. Whether post holders report directly to the highest governance body	Please see our response to 102-19.
102-21	Consulting stakeholders on economic, environmental, and social topics	The reporting organization shall report the following information: a. Processes for consultation between stakeholders and the highest governance body on economic, environmental, and social topics. b. If consultation is delegated, describe to whom it is delegated and how the resulting feedback is provided to the highest governance body.	Please see our response to 102-19.



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DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
102-22	Composition of the highest governance body and its committees	The reporting organization shall report the following information: a. Composition of the highest governance body and its committees by: i. executive or non-executive; ii. independence; iii. tenure on the governance body; iv. number of each individual's other significant positions and commitments, and the nature of the commitments; v. gender; vi. membership of under-represented social groups; vii. competencies relating to economic, environmental, and social topics; viii. stakeholder representation.	Carlyle's Board of Directors oversees our business and affairs and consists of 13 directors. The Company's Board is majority independent, and the committees of the Board are entirely independent. Please see pages 12-21 (including the Board Diversity Matrix on page 20) of our 2023 Proxy Statement for additional information ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5a1-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5a1-df02ac2d4ec0</a> ).  Two of our founding partners, David M. Rubenstein and William E. Conway, Jr., currently serve as non-executive Co-Chairmen of the Board, and another founding partner, Daniel A. D'Aniello, serves as Chairman Emeritus and as a member of the Board. Our Chief Executive Officer, Harvey M. Schwartz, also serves as a member of the Board.  Lawton W. Fitt serves as our Lead Independent Director. She presides at executive sessions of the independent directors and engages with them between Board and Committee meetings. As our Lead Independent Director, Ms. Fitt works closely with the independent directors to provide essential objective oversight of our business. She facilitates communications with the Board, the identification of matters for consideration by the Board and management, and the formulation of appropriate guidance to be suggested by the independent directors.  Carlyle representatives from across the organization, including those who sit on the highest governance body, routinely talk to shareholders, limited partners, NGOs and government bodies on economic, environmental, and social topics.
102-23	Chair of the highest governance body	The reporting organization shall report the following information: a. Whether the chair of the highest governance body is also an executive officer in the organization. b. If the chair is also an executive officer, describe his or her function within the organization's management and the reasons for this arrangement.	The Co-Chairmen of Carlyle's Board of Directors, David M. Rubenstein and William E. Conway, Jr., are not executive officers. See page 25 of our 2023 Proxy Statement ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5a1-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5a1-df02ac2d4ec0</a> ).
102-24	Nominating and selecting the highest governance body	The reporting organization shall report the following information: a. Nomination and selection processes for the highest governance body and its committees. b. Criteria used for nominating and selecting highest governance body members, including whether and how: i. stakeholders (including shareholders) are involved; ii. diversity is considered; iii. independence is considered; iv. expertise and experience relating to economic, environmental, and social topics are considered.	The Board of Director's Nominating and Corporate Governance Committee is responsible for reviewing the qualifications of potential director candidates and recommending to the Board those candidates to be nominated for election to the Board. Please see pages 11, 19-21 of Carlyle's 2023 Proxy Statement ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5a1-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5a1-df02ac2d4ec0</a> ).  The Nominating and Corporate Governance committee considers certain ESG factors as part of its analysis of potential candidates. See pages 19-21 of Carlyle's 2023 Proxy Statement ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5a1-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5a1-df02ac2d4ec0</a> ) for the skills, qualifications, and traits considered by the Nominating and Corporate Governance Committee.

DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
102-25	Conflicts of interest	The reporting organization shall report the following information: a. Processes for the highest governance body to ensure conflicts of interest are avoided and managed. b. Whether conflicts of interest are disclosed to stakeholders, including, as a minimum: i. Cross-board membership; ii. Cross-shareholding with suppliers and other stakeholders; iii. Existence of controlling shareholder; iv. Related party disclosures.	Carlyle is a publicly traded company and is subject to the SEC's standards in terms of identifying, mitigating, and disclosing conflicts of interest. In addition, the funds we manage are advised by investment advisers registered with the SEC as registered investment advisers (RIAs). As such, these RIAs are also subject to high standards in terms of identifying, mitigating, and disclosing conflicts of interest.  The other boards on which the members of our Board of Directors serve (if any) are disclosed on pages 12-18 of our 2023 Proxy Statement ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5a1-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5a1-df02ac2d4ec0</a> ).  Effective in August 2021, we ceased to be a controlled company. For more information regarding the ownership of our significant shareholders, see page 88 of our 2023 Proxy Statement ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5a1-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5a1-df02ac2d4ec0</a> ).  For information regarding related parties and related transactions, see pages 84-87 of our 2023 Proxy Statement ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5a1-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5a1-df02ac2d4ec0</a> ).
102-26	Role of highest governance body in setting purpose, values, and strategy	The reporting organization shall report the following information: a. Highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental, and social topics.	Carlyle's dedicated ESG team is responsible for developing and updating Carlyle's ESG policy and approach to ESG issues, in conjunction with senior executives across the firm. Any material updates or changes to Carlyle's approach to ESG are reviewed and approved by Carlyle's Chief Executive Officer, and in some cases, Carlyle's Board of Directors. Our ESG policy can be found here ( <a href="https://www.carlyle.com/sites/default/files/2021-02/2020_Carlyle_ESG-Policy.pdf">https://www.carlyle.com/sites/default/files/2021-02/2020_Carlyle_ESG-Policy.pdf</a> ).
			Carlyle's Board of Directors is responsible for the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental, and social topics. The Board has oversight of the firm's approach to ESG. The Board receives an overview of the firm's approach to ESG issues at least annually and annually reviews the firm's ESG report. Please see page 25 of our 2023 Proxy Statement ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5a1-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5a1-df02ac2d4ec0</a> ) and page 22 in our 2022 Annual Report on Form 10-K ( <a href="https://ir.carlyle.com/static-files/dcea0020-8c53-49b1-826b-ad8f32e64585">https://ir.carlyle.com/static-files/dcea0020-8c53-49b1-826b-ad8f32e64585</a> ).



## General Disclosures

DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
102-27	Collective knowledge of highest governance body	The reporting organization shall report the following information: a. Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental, and social topics.	Carlyle's Board of Directors receives updates on material issues for the firm and education on emerging topics, including on certain economic, environmental, and social issues such as diversity and inclusion, cybersecurity, and more.  Carlyle's Board of Directors receives an overview of the firm's approach to ESG issues on at least an annual basis. This overview includes information on how Carlyle is actively managing the most material ESG issues for itself as a corporation, as well as how Carlyle seeks to integrate ESG across its investment processes in order to drive long-term, sustainable value in its investments. Carlyle's Board also receives education on emerging ESG issues of importance to the firm at least annually. The Board annually reviews the firm's ESG report and has oversight of the firm's approach to ESG. See page 25 of our 2023 Proxy Statement ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a> ) and page 22 in our 2022 Annual Report on Form IO-K ( <a href="https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585">https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585</a> ).
102-28	Evaluating the highest governance body's performance	The reporting organization shall report the following information: a. Processes for evaluating the highest governance body's performance with respect to governance of economic, environmental, and social topics. b. Whether such evaluation is independent or not, and its frequency. c. Whether such evaluation is a self-assessment. d. Actions taken in response to evaluation of the highest governance body's performance with respect to governance of economic, environmental, and social topics, including, as a minimum, changes in membership and organizational practice.	Each year, Carlyle's Board of Directors and its Committees conduct an assessment of their performance, including against the requirements of their charter documents. As part of this assessment, the Board considers its strengths and areas for improvement. Among other topics, the Board considers whether it has the right mix of skills and experience on the Board.  The Nominating and Corporate Governance committee considers ESG as part of its analysis of potential new director candidates.
102-29	Identifying and managing economic, environmental, and social impacts	The reporting organization shall report the following information: a. Processes for evaluating the highest governance body's performance with respect to governance of economic, environmental, and social topics. b. Whether such evaluation is independent or not, and its frequency. c. Whether such evaluation is a self-assessment. d. Actions taken in response to evaluation of the highest governance body's performance with respect to governance of economic, environmental, and social topics, including, as a minimum, changes in membership and organizational practice.	Carlyle's Board of Directors oversees Carlyle's ESG and Impact strategy. At least annually, the ESG team presents developments in ESG integration and impact strategy and process to Carlyle's Board. See pages 25 and 30 of our 2023 Proxy Statement ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a> ) and page 22 in our 2022 Annual Report on Form IO-K ( <a href="https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585">https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585</a> ).
102-30	Effectiveness of risk management processes	The reporting organization shall report the following information: a. Highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental, and social topics.	Please see page 22-25 of our 2023 Proxy Statement ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a> ).

DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
102-31	Review of economic, environmental, and social topics	The reporting organization shall report the following information: a. Frequency of the highest governance body's review of economic, environmental, and social topics and their impacts, risks, and opportunities.	Carlyle's Global Head of Impact reports directly to the firm's Chief Operating Officer and also provides direct updates to Carlyle's Board of Directors. ESG topics are covered in at least one board meeting annually, with written updates on ESG provided to the Board monthly. Additionally, Carlyle's ESG and Impact team provides regular updates on the firm's ESG and Impact work to Carlyle's Chief Executive Officer. See page 25 of our 2023 Proxy Statement ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a> ) and page 22 in our 2022 Annual Report on Form IO-K ( <a href="https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585">https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585</a> ).  In addition, Carlyle has reported on economic, environmental, and social topics since 2010 on an annual basis. Please see our historical ESG reporting archive here ( <a href="https://www.carlyle.com/esg-report-archive">https://www.carlyle.com/esg-report-archive</a> ).
102-32	Highest governance body's role in sustainability reporting	The reporting organization shall report the following information: a. The highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material topics are covered.	Carlyle's sustainability report is reviewed by multiple senior stakeholders in the firm. The report is ultimately reviewed by Carlyle's Chief Executive Officer, who is also a member of the Board of Directors.  The Board has oversight of the firm's approach to ESG. See page 25 of our 2023 Proxy Statement ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a> ) and page 22 in our 2022 Annual Report on Form IO-K ( <a href="https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585">https://ir.carlyle.com/static-files/dcea0020-8c53-49bl-826b-ad8f32e64585</a> ).
102-33	Communicating critical concerns	The reporting organization shall report the following information: a. Process for communicating critical concerns to the highest governance body	Carlyle has a Ethics and Compliance hotline that is available to all employees, and has other processes for submitting concerns anonymously. The General Counsel reports on any whistleblower activity at each meeting to the Audit Committee of the Board of Directors. The Audit Committee has procedures in place for the anonymous submission of employee complaints on accounting, internal accounting controls, or auditing matters.
102-35	Remuneration policies	The reporting organization shall report the following information: a. Remuneration policies for the highest governance body and senior executives for the following types of remuneration: i. Fixed pay and variable pay, including performance-based pay, equity-based pay, bonuses, and deferred or vested shares; ii. Sign-on bonuses or recruitment incentive payments; iii. Termination payments; iv. Clawbacks; v. Retirement benefits, including the difference between benefit schemes and contribution rates for the highest governance body, senior executives, and all other employees. b. How performance criteria in the remuneration policies relate to the highest governance body's and senior executives' objectives for economic, environmental, and social topics.	Please see pages 38-81 of Carlyle's 2023 Proxy Statement for information on Carlyle remuneration policies for senior executives and Board members ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a> ).  We believe that embedding inclusive leadership and management into our organization is key to honing our competitive edge. Accordingly, in assessing employee and firm performance in connection with year-end compensation decisions, we consider progress in DEI efforts for the year, including individual achievement against DEI objectives we ask our employees to set at the beginning of each year. In addition, in order to further reward employees who go above and beyond in contributing to DEI progress, we have continued our Carlyle DEI Incentive Award Program, initially introduced in 2021, in order to create a further formal link between progress on DEI efforts and compensation. These strategies are designed to incent inclusive behavior, drive progress on key metrics, and align with our strategy and values while prioritizing accountability from all employees of the firm.



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102-36	Process for determining remuneration	The reporting organization shall report the following information: a. Process for determining remuneration. b. Whether remuneration consultants are involved in determining remuneration and whether they are independent of management. c. Any other relationships that the remuneration consultants have with the organization	Carlyle believes quality compensation and incentive programs are critical to hiring and retaining highly qualified individuals. Please see GRI disclosure I02-35 in this report for information on how ESG impacts remuneration decisions.  Please see pages 38-81 of Carlyle's 2023 Proxy Statement for information on Carlyle remuneration policies for senior executives and Board members ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a> ).  The Compensation Committee engages a compensation consultant, Pay Governance, and the Compensation Committee considered the independence of such compensation consultant and determined that its work during 2022 did not raise any conflicts of interest. Please see page 49 of Carlyle's 2023 Proxy Statement for information on the Compensation Committee's engagement of a compensation consultant ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a> ).  The Company has implemented Executive Stock Ownership Guidelines as well as an Incentive Compensation Clawback Policy. Please see page 61 of our 2023 Proxy Statement ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a> ).	102-41	Collective bargaining agreements	The reporting organization shall report the following information: a. Percentage of total employees covered by collective bargaining agreements.	There is a de minimis number of employees covered by collective bargaining agreements.
102-37	Stakeholders' involvement in remuneration	The reporting organization shall report the following information: a. How stakeholders' views are sought and taken into account regarding remuneration. b. If applicable, the results of votes on remuneration policies and proposals.	Carlyle's approach to stakeholder engagement is described on page 30 of our 2023 Proxy Statement ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a> ).  The results of the "say-on-pay" vote for the 2023 Annual Meeting of Shareholders are reported on the following Form 8-K ( <a href="https://www.sec.gov/ix?doc=/Archives/edgar/data/1527166/000152716623000068/cg-20230530.htm">https://www.sec.gov/ix?doc=/Archives/edgar/data/1527166/000152716623000068/cg-20230530.htm</a> ).	102-42	Identifying and selecting stakeholders	The reporting organization shall report the following information: a. The basis for identifying and selecting stakeholders with whom to engage	Please see our response to I02-40.
102-38	Annual total compensation ratio	The reporting organization shall report the following information: a. Ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country.	For 2022, the total compensation for Kewsong Lee, our former principal executive officer, was \$40,775,405 and 40% of the total compensation for Bill Conway, our principal executive officer as of December 31, 2022, was \$200,000, resulting in an aggregate principal executive officer total compensation amount of \$40,975,405 for these purposes. For 2022, our median employee's annual total compensation was \$263,098. Based on the aggregate principal executive officer total compensation, our CEO Pay Ratio for 2022 was 155.7:1. See page 75 of our 2023 Proxy Statement ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a> ).	102-43	Approach to stakeholder engagement	The reporting organization shall report the following information: a. The organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	Please see our response to I02-40.
102-40	List of stakeholder groups	The reporting organization shall report the following information: a. A list of stakeholder groups engaged by the organization.	Please see the materiality assessment methodology on page 58 of this report.  Carlyle's approach to stakeholder engagement is described on page 30 of our 2023 Proxy Statement ( <a href="https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0">https://ir.carlyle.com/static-files/2763fd5f-418b-4d24-a5al-df02ac2d4ec0</a> ).	102-44	Key topics and concerns raised	The reporting organization shall report the following information: a. Key topics and concerns that have been raised through stakeholder engagement, including: i. how the organization has responded to those key topics and concerns, including through its reporting; ii. the stakeholder groups that raised each of the key topics and concerns.	Please see our response to I02-40.
				102-45	Entities included in the consolidated financial statements	The reporting organization shall report the following information: a. A list of all entities included in the organization's consolidated financial statements or equivalent documents. b. Whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.	Please see pages 165-169 and 171-179 in Carlyle's 2022 Annual Report on Form 10-K ( <a href="https://ir.carlyle.com/static-files/dcea0020-8c53-49b1-826b-ad8f32e64585">https://ir.carlyle.com/static-files/dcea0020-8c53-49b1-826b-ad8f32e64585</a> ).
				102-46	Defining report content and topic Boundaries	The reporting organization shall report the following information: a. An explanation of the process for defining the report content and the topic Boundaries. b. An explanation of how the organization has implemented the Reporting Principles for defining report content.	Please see our response to I02-40.
				102-47	List of material topics	The reporting organization shall report the following information: a. A list of the material topics identified in the process for defining report content	Please see our response to I02-40.
				102-48	Restatements of information	The reporting organization shall report the following information: a. The effect of any restatements of information given in previous reports, and the reasons for such restatements	There have been no significant restatements of our Corporate Sustainability reporting compared to the previous reporting period. We have adjusted our carbon footprinting methodology as described in the Environmental tab of these disclosures.



## General Disclosures

DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
102-49	Changes in reporting	The reporting organization shall report the following information: a. Significant changes from previous reporting periods in the list of material topics and topic Boundaries	No significant changes.
102-50	Reporting period	The reporting organization shall report the following information: a. Reporting period for the information provided.	Except as otherwise indicated, the reporting period is January 1, 2022 through December 31, 2022.
102-51	Date of most recent report	The reporting organization shall report the following information: a. If applicable, the date of the most recent previous report.	June 30, 2022.
102-52	Reporting cycle	The reporting organization shall report the following information: a. Reporting cycle.	Carlyle has produced an annual sustainability report since 2010. Previous reports can be found here ( <a href="https://www.carlyle.com/esg-report-archive">https://www.carlyle.com/esg-report-archive</a> ).
102-53	Contact point for questions regarding the report	The reporting organization shall report the following information: a. The contact point for questions regarding the report or its contents.	Meg Starr (Megan.Starr@Carlyle.com).
102-54	Claims of reporting in accordance with the GRI Standards	The reporting organization shall report the following information: a. The claim made by the organization, if it has prepared a report in accordance with the GRI Standards, either: i. 'This report has been prepared in accordance with the GRI Standards: Core option'; ii. 'This report has been prepared in accordance with the GRI Standards: Comprehensive option'.	This report has been prepared in accordance with the GRI Standards: Core option.
102-55	GRI content index	The reporting organization shall report the following information: a. The GRI content index, which specifies each of the GRI Standards used and lists all disclosures included in the report. b. For each disclosure, the content index shall include: i. the number of the disclosure (for disclosures covered by the GRI Standards); ii. the page number(s) or URL(s) where the information can be found, either within the report or in other published materials; iii. if applicable, and where permitted, the reason(s) for omission when a required disclosure cannot be made.	The GRI content index (this report) is in accordance with the GRI Standards.
102-56	External assurance	The reporting organization shall report the following information: a. A description of the organization's policy and current practice with regard to seeking external assurance for the report. b. If the report has been externally assured: i. A reference to the external assurance report, statements, or opinions. If not included in the assurance report accompanying the sustainability report, a description of what has and what has not been assured and on what basis, including the assurance standards used, the level of assurance obtained, and any limitations of the assurance process; ii. The relationship between the organization and the assurance provider; iii. Whether and how the highest governance body or senior executives are involved in seeking external assurance for the organization's sustainability report.	At this time, Carlyle does not seek external assurance for its ESG Report. The report is reviewed by Carlyle's Chief Executive Officer, Chief Operating Officer, Chief Risk Officer, Legal and Compliance, and our Global Head of Impact. Carlyle's consolidated financial statements are externally audited by Ernst and Young LLP.

## Economic Disclosures

GRI NUMBER	GRI TITLE	DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
GRI 201	Economic Performance	201-1	Direct economic value generated and distributed	The reporting organization shall report the following information: a. Direct economic value generated and distributed (EVG&D) on an accruals basis, including the basic components for the organization's global operations as listed below. If data are presented on a cash basis, report the justification for this decision in addition to reporting the following basic components: i. Direct economic value generated: revenues; ii. Economic value distributed: operating costs, employee wages and benefits, payments to providers of capital, payments to government by country, and community investments; iii. Economic value retained: 'direct economic value generated' less 'economic value distributed'. b. Where significant, report EVG&D separately at country, regional, or market levels, and the criteria used for defining significance.	Please see pages 171-179 in our 2022 Annual Report on Form 10-K ( <a href="https://ir.carlyle.com/static-files/dcea0020-8c53-49b1-826b-ad8f32e64585">https://ir.carlyle.com/static-files/dcea0020-8c53-49b1-826b-ad8f32e64585</a> ).
GRI 201	Economic Performance	201-2	Financial implications and other risks and opportunities due to climate change	The reporting organization shall report the following information: a. Risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue, or expenditure, including: i. a description of the risk or opportunity and its classification as either physical, regulatory, or other; ii. a description of the impact associated with the risk or opportunity; iii. the financial implications of the risk or opportunity before action is taken; iv. the methods used to manage the risk or opportunity; v. the costs of actions taken to manage the risk or opportunity.	We view climate change as systemically important across our portfolio, and are committed to understanding and addressing material climate risks and opportunities. We were one of the first major private equity firms to publish a Taskforce on Climate-related Financial Disclosures report, which details our approach to navigating climate risks and opportunities.
GRI 203	Indirect Economic Impacts	203-1	Infrastructure investments and services supported	The reporting organization shall report the following information: a. Extent of development of significant infrastructure investments and services supported. b. Current or expected impacts on communities and local economies, including positive and negative impacts where relevant. c. Whether these investments and services are commercial, in-kind, or pro bono engagements.	Please see our infrastructure website ( <a href="https://www.carlyle.com/our-firm/global-private-equity/global-infrastructure">https://www.carlyle.com/our-firm/global-private-equity/global-infrastructure</a> ).
GRI 205	Anti-corruption	205-2	Communication and training about anti-corruption policies and procedures	The reporting organization shall report the following information: a. Total number and percentage of governance body members that the organization' anti-corruption policies and procedures have been communicated to, broken down by region. b. Total number and percentage of employees that the organization's anti-corruption policies and procedures have been communicated to, broken down by employee category and region. c. Total number and percentage of business partners that the organization's anti-corruption policies and procedures have been communicated to, broken down by type of business partner and region. Describe if the organization's anti-corruption policies and procedures have been communicated to any other persons or organizations. d. Total number and percentage of governance body members that have received training on anti-corruption, broken down by region. e. Total number and percentage of employees that have received training on anti-corruption, broken down by employee category and region.	Our Anticorruption and Anti-Bribery (ABC) Policy is shared with all employees globally. Additionally, training is provided to all Carlyle employees globally on ABC. An internal audit function also carries out periodic monitoring activity. We do not routinely share our ABC Policy with our business partners. However, we do require certain business partners to certify that they are in compliance with ABC minimum standards set forth in our commercial contracts.



## Environmental Disclosures

GRI NUMBER	GIR TITLE	DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
<b>GRI 302</b>	Energy	302-1	Energy consumption within the organization	<p>The reporting organization shall report the following information:</p> <p>a. Total fuel consumption within the organization from non-renewable sources, in joules or multiples, and including fuel types used.</p> <p>b. Total fuel consumption within the organization from renewable sources, in joules or multiples, and including fuel types used.</p> <p>c. In joules, watt-hours or multiples, the total:</p> <p>i. electricity consumption</p> <p>ii. heating consumption</p> <p>iii. cooling consumption</p> <p>iv. steam consumption</p> <p>d. In joules, watt-hours or multiples, the total:</p> <p>i. electricity sold</p> <p>ii. heating sold</p> <p>iii. cooling sold</p> <p>iv. steam sold</p> <p>e. Total energy consumption within the organization, in joules or multiples.</p> <p>f. Standards, methodologies, assumptions, and/or calculation tools used.</p> <p>g. Source of the conversion factors used</p>	<p>(a, b) Carlyle has no direct fuel consumption as a part of its operations.</p> <p>(c) Total estimated electricity &amp; heating consumption: 2022: 25,597 MWh</p> <p>(d) Zero energy sold for 2022.</p> <p>(e) 2022: 25,597 MWh</p> <p>(f,g) Sources: US DoE "eGrid," International Energy Agency, US EPA. Procedures align with WRI GHG Protocol, reviewed by Watershed. We offset our emissions by purchasing carbon offsets as detailed in our TCFD report.</p> <p>We undertake a number of initiatives to reduce our overall environmental footprint. Please see details here (<a href="https://www.carlyle.com/sites/default/files/Carlyle%20Firmwide%20Operations-vFL.pdf">https://www.carlyle.com/sites/default/files/Carlyle%20Firmwide%20Operations-vFL.pdf</a>).</p> <p>In 2021, we published and presented over webinar a 70-page Carbon and Energy Management playbook for our portfolio companies providing a step-by-step resource to design, create, and execute robust decarbonization strategies.</p> <p>In 2022, we updated our methodology for calculating our operational greenhouse gas footprint, and enlisted Watershed, an external technology platform, to calculate our operational footprint for 2022. This updated methodology was also retroactively applied to 2021 emissions as well. Watershed's methodologies and emission factors undergo various updates and a third-party review that results in a statement of limited assurance twice per year. These updates include incorporating newer data, improving the granularity of measurement approaches, and creating custom methodologies to assist customers with needs outside the standard sector guidance.</p> <p>Additional information on our approach to climate change and the energy transition within our investment portfolios can be found in our most recent TCFD report, which is included as part of this report.</p> <p>In 2022, we announced firmwide climate goals inclusive of a net zero by 2050 goal and corresponding near-term goals (<a href="https://www.carlyle.com/media-room/news-release-archive/carlyle-sets-net-zero-2050-and-near-term-climate-goals">https://www.carlyle.com/media-room/news-release-archive/carlyle-sets-net-zero-2050-and-near-term-climate-goals</a>).</p>
<b>GRI 302</b>	Energy	302-3	Energy intensity	<p>The reporting organization shall report the following information:</p> <p>a. Energy intensity ratio for the organization.</p> <p>b. Organization-specific metric (the denominator) chosen to calculate the ratio.</p> <p>c. Types of energy included in the intensity ratio; whether fuel, electricity, heating, cooling, steam, or all.</p> <p>d. Whether the ratio uses energy consumption within the organization, outside of it, or both.</p>	<p>(a) 2022: 11.74 MWh per employee of energy use. 9.6 MT of CO2e per employee of GHG emissions.</p> <p>(b) Employee headcount</p> <p>(c) All energy types included</p> <p>(d) Energy use refers specifically to Scope 2, while the GHG footprint includes all scopes</p> <p>In 2022, we updated our methodology for calculating our operational greenhouse gas footprint, and enlisted Watershed, an external technology platform, to calculate our operational footprint for 2022. This updated methodology was also retroactively applied to 2021 emissions as well. Watershed's methodologies and emission factors undergo various updates and a third-party review that results in a statement of limited assurance twice per year. These updates include incorporating newer data, improving the granularity of measurement approaches, and creating custom methodologies to assist customers with needs outside the standard sector guidance.</p>

GRI NUMBER	GIR TITLE	DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
<b>GRI 303</b>	Water and Effluents	303-5	Water consumption	<p>The reporting organization shall report the following information:</p> <p>a. Total water consumption from all areas in megaliters.</p> <p>b. Total water consumption from all areas with water stress in megaliters.</p> <p>c. Change in water storage in megaliters, if water storage has been identified as having a significant water-related impact.</p> <p>d. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used, including whether the information is calculated, estimated, modelled, or sourced from direct measurements, and the approach taken for this, such as the use of any sector-specific factors</p>	<p>We believe our water consumption is de minimis as we lease our office spaces. The majority of our buildings are outfitted with water efficiency measures such as low-flow toilets. As tenants, we are unable to obtain the data to undertake a comprehensive analysis of our water consumption across our global offices.</p>
<b>GRI 305</b>	Emissions	305-1	Direct (Scope 1) GHG emissions	<p>The reporting organization shall report the following information:</p> <p>a. Gross direct (Scope 1) GHG emissions in metric tons of CO2 equivalent.</p> <p>b. Gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all.</p> <p>c. Biogenic CO2 emissions in metric tons of CO2 equivalent.</p> <p>d. Base year for the calculation, if applicable, including:</p> <p>i. the rationale for choosing it;</p> <p>ii. emissions in the base year;</p> <p>iii. the context for any significant changes in emissions that triggered recalculations of base year emissions.</p> <p>e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.</p> <p>f. Consolidation approach for emissions; whether equity share, financial control, or operational control.</p> <p>g. Standards, methodologies, assumptions, and/or calculation tools used.</p>	<p>(a) 2021: 3,099 MT CO2e 2022: 3,058 MT CO2e</p> <p>(b) N/A</p> <p>(c) All included</p> <p>(d) First year of GHG accounting was 2017. Current reporting covers the 2021 and 2022 emissions year.</p> <p>(e) As above, sources include US DoE eGrid, International Energy Agency (IEA) emissions factors</p> <p>(f) Financial control</p> <p>(g) WRI GHG Protocol. Reviewed by Watershed.</p> <p>In 2022, we updated our methodology for calculating our operational greenhouse gas footprint, and enlisted Watershed, an external technology platform, to calculate our operational footprint for 2022. This updated methodology was also retroactively applied to 2021 emissions as well. Watershed's methodologies and emission factors undergo various updates and a third-party review that results in a statement of limited assurance twice per year. These updates include incorporating newer data, improving the granularity of measurement approaches, and creating custom methodologies to assist customers with needs outside the standard sector guidance.</p>



## Environmental Disclosures

GRI NUMBER	GIR TITLE	DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
<b>GRI 305</b>	Emissions	305-2	Energy indirect (Scope 2) GHG emissions	<p>The reporting organization shall report the following information:</p> <p>a. Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of CO2 equivalent.</p> <p>b. If applicable, gross market-based energy indirect (Scope 2) GHG emissions in metric tons of CO2 equivalent.</p> <p>c. If available, the gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all.</p> <p>d. Base year for the calculation, if applicable, including:</p> <p>i. the rationale for choosing it;</p> <p>ii. emissions in the base year;</p> <p>iii. the context for any significant changes in emissions that triggered recalculations of base year emissions.</p> <p>e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.</p> <p>f. Consolidation approach for emissions; whether equity share, financial control, or operational control.</p> <p>g. Standards, methodologies, assumptions, and/or calculation tools used</p>	<p>(a) 2021: 2,827 MT CO2e 2022: 2,954 MT CO2e</p> <p>(b) N/A</p> <p>(c) All included</p> <p>(d) First year of GHG accounting was 2017. Current reporting covers the 2021 and 2022 emissions year.</p> <p>(e) As above, sources include US DoE eGrid, International Energy Agency (IEA) emissions factors</p> <p>(f) Financial control</p> <p>(g) WRI GHG Protocol. Reviewed by Watershed.</p> <p>In 2022, we updated our methodology for calculating our operational greenhouse gas footprint, and enlisted Watershed, an external technology platform, to calculate our operational footprint for 2022. This updated methodology was also retroactively applied to 2021 emissions as well. Watershed's methodologies and emission factors undergo various updates and a third-party review that results in a statement of limited assurance twice per year. These updates include incorporating newer data, improving the granularity of measurement approaches, and creating custom methodologies to assist customers with needs outside the standard sector guidance. For 2022 with respect to our London and New York, NY offices, Q4 electricity consumption was proxy calculated using 2021 figures as utility bills are not yet available.</p>
<b>GRI 305</b>	Emissions	305-3	Other indirect (Scope 3) GHG emissions	<p>The reporting organization shall report the following information:</p> <p>a. Gross other indirect (Scope 3) GHG emissions in metric tons of CO2 equivalent.</p> <p>b. If available, the gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all.</p> <p>c. Biogenic CO2 emissions in metric tons of CO2 equivalent.</p> <p>d. Other indirect (Scope 3) GHG emissions categories and activities included in the calculation.</p> <p>e. Base year for the calculation, if applicable, including:</p> <p>i. the rationale for choosing it;</p> <p>ii. emissions in the base year;</p> <p>iii. the context for any significant changes in emissions that triggered recalculations of base year emissions.</p> <p>f. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.</p> <p>g. Standards, methodologies, assumptions, and/or calculation tools used.</p>	<p>(a) 2021: 4,977 MT CO2e* 2022: 14,889 MT CO2e*</p> <p>(b) All included</p> <p>(c) N/A</p> <p>(d) First year of GHG accounting was 2017. Current reporting covers the 2021 and 2022 emissions year. In 2022, we updated our methodology for calculating our operational greenhouse gas footprint, and enlisted Watershed, an external technology platform, to calculate our operational footprint for 2022. This updated methodology was also retroactively applied to 2021 emissions as well. Watershed's methodologies and emission factors undergo various updates and a third-party review that results in a statement of limited assurance twice per year. These updates include incorporating newer data, improving the granularity of measurement approaches, and creating custom methodologies to assist customers with needs outside the standard sector guidance.</p> <p>(e) As above, sources include US DoE eGrid, International Energy Agency (IEA) emissions factors</p> <p>(f) Financial control</p> <p>(g) WRI GHG Protocol. Reviewed by Watershed.</p> <p>*Employee business travel does not include data from AlInvest or Aviation Partners, nor any transactions booked outside the Concur Travel and Expense platform.</p>

GRI NUMBER	GIR TITLE	DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
<b>GRI 305</b>	Emissions	305-4	GHG emissions intensity	<p>The reporting organization shall report the following information:</p> <p>a. GHG emissions intensity ratio for the organization.</p> <p>b. Organization-specific metric (the denominator) chosen to calculate the ratio.</p> <p>c. Types of GHG emissions included in the intensity ratio; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3).</p> <p>d. Gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all.</p>	<p>(a) 2021: 5.9 2022: 9.6</p> <p>(b) Number of employees</p> <p>(c) Scope 1, Scope 2 and Scope 3</p> <p>(d) All included</p> <p>In 2022, we updated our methodology for calculating our operational greenhouse gas footprint, and enlisted Watershed, an external technology platform, to calculate our operational footprint for 2022. This updated methodology was also retroactively applied to 2021 emissions as well. Watershed's methodologies and emission factors undergo various updates and a third-party review that results in a statement of limited assurance twice per year. These updates include incorporating newer data, improving the granularity of measurement approaches, and creating custom methodologies to assist customers with needs outside the standard sector guidance.</p>
<b>GRI 306</b>	Effluents and Waste	306-2	Waste by type and disposal method	<p>The reporting organization shall report the following information:</p> <p>a. Total weight of hazardous waste, with a breakdown by the following disposal methods where applicable:</p> <p>i. Reuse</p> <p>ii. Recycling</p> <p>iii. Composting</p> <p>iv. Recovery, including energy recovery</p> <p>v. Incineration (mass burn)</p> <p>vi. Deep well injection</p> <p>vii. Landfill</p> <p>viii. On-site storage</p> <p>ix. Other (to be specified by the organization)</p> <p>b. Total weight of non-hazardous waste, with a breakdown by the following disposal methods where applicable:</p> <p>i. Reuse</p> <p>ii. Recycling</p> <p>iii. Composting</p> <p>iv. Recovery, including energy recovery</p> <p>v. Incineration (mass burn)</p> <p>vi. Deep well injection</p> <p>vii. Landfill</p> <p>viii. On-site storage</p> <p>ix. Other (to be specified by the organization)</p> <p>c. How the waste disposal method has been determined:</p> <p>i. Disposed of directly by the organization, or otherwise directly confirmed</p> <p>ii. Information provided by the waste disposal contractor</p> <p>iii. Organizational defaults of the waste disposal contractor</p>	<p>As a global investment firm, we do not generate hazardous waste directly beyond the disposal of computing systems, which we strive to dispose of in a responsible way and recycle.</p>



## Environmental Disclosures

GRI NUMBER	GIR TITLE	DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
<b>GRI 306</b>	Effluents and Waste	306-3	Significant spills	The reporting organization shall report the following information: a. Total number and total volume of recorded significant spills. b. The following additional information for each spill that was reported in the organization's financial statements: i. Location of spill; ii. Volume of spill; iii. Material of spill, categorized by: oil spills (soil or water surfaces), fuel spills (soil or water surfaces), spills of wastes (soil or water surfaces), spills of chemicals (mostly soil or water surfaces), and other (to be specified by the organization). c. Impacts of significant spills.	We have had no significant spills as a result of our direct operations during the reporting period.
<b>GRI 306</b>	Effluents and Waste	306-4	Transport of hazardous waste	The reporting organization shall report the following information: a. Total weight for each of the following: i. Hazardous waste transported ii. Hazardous waste imported iii. Hazardous waste exported iv. Hazardous waste treated b. Percentage of hazardous waste shipped internationally. c. Standards, methodologies, and assumptions used.	As a global investment firm, we do not transport hazardous waste directly.
<b>GRI 307</b>	Environmental Compliance	307-1	Non-compliance with environmental laws and regulations	"The reporting organization shall report the following information: a. Significant fines and non-monetary sanctions for non-compliance with environmental laws and/or regulations in terms of: i. total monetary value of significant fines; ii. total number of non-monetary sanctions; iii. cases brought through dispute resolution mechanisms. b. If the organization has not identified any non-compliance with environmental laws and/or regulations, a brief statement of this fact is sufficient."	We are not aware of any material fines for non-compliance with environmental laws or regulations within our operations.

## Social Disclosures

GRI NUMBER	GIR TITLE	DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
<b>GRI 401</b>	Employment	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	The reporting organization shall report the following information: a. Benefits which are standard for full-time employees of the organization but are not provided to temporary or part-time employees, by significant locations of operation. These include, as a minimum: i. life insurance; ii. health care; iii. disability and invalidity coverage; iv. parental leave; v. retirement provision; vi. stock ownership; vii. others. b. The definition used for 'significant locations of operation'.	Globally, dependent on eligibility and geographic location, Carlyle may offer the following benefits to full and/or part-time employees.  Generally, in its U.S. offices, Carlyle provides the following benefits to its full-time employees:  <ul style="list-style-type: none"> <li>· life insurance</li> <li>· health care</li> <li>· mental health</li> <li>· behavioral health</li> <li>· disability and invalidity coverage</li> <li>· parental leave</li> <li>· retirement provision</li> <li>· stock ownership (for certain grades)</li> <li>· tuition reimbursement</li> <li>· commuter allowance</li> <li>· childcare backup or vouchers</li> <li>· dental care insurance</li> <li>· healthcare advocacy service</li> </ul> In the United States, part time employees (which generally include employees working less than 30 hours per week), typically only are eligible for retirement benefits, which are the same across full-time and part-time employees.  Almost 100% of Carlyle's full-time employees are eligible for coverage on the benefit and leave plans offered in their respective geographies.  An Employee Assistance Program (EAP) has been implemented across all Carlyle locations. In the United States, the EAP includes a virtual platform and a new network of mental health providers. This network was also added to the U.S. medical plan as an in-network resource for more mental health provider options.
<b>GRI 401</b>	Employment	401-3	Parental leave	The reporting organization shall report the following information: a. Total number of employees that were entitled to parental leave, by gender. b. Total number of employees that took parental leave, by gender. c. Total number of employees that returned to work in the reporting period after parental leave ended, by gender. d. Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work, by gender. e. Return to work and retention rates of employees that took parental leave, by gender.	100% of full-time employees are eligible for parental leave. We offer parental leave to employees of all genders.  In 2022, Carlyle implemented minimum global standards for fully-paid maternity and paternity caregiver leave, which are 20 weeks and 4 weeks of leave, respectively. Generally, this was an increase in leave for most Carlyle offices. Local customizations to account for local needs were also taken into consideration. For example, in the United States, birth mothers are eligible to up to 26-28 weeks of fully-paid leave.



## Social Disclosures

GIR NUMBER	GIR TITLE	DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
<b>GRI 403</b>	Occupational Health and Safety	403-6	Promotion of worker health	<p>The reporting organization shall report the following information for employees and for workers who are not employees but whose work and/or workplace is controlled by the organization:</p> <p>a. An explanation of how the organization facilitates workers' access to non-occupational medical and healthcare services, and the scope of access provided.</p> <p>b. A description of any voluntary health promotion services and programs offered to workers to address major non-work-related health risks, including the specific health risks addressed, and how the organization facilitates workers' access to these services and programs.</p>	<p>At Carlyle, keeping our employees healthy is front of mind. We have invested in developing a global five-pillar wellbeing plan, which has support from the highest levels of the firm. This plan is focused on the emotional, physical, social, financial, and environmental wellness of our employees, which includes experts presenting webinars on health, nutrition, resilience and life longevity, movement programs and challenges, and putting tools in place so that our employees feel safe and productive while working in a hybrid environment.</p> <p>In the United States, we provide access to a membership for full-time employees and their families to One Medical, which is a Carlyle portfolio company. One Medical is a primary care practice that is focused on patient comfort and convenience. Importantly, One Medical provides 24/7 virtual care via video, phone, and email, as well as online appointment booking and prescription renewals via the app or web. Carlyle considered equity and inclusivity as we worked to redesign certain of our employee benefits. In January 2020, we partnered with Progyny, a leading fertility benefits provider, to offer inclusive family building benefits and support to our employees and their partners, including single parents by choice and LGBTQ individuals and couples. Brought forth by the LGBTQ and Working Parents employee resource groups (ERGs) in partnership with our Human Capital Management team, this benefit is available to all (versus traditional benefits that require evidence of infertility). The benefit provides access to a large network of fertility specialists, and support for adoption or surrogacy options, as well as coverage for family planning processes. This benefit is available to all participants of the Carlyle medical plan who work 30+ hours a week.</p> <p>Commencing in 2021, we provide an annual wellbeing stipend for employees at the level of Principal and below that can be used in the employee's discretion for health and wellness related items or services. Suggested uses for this stipend include gym memberships and class fees, meditation or sleep apps, equipment such as a weight set, a commuting bike, fees for a nutrition coach or a massage therapist, and other related items or services.</p> <p>In addition to the benefits outlined above, we are particularly focused on employee satisfaction and mental health during the pandemic. Global manager trainings were implemented to train managers to recognize burnout versus stress in themselves and their staff with subsequent training on how to respond in a motivating and inspiring way. Moreover, we understand that it is more difficult to disconnect while working from home, so we have made the decision, similar to prior years, to close our offices globally for a week in August 2023 in order for Carlyle employees to fully disconnect. The week-long closing will not count towards employees' regularly allotted vacation days. Similarly, we had a week-long closing at the end of December 2022 to allow employees to disconnect. This decision was made, in part, in response to the results of our annual employee engagement survey. The survey is an integral part of our Human Capital Management development strategy. An overview of the results of the employee engagement survey are shared with all global employees.</p> <p>The focus on worker health extends to our physical offices as well. All of our DC and New York, NY offices have motorized standing desks.</p>
<b>GRI 404</b>	Training and Education	404-1	Average hours of training per year per employee	<p>The reporting organization shall report the following information:</p> <p>a. Average hours of training that the organization's employees have undertaken during the reporting period, by:</p> <p>i. gender;</p> <p>ii. employee category</p>	<p>In 2021, we implemented a new learning management system called EMPOWER, which has equipped us to track hours and cost for a portion of our internal training programs offered by the Carlyle Learning and Development team. Globally, employees completed an average of 8 hours of training in 2022. Not all external trainings are not captured in the reported hours.</p> <p>Carlyle is committed to ensuring that its employees have the relevant knowledge, skills, and expertise to perform their work at high standards and achieve their full potential. Global employees can access training and learning resources by visiting EMPOWER.</p>

GIR NUMBER	GIR TITLE	DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
<b>GRI 404</b>	Training and Education	404-2	Programs for upgrading employee skills and transition assistance programs	<p>The reporting organization shall report the following information:</p> <p>a. Type and scope of programs implemented and assistance provided to upgrade employee skills.</p> <p>b. Transition assistance programs provided to facilitate continued employability and the management of career endings resulting from retirement or termination of employment.</p>	<p>Carlyle provides a range of programs to assist employees to upgrade their skills. These programs include:</p> <ol style="list-style-type: none"> <li>Instructor-led Training Delivery/Facilitation: <ul style="list-style-type: none"> <li>Full curriculum of scheduled training with CPE credits available – these trainings are typically focussed on professional and leadership skills</li> <li>Technical Training: Fundamental and Advanced Excel</li> </ul> </li> <li>eLearning Programs from Top Vendors: <ul style="list-style-type: none"> <li>eLearning programs are offered to both full-time and part-time Carlyle employees</li> <li>LinkedIn Learning provides an extensive online library of high-quality instructional videos on professional and leadership skills. Videos and courses are taught by industry experts and designed to keep viewers engaged</li> <li>GetAbstract provides book summaries of over 13,000 current and classic best sellers and hundreds of summaries and links to TED talks, including topics such as economics, finance, leadership, and self-development</li> <li>Blue Ocean Brain provides short articles, tips, and brain performance challenges that elevate one's critical thinking skills and build brain-healthy habits. This is an interactive application that offers brand new, daily experiences</li> </ul> </li> <li>Onboarding: <ul style="list-style-type: none"> <li>Learning and Development Overview during week 1 orientation</li> <li>Monthly Global Employee Orientation sessions providing overviews of different areas of the firm</li> </ul> </li> <li>Annual training programs: <ul style="list-style-type: none"> <li>Analyst and Associate Program and Associate Continuing Education</li> <li>Finance Training Day - A day of training specifically for those in support functions (for example finance or technology). CPE credit is offered for the majority of the sessions</li> </ul> </li> <li>Leadership Programs: <ul style="list-style-type: none"> <li>Better Managers Program: Focuses on building core, "foundational" management behaviors and skills; Topics include: increasing self-awareness, transitioning to management, setting goals, giving and receiving feedback, building trust, delivering change, and driving collaborative solutions</li> <li>Better Leaders Program: Focuses on more advanced management behaviors and skills; Topics include: leading change efforts, driving decision quality, effectively delegating, inspiring followership, building high-performing teams, leading difficult conversations, performance coaching, and managing upwards. Includes the key elements of the previously offered VP Forum focused on advancing investing skills and provides additional opportunities to assess and refine leadership skills. Participants complete MBTI assessments</li> <li>Leadership Principles program: 3-day Residential Experience to network and build relationships. Sessions focus on: building resilience, strategic networking, delegating, coaching, managing conflict, strategic communications. Following the residential program, participants work with a communications coach over the course of three virtual sessions to assess and enhance their executive presence. Participants complete the Hogan assessment, receive a debrief, and work on an action plan.</li> <li>Future Leaders Academy: Recent promotes to Managing Director receive hands-on mentoring from CEO &amp; CHRO and participate in sessions focusing on developing your leadership point of view, taking decisive action, building strategic networks, inspiring followership, innovating and leading change, and leading across One Carlyle</li> <li>Career Strategies Initiative: Provides underrepresented professionals with the access to expand their scope; Builds inclusive teams and boosts the effectiveness of the participants' managers as leaders; includes a robust assessment center, assigned Career Coach and Executive Sponsor, peer learning cohorts, bi-monthly skill building workshops, and career action planning</li> <li>Quarterly Learning Sessions for People Managers: Provides open-enrollment sessions to all people managers globally in the form of two-hour virtual learning sessions that offer the latest best practices research and interactive exercises that will provide participants with opportunities to learn and practice using concepts, tools and techniques</li> <li>Formal Mentorship Program: Mentoring is a career development method whereby less experienced employees are matched with more experienced colleagues for guidance in order to gain knowledge, skills, experience, information, and advice. Mentorship is extremely important at Carlyle.</li> <li>Training Tuition Reimbursement Program: Carlyle reimburses employees for a portion of the cost of external training programs, including: undergraduate coursework, graduate coursework, various professional certifications, standardized test preparation, or academic seminars.</li> </ul></li></ol>



## Social Disclosures

GIR NUMBER	GIR TITLE	DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
<b>GRI 404</b>	Training and Education	404-3	Percentage of employees receiving regular performance and career development reviews	<p>"The reporting organization shall report the following information: a. Percentage of total employees by gender and by employee category who received a regular performance and career development review during the reporting period."</p>	<p>Global employees receive an annual performance and career development review. Carlyle uses a single Performance Evaluation process for the firm's employees. This includes the following key features that are implemented in our feedback system, Perform Yard:</p> <p>QI: Team and Individual Goal Setting. Employees are expected to set one goal specifically focused on diversity, equity, and inclusion Ongoing: Gather stakeholder feedback June: Mid-Year Review of Progress of Goals Ongoing: Gather stakeholder feedback November: Year-End Evaluation</p> <p>Out of the 1,606 employees who participated in the year-end performance process, 74% of the population had a performance discussion in 2022 with their manager. This means in PerformYard, the manager submitted and/or signed off on the review.</p> <p>Business leaders meet regularly to discuss how the firm's growth goals may create opportunities for each team member to grow and advance over time. These discussions ensure that we are identifying and grooming future leaders and building bench strength across Carlyle. Managers share insights and outputs from these discussions with their respective team members.</p> <p>Additionally, Carlyle is focused on transparency in the promotion process. In an Employee Engagement survey, employees asked for additional information on the process. In response, our Human Capital Management team communicated both the process and criteria for advancement. Documents detailing both the process and criteria are published on our internal employee website. Each team is assigned a Human Resources Business Partner who is responsible for responding to questions employees may have about promotions.</p>
<b>GRI 405</b>	Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	<p>The reporting organization shall report the following information: a. Percentage of individuals within the organization's governance bodies in each of the following diversity categories: i. Gender; ii. Age group: under 30 years old, 30-50 years old, over 50 years old; iii. Other indicators of diversity where relevant (such as minority or vulnerable groups). b. Percentage of employees per employee category in each of the following diversity categories: i. Gender; ii. Age group: under 30 years old, 30-50 years old, over 50 years old; iii. Other indicators of diversity where relevant (such as minority or vulnerable groups).</p>	<p>Our Board of Directors oversees our business and affairs and consists of 13 directors. We have a majority independent Board. Two of our founding partners, David M. Rubenstein and William E. Conway, Jr., currently serve as non-executive Co-Chairmen of the Board. Our Chief Executive Officer, Harvey M. Schwartz, also serves as a director.</p> <p>The Nominating and Corporate Governance Committee of the Board, which takes a leadership role in shaping our corporate governance, including our ESG strategy, has appointed Linda H. Filler as the Board's ESG lead, responsible for oversight of the firm's work in this area.</p> <p>Lawton W. Fitt serves as our Lead Independent Director. She presides at executive sessions of the independent directors and engages with them between Board and Committee meetings. Ms. Fitt works closely with the independent directors to provide objective oversight of our business. She facilitates communications with the Board, the identification of matters for consideration by the Board and management, and the formulation of appropriate guidance to be suggested by the independent directors.</p> <p>Carlyle's Board is comprised of 30%+ diverse directors. The Board believes that diversity is an important component of a board, which includes such factors as background, skills, experience, expertise, gender, race, and culture. Moreover, the Board does not discriminate on the basis of race, color, national origin, gender, religion, disability, or sexual orientation in selecting director candidates.</p>

GIR NUMBER	GIR TITLE	DISCLOSURE NUMBER	DISCLOSURE TITLE	DESCRIPTION	LOCATION / RELEVANT INFORMATION
<b>GRI 413</b>	Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs	<p>The reporting organization shall report the following information: a. Percentage of operations with implemented local community engagement, impact assessments, and/or development programs, including the use of: i. social impact assessments, including gender impact assessments, based on participatory processes; ii. environmental impact assessments and ongoing monitoring; iii. public disclosure of results of environmental and social impact assessments; iv. local community development programs based on local communities' needs; v. stakeholder engagement plans based on stakeholder mapping; vi. broad based local community consultation committees and processes that include vulnerable groups; vii. works councils, occupational health and safety committees and other worker representation bodies to deal with impacts; viii. formal local community grievance processes.</p>	<p>Carlyle offers a gift match program. The firm will match employee donations to approved charitable organizations up to \$2,000 per year per employee. In 2022, Carlyle offered an additional \$1,000 per employee to help victims of the war in Ukraine.</p> <p>Carlyle's One Community volunteer program provides the opportunity for employees to share their talent, drive, and commitment with those in need in their community. Employees receive two paid days off per calendar year to arrange group volunteer activities that foster One Community goals by working together with colleagues across disciplines and teams and to participate in volunteer opportunities coordinated by their local office.</p>
<b>GRI 417</b>	Marketing and Labelling	417-3	Incidents of non-compliance concerning marketing communications	<p>The reporting organization shall report the following information: a. Total number of incidents of non-compliance with regulations and/or voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by: i. incidents of non-compliance with regulations resulting in a fine or penalty; ii. incidents of non-compliance with regulations resulting in a warning; iii. incidents of non-compliance with voluntary codes. b. If the organization has not identified any non-compliance with regulations and/or voluntary codes, a brief statement of this fact is sufficient.</p>	<p>No instances of noncompliance with regulations and/or voluntary codes concerning marketing activities resulting in fines or non-monetary sanctions from competent authorities were identified during the reporting period.</p>



# World Economic Forum Disclosures

## SUB-THEMES, CORE METRICS & DISCLOSURES

## LOCATION / RELEVANT INFORMATION

### Setting Purpose

Whether the company has a stated purpose linked to societal benefit and their core business

"An important component of Carlyle's mission statement is to be responsible and respected members of the global community. As stated on our firm's landing page, as a global investment firm, we work together to create long-term value for our investors, companies, shareholders, people and communities (<https://www.carlyle.com>).

In addition, we are a signatory to the Business Roundtable's Statement on the Purpose of a Corporation in 2019, reaffirming our commitment to all of our stakeholders.

The Statement on the Purpose of a Corporation is focused on a commitment to:

- Deliver value to customers;
- Invest in employees through fair compensation and provision of benefits;
- Deal fairly and ethically with suppliers;
- Provide support to the communities in which a company operates; and
- Generate long-term value for shareholders, who provide the capital that allows companies to invest, grow and innovate. This includes transparency and effective engagement with shareholders.

The full Statement on the Purpose of a Corporation can be found here (<https://purpose.businessroundtable.org/#:~:text=In%20its%20place%2C%20the%20CEOs,communities%20in%20which%20they%20operate>).

### Board Composition

Composition of the highest governance body and its committees by: executive or non-executive; independence; tenure on the governance body; number of each individual's other significant positions and commitments, and the nature of the commitments; gender; membership of under-represented social groups; competencies relating to economic, environmental and social topics; stakeholder representation

Please see our response to GRI I02-22.

### Impact of material issues on stakeholders

A list of the material topics identified in the process of defining report content and how they impact stakeholders

Please see our Materiality Assessment Methodology on page 58 of this report.

### Anti-corruption

1. Total percentage of governance body members, employees and business partners who have received training on the organization's anti-corruption policies and procedures, broken down by region
2. Total number and nature of incidents of corruption confirmed during the current year but related to previous years
3. Total number and nature of incidents of corruption confirmed during the current year, related to this year

All of Carlyle's employees receive training on the organization's anti-corruption policies and procedures. Our Anticorruption and Anti-Bribery (ABC) Policy is shared with all employees globally. An internal audit function also carries out periodic monitoring activity. We do not routinely share our ABC Policy with our business partners. However, we do require certain business partners to certify that they are in compliance with ABC minimum standards set forth in our commercial contracts.

### Protected ethics advice and reporting mechanisms

A description of internal and external mechanisms for:

1. seeking advice about ethical and lawful behaviour, and organizational integrity;
2. reporting concerns about unethical or unlawful behaviour, and organizational integrity

Please see our response to GRI I02-17, which details our Code of Conduct, Whistleblower Policy, and Ethics and Compliance Hotline.

### Integrating risk and opportunity into business process

Company risk factor disclosures clearly identify the principal risks facing the company specifically (as opposed to generic sector risks), the Board appetite in respect of these risks, how these risks have moved over time and the response to those changes. These should include discussion of data security and other emerging principal risks and should disclose the number of data breaches in the reporting period

Please see our response to GRI I02-15.

## SUB-THEMES, CORE METRICS & DISCLOSURES

## LOCATION / RELEVANT INFORMATION

### Greenhouse Gas (GHG) emissions

Report GHG Protocol Scope 1 and 2 emissions in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) and estimate and report upstream and downstream (GHG Protocol Scope 3) emissions where material.

2021:  
Scope 1 emissions: 3,099 MT CO<sub>2</sub>e  
Scope 2 emissions: 2,827 MT CO<sub>2</sub>e  
Scope 3 emissions: 4,977 MT CO<sub>2</sub>e\*

2022:  
Scope 1 emissions: 3,058 MT CO<sub>2</sub>e  
Scope 2 emissions: 2,954 MT CO<sub>2</sub>e  
Scope 3 emissions: 14,889 MT CO<sub>2</sub>e\*

\*Employee business travel does not include data from Alpinvest or Aviation Partners, nor any transactions booked outside the Concur Travel and Expense platform.

In 2022, we updated our methodology for calculating our operational greenhouse gas footprint, and enlisted Watershed, an external technology platform, to calculate our operational footprint for 2022. This updated methodology was also retroactively applied to 2021 emissions as well. Watershed's methodologies and emission factors undergo various updates and a third-party review that results in a statement of limited assurance twice per year. These updates include incorporating newer data, improving the granularity of measurement approaches, and creating custom methodologies to assist customers with needs outside the standard sector guidance. For 2022, with respect to our London and New York, NY offices, Q4 electricity consumption was proxy calculated using 2021 figures as utility bills are not yet available.

### TCFD-aligned reporting on material climate risks and opportunities

TCFD-aligned reporting on governance and risk management for all. If climate change is material in short, medium or long term, disclose strategy and metrics/ targets as well, including whether the company has committed to set a science-based target in line with net zero by 2050.

Climate change is material in the short, medium, and long term. In 2022, we announced our firmwide climate strategy and corresponding near- and long-term goals (<https://www.carlyle.com/media-room/news-release-archive/carlyle-sets-net-zero-2050-and-near-term-climate-goals#:~:text=0%20February%202022,-Carlyle%20Sets%20Net%20Zero%20by%202050%20and%20Near%20Term%20Climate,2050%20or%20sooner%20across%20investments>).

Our strategy to addressing climate risks and opportunities is publicly available in our TCFD report, which is included as part of this report.

### Diversity and inclusion (%)

Percentage of employees per employee category, by age group, gender and other indicators of diversity

Please see information on diversity within our teams here (<https://www.carlyle.com/impact/diverse-teams>).

### Training provided (#)

1. Average hours of training per person that the organization's employees have undertaken during the reporting period, by gender and employee category (total number of trainings provided to employees divided by the number of employees)
2. The average training and development expenditure per full time employee

Please see our response to GRI 404-I.

### Net Economic Contribution

1. Direct economic value generated and distributed (EVG&D) – on an accruals basis, covering the basic components for the organization's global operations, including revenues, operating costs, employee wages and benefits, payments to providers of capital, payments to government
2. Financial assistance received from the government (e.g. tax breaks, subsidies, investment grants etc.)
3. Net Economic Contribution = (EVG&D) minus (Financial assistance received from the government)

Please see our response to GRI 201-I.

### Net Economic Contribution

1. Direct economic value generated and distributed (EVG&D) – on an accruals basis, covering the basic components for the organization's global operations, including revenues, operating costs, employee wages and benefits, payments to providers of capital, payments to government
2. Financial assistance received from the government (e.g. tax breaks, subsidies, investment grants etc.)
3. Net Economic Contribution = (EVG&D) minus (Financial assistance received from the government)

Please see our response to GRI 201-I.



## World Economic Forum Disclosures

### SUB-THEMES, CORE METRICS & DISCLOSURES

#### Community investment (%)

A percentage breakdown of community investment, including monetary contributions such as charitable gifts and community partnerships; time contributions such as staff volunteering in paid time; in-kind contributions from services or equipment; and management costs, normalized as a percentage of pre-tax profit

### LOCATION / RELEVANT INFORMATION

In 2022, Carlyle matched 647 donations to 212 charitable organizations. In total, \$751,660.70 was donated.

Additionally, we engaged in a number of volunteering and fundraising initiatives. Select examples include:

- Partnered with Capital Area Food Bank (CAFB) to provide an essential first step in getting food flowing into the community for those who need it most; donated \$5,000 to CAFB to support the ongoing partnership; employees donated over 30 pounds of food during the food drive. CAFB hosted two events where volunteers sorted food donations and packed emergency and senior citizen food boxes.
- Partnered with Community of Hope to provide new backpacks filled with school supplies to underserved students in DC. Volunteers filled 100 backpacks with supplies. Employees contributed in-kind and financial donations.
- To promote access to healthy food to families in Wards 7 & 8 of DC, Martha's Table has a full service no-cost Grocery Market. Employees volunteered at their Commons Grocery Market to set up and operate the market, maintain inventory, unload delivery trucks, and build grocery bags.
- So Others Mmay Eat (SOME) annual holiday gift box packing event. Employees packed 200 boxes brimming with essential items to be given out during the holidays.
- Partnered with World Child Cancer to create the Rory MacMillan Scholarship Fund and raised over £5,000 so far.
- Hosted a Business in Focus day in July for students from IntoUniversity. This was a business simulation where the London team provided office space, lunch and volunteers.
- Participated in the J.P. Morgan Corporate Challenge in July where 30 employees participated and supported runners. The event raised funds for NSPCC, the UK's leading children's charity.
- Employees participated in The Trident triathlon where they raised over £4,000 for SBSA in August.
- Raised more than £40,000 (including gift matches) for The Single Homeless Project at their annual raffle in December.

#### Country by country tax reporting

1. All tax jurisdictions where the entities included in the organization's audited consolidated financial statements, or in the financial information filed on public record, are resident for tax purposes.

2. For each tax jurisdiction reported in Disclosure 207-4-a:

- Names of the resident entities
- Primary activities of the organization
- Number of employees and the basis of calculation of this number
- Revenues from third-party sales
- Revenues from intra-group transactions with other tax jurisdictions
- Profit/loss before tax
- Tangible assets other than cash and cash equivalents
- Corporate income tax paid on a cash basis
- Corporate income tax accrued on profit/loss
- Reasons for the difference between corporate income tax accrued on profit/loss and the tax due if the statutory tax rate is applied to profit/loss before tax

3. The time period covered by the information reported in Disclosure 207-4.

Please see pages 218-221 in Carlyle's 2022 Annual Report on Form IO-K (<https://ir.carlyle.com/static-files/dcea0020-8c53-49b1-826b-ad8f32e64585>).



## Disclaimers

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The information provided herein is for informational purposes only and is not and may not be relied on in any manner as advice or as an offer to sell or a solicitation of an offer to buy interests in any fund or other product sponsored or managed by Carlyle. Any such offer or solicitation shall only be made pursuant to a final confidential private placement memorandum (as amended and/or restated from time to time) and the applicable fund’s subscription documents, which will be furnished to qualified investors on a confidential basis at their request for their consideration in connection with such offering. Private equity funds and investment strategies are intended for qualified investors only. They are typically speculative, provide limited liquidity, involve a high degree of risk, including a total loss of capital, and they may engage in the use of leverage, short sales, and derivatives. This report is not and shall not be construed as an “advertisement” for purposes of the Investment Advisers Act of 1940, as amended. Further, nothing contained herein constitutes investment, legal, tax, or other advice nor is it to be relied on in making an investment or other decision. The information in this report is only as current as the date indicated and may be superseded by subsequent market events or for other reasons, and Carlyle and its affiliates assume no obligation to update the information herein. Please see Carlyle’s public filings for the definition of “Assets under Management” or “AUM.”

References to portfolio companies, including within any case studies, are intended to illustrate the application of Carlyle’s investment or ESG process only and should not be viewed as a recommendation of any particular security or portfolio company. The information provided about these portfolio companies is intended to be illustrative, and is not intended to be used as an indication of the current or future performance of Carlyle’s portfolio companies. The investments described in the selected case studies were not made by any single fund or other product and do not represent all of the investments purchased or sold by any fund or other product. It should not be assumed that investments made in the future will be comparable in quality or performance to the investments described herein. Past performance is not necessarily indicative of future results. Descriptions of any ESG or impact achievements or improved practices or outcomes are not necessarily intended to indicate that Carlyle has substantially contributed to such achievements, practices, or outcomes. For instance, Carlyle’s ESG efforts may have been one of many factors—including such other factors as engagement by portfolio company management, advisors, and other third parties—contributing to the success described in each of the selected case studies. Further, the receipt of any awards by Carlyle or the portfolio companies described herein is no assurance that Carlyle’s investment

objectives have been achieved or successful. Further, such awards are not, and should not be deemed to be, a recommendation or evaluation of Carlyle’s investment management business.

Goals, targets, and commitments, including Carlyle’s ESG goals and related timelines, are aspirational, subject to change, and not guarantees or promises that any or all goals, targets, and commitments will be met. Such goals, targets and commitments are not binding on investment decisions and/or Carlyle’s management of investments and any reference herein to environmental or social considerations is not intended to qualify our duty to maximize risk-adjusted returns. Relatedly, any figures or data on emission reduction targets and/or progress, as well as any cost savings associated with emissions reductions, have not been independently verified. The analysis involved in determining whether and how certain initiatives may contribute to such goals is inherently subjective and dependent on a number of factors. There can be no assurance that reasonable parties will agree as to whether certain projects or investments contribute to a particular goal, target, or commitment. Carlyle makes no commitment or guarantee that it is investing in companies that have a formal commitment or plan or take specific actions to support or contribute to any goal, target or commitment.

Similarly, there can be no assurance that Carlyle’s ESG policies and procedures as described in this report, including policies and procedures related to responsible investment or the application of ESG-related criteria or reviews to the investment process, will be successfully implemented or continue; such policies and procedures could change, even materially, or may not be applied to a particular investment. Carlyle is permitted to determine in its discretion that it is not feasible or practical to implement or complete certain of its ESG goals, initiatives, policies, and procedures based on cost, timing, or other considerations. No assurance can be given that Carlyle will remain a signatory, supporter, or member of any ESG-related initiative or other similar industry frameworks. Statements about ESG initiatives or practices related to portfolio companies do not apply in every instance and depend on factors including, but not limited to, the relevance or implementation status of an ESG initiative to or within the portfolio company; the nature and/or extent of investment in, ownership of or, control or influence exercised by Carlyle with respect to the portfolio company; and other factors as determined by investment teams, corporate groups, asset management teams, portfolio operations teams, companies, investments, and/or businesses on a case-by-case basis. ESG factors are only some of the many factors Carlyle considers in making an investment, and there is no guarantee that Carlyle’s consideration of ESG factors will enhance long-term value and financial returns for investors. To the extent Carlyle engages with portfolio companies on ESG-related practices and potential enhancements thereto, there is no guarantee that such engagements will improve the long-term value of the investment. In addition, the act of selecting and evaluating material ESG factors is subjective by nature, and there is no guarantee that the criteria utilized or judgment exercised by Carlyle will reflect the beliefs or values, internal policies or preferred practices of investors, other asset managers or with market trends. There can be no assurance that the operations and/or processes of Carlyle as described herein will continue, and such processes and operations may change, even materially. The actual investment process used for any or all of Carlyle’s investments may differ materially from the process described herein. Investors should read this 2023 ESG Report in conjunction with investment fund quarterly reports, financial statements and other disclosures regarding the valuations and performance of the specific investments listed herein.

Investors should also review Carlyle’s annual, quarterly, and other reports filed with the U.S. Securities and Exchange Commission (SEC). Certain of the information contained in this 2023 ESG Report represents or is based upon forward-looking statements or information. Any statements that are not statements of historical facts may be deemed to be forward-looking statements. When used in this 2023 ESG Report, the words “may,” “could,” “anticipate,” “target,” “plan,” “continue,” “goal,” “commit,” “achieve,” “project,” “impact,” “intend,” “estimate,” “believe,” “expect,” “potential,” “will,” “should,” “seeks” and similar expressions (or the negatives thereof) are intended to identify forward-looking statements, although not all forward-looking statements contain such words. Forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from our historical experience and our present expectations or anticipated results. These risks and uncertainties include, but are not limited to those described under “Risk Factors” in Carlyle’s Annual Report on Form 10-K for the year ended December 31, 2022, filed with the SEC, as such factors may be updated from time to time in its periodic filings, which are accessible on the SEC’s website at [www.sec.gov](http://www.sec.gov). These factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included in this 2023 ESG Report and Carlyle’s other periodic filings with the SEC. Therefore, undue reliance should not be placed on such statements or the conclusions drawn therefrom, which in no event shall be construed as a guarantee of future performance, results or courses of action. Any forward-looking statement speaks only as of the date on which such statement is made, and Carlyle expressly disclaims any obligation or undertaking to update or revise any such forward-looking statements, except as required by applicable law. Additionally, terms such “ESG,” “impact,” and “sustainability” can be subjective in nature, and there is no representation or guarantee that these terms, as used by Carlyle, or judgment exercised by Carlyle Partner or its affiliates or advisors in the application of these terms, will reflect the beliefs or values, policies, principles, frameworks or preferred practices of any particular investor or other third-party or reflect market trends. There is additionally no guarantee that any of the ESG- or decarbonization-linked loans noted herein align with the Sustainability Linked Loan Principles developed by the Loan Market Association, Loan Syndications and Trading Association, and the Asia Pacific Loan Market Association.

In this report, we are not using such terms as “material” or “materiality” as they are used under the securities or other laws of the U.S. or any other jurisdiction, or as they are used in the context of financial statements and financial reporting. Materiality, for purposes of this report should not, therefore, be read as equating to any use of the word in other Carlyle reporting or statements.

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The information and/or data required to discharge the TCFD disclosure requirements may not be available in every instance, and/or may be partially or fully incomplete due to a number of factors such as methodological challenges affecting the ability to collect and/or calculate certain data, or where data is sourced from third-party sources. Responses given in sections of this 2023 ESG Report may be based on estimated data, and Carlyle gives no representation or assurance as to the accuracy, completeness and/or reliability of such estimates. Carlyle does not independently verify data obtained from third-party sources, or estimated data. Responses in sections of this 2023 ESG Report may refer to internal systems and/or processes which are under development, evolution and review, and Carlyle gives no guarantee that these systems and processes will be implemented as described herein

For purposes of the non-financial operating and statistical data included herein, foreign currencies have been converted to U.S. dollars at the spot rate as of the last trading day of the reporting period when presenting period end balances, and the average rate for the period has been utilized when presenting activity during such period.

Please note that this report does not include energy funds that are (i) legacy funds jointly advised with Riverstone Holdings LLC or its affiliates (“Riverstone”) or (ii) managed by NGP Management Company, L.L.C. or its affiliates (“NGP”). Carlyle does not control or manage Riverstone or NGP. Affiliates of both Carlyle and Riverstone act as joint investment advisers to three legacy energy funds with vintages from 2003-2007. Carlyle’s representation on the investment and/or management committees of the jointly sponsored legacy funds varies and after the last of these co-branded funds Carlyle does not have any interest in Riverstone’s management or funds. Moreover, Carlyle does not operate NGP’s business, have representation on NGP’s board or serve as an investment advisor to any investment fund sponsored by NGP, nor does Carlyle direct the operations of any of NGP portfolio companies. While Carlyle has consent rights over certain major actions by NGP outside of the ordinary course of NGP’s business (including, for example, consent rights over items such as amendments to the organizational documents of the entity in which Carlyle is invested, changes to the management fee streams earned by NGP under its fund agreements, or the incurrence of certain debt by NGP and other similar items), Carlyle has no voting rights or consent rights on any NGP investment committee that selects investments to be made by NGP funds. None of the firm-level metrics included herein incorporate Riverstone or NGP.



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