The Carlyle Group

GLOBAL ALTERNATIVE ASSET MANAGEMENT

# Tailored Strategies

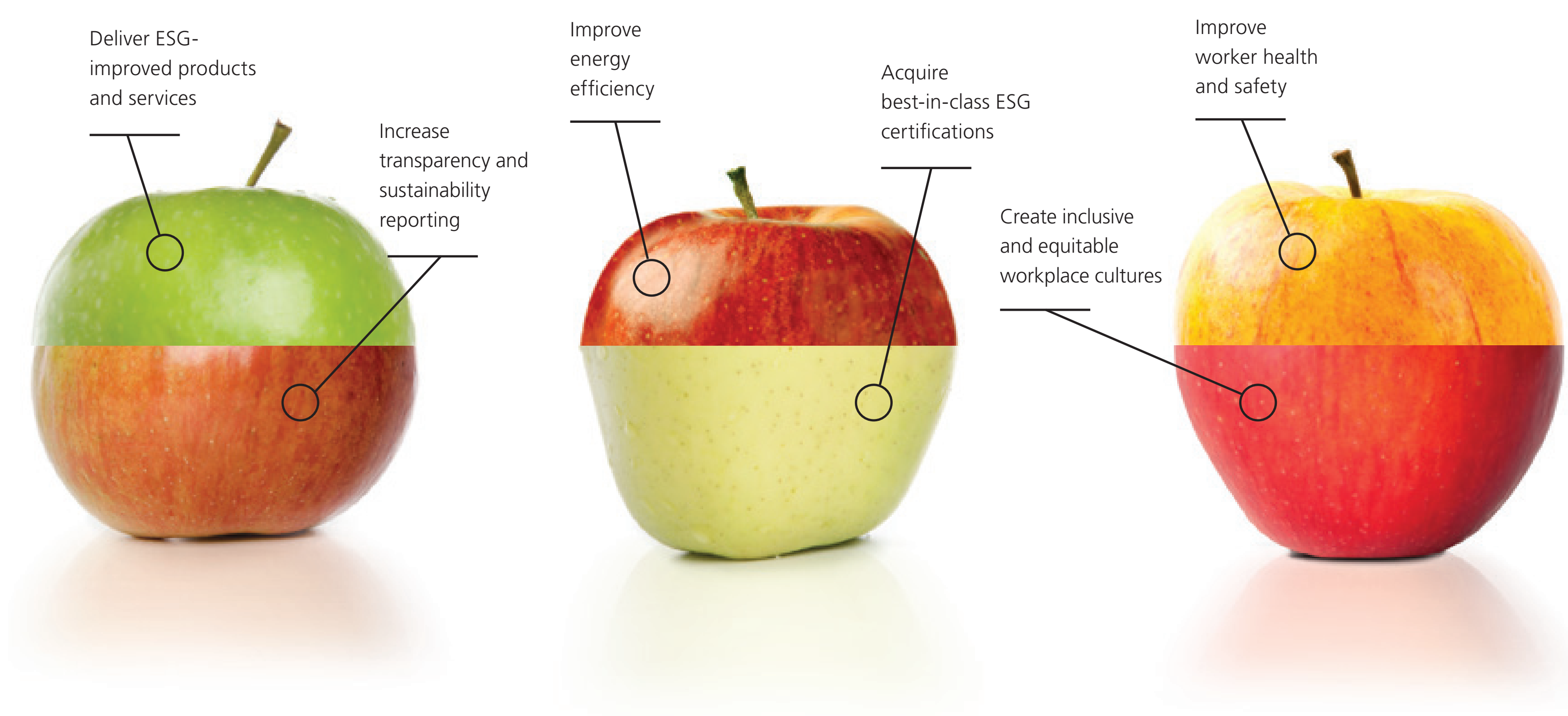
2018 Corporate Citizenship Report

ENVIRONMENTAL SOCIAL GOVERNANCE

Just as apples have many varieties, so do our Environmental, Social and Governance (ESG) solutions. We believe that our portfolio companies benefit from distinct ESG strategies that reflect their particular operations, sectors, geographies and stakeholders.

We call this approach *tailored strategies.* Solutions tailored for each particular company's circumstances enable our companies to address their material ESG risks and opportunities.

Tailored strategies help to create maximum value for companies.



# One size fits none

Carlyle helps our portfolio companies and their senior management teams strategize around a range of ESG issues, including environmental performance, workforce health and safety, governance, and diversity and inclusion. Our tailored approach helps ensure that these companies address the ESG issues that can have the biggest impact.

In this year's citizenship report, we highlight in-depth case studies that demonstrate how specific, tailored strategies can help companies create more value from ESG initiatives. We also describe how one of our largest funds, Carlyle Europe Partners IV, monitors portfolio companies through ESG Key Performance Indicators that enable an approach tailored to the most material issues.

In Carlyle's own operations, we too pursue an ESG strategy tailored to our business as an alternative asset manager. We focus on the areas that drive the most value for our limited partners and unit-holders, and draw on our expertise and resources to be a leader in our industry.

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# To our investors, our partners and our communities

As stewards of our investors' capital, Carlyle's mandate is to invest wisely and create value. Over the last decade, one of the ways we have strengthened our stewardship is through our sustainability practice: quite simply, sound ESG practices enhance our investment processes and outcomes. In this, our first annual letter as co-CEOs, we want to assure our investors and other stakeholders that sustainability is and will continue to be an important priority for Carlyle.

As Carlyle enters our second decade of ESG leadership, we are focused on three priorities: value creation; robust governance and transparency; and industry leadership on ESG issues.

The theme of this year's report—tailored strategies—captures the first pillar of our ESG strategy. Each portfolio company and investment is unique, and we create the most value by tailoring ESG objectives and priorities on a case-by-case basis. As a firm with more than 275 active portfolio companies, we have learned that a one-size-fits-all solution does not serve our investors well.

In essence, we encourage our investment professionals to prioritize those issues that matter most. Recent research from the Harvard Business School validates this approach. The study found that firms that focus on and achieve success on material sustainability issues create more value (for more information see page 14). In other words, many firms say they prioritize sustainability, but those firms that focus on the right issues—the material ones—generate the most value.

At Carlyle, we possess strong internal capabilities, including a Chief Sustainability Officer and external specialists in specific ESG issues who help us identify the materiality of ESG issues and provide insight to our investment teams during the due diligence process. In the last year, we augmented our existing investment process by adding the Sustainability Accounting Standards Board (SASB) sector guidelines as a resource. These guidelines identify material factors likely to create or destroy value in 11 sectors and 79 industries. For example, if we explore an investment in an agricultural products company, SASB points to several material sustainability issues

### Our ESG strategy:

- Tailored value creation
- Robust governance and transparency
- Industry leadership on ESG issues

to consider, including water use, fertilizer consumption and food safety. These sector guidelines, combined with our in-house expertise, allow us to approach ESG strategically and focus on those issues that matter.

The second pillar of our ESG strategy—governance and transparency—ensures alignment between Carlyle's interests and those of our investors, and places a premium on effective communication with our investors and other stakeholders. We follow a rigorous process around ESG issues, with mandatory inclusion of these issues in Investment Committee materials in most asset classes, and annual board-level review of our Guidelines for Responsible Investment at all of our controlled Corporate Private Equity companies. We also publish this annual citizenship report—our eighth—and regularly brief and consult with investors on ESG issues. We are excited to announce that in 2017, one of our largest fund families, Carlyle Europe Partners, further advanced Carlyle's ESG policies and practices by moving from fund-level reporting to reporting, on a company-by-company basis, ESG Key Performance Indicators (KPIs). This enhanced framework gives our investors greater insight into the true ESG performance of our portfolio companies.

Carlyle's third ESG pillar is to continue providing leadership on ESG issues, as we have for ten years. In 2008, we created our Guidelines for Responsible Investment, which also became the basis of the American Investment Council's guidelines in 2009. We published the first sustainability report in the sector in 2010 and hired our first Chief Sustainability Officer, Jackie Roberts, in 2014.

We are pleased to announce that Carlyle, across our 31 global offices and the activities of our roughly 1,600 employees, is now carbon neutral. Over the past year, we conducted our first-ever carbon footprint analysis with the assistance of environmental consultants with expertise in carbon measurement and estimation, and continued efforts to reduce our carbon emissions through efficiency projects. We then used our carbon data to invest in an offset project with The Carbon Fund focused on reducing emissions from long-haul trucks, a service used by many of our portfolio companies. We are not aware of any other global private equity firm that has taken this step. For more information on how we are deepening our approach to carbon and the climate, please see pages 12 and 13.

Another area in which we aim to provide leadership is diversity and inclusion. Pursuing a diverse workplace not only reflects our values as a firm, but also enables us to better serve our investors because teams with diverse perspectives and experiences make better decisions.

In our 2017 citizenship report, when we chose to highlight our progress (and areas for further work) in hiring and promoting women at Carlyle, we had no way of knowing that gender diversity would become a front-page issue by the end of the year. However, the spotlight only reinforced our belief that proactive leadership on these issues is essential to our firm's success and development. We are proud of our achievements and committed to even further improvements.

This year, we are also proud to announce that the Human Rights Campaign gave us a perfect score of 100 for LGBTQ inclusiveness, the result of inspired leadership by our LGBTQ Employee Resource Group and support from senior decision makers at Carlyle. We believe that such employee-driven initiatives help in all areas of diversity.

We are humbled by your trust and hope this year's corporate citizenship report will further validate your confidence in Carlyle.

"The most effective ESG strategies are those with a clear connection to how managing and improving ESG issues creates value. A tailored strategy enables our deal teams to assess ESG risks and opportunities given their deep knowledge of the companies and their stakeholders."

Kewsong Lee
Co-Chief Executive Officer

Glenn A. Youngkin
Co-Chief Executive Officer

# This is Carlyle

The Carlyle Group (NASDAQ: CG) is a global alternative asset manager with $201 billion of assets under management across 324 investment vehicles as of March 31, 2018. Carlyle's purpose is to invest wisely and create value on behalf of its investors.

## Our Purpose

**To invest wisely and create value**

## Our Mission

Generate superior investment returns

Inspire the confidence and loyalty of our investors

Attract, develop and retain highly talented professionals

Demonstrate principled industry leadership

Be responsible and respected members of the global community

## Our Values

**Service** Act in the best interest of our investors

**Integrity** Uphold the highest standards of integrity, professionalism and confidentiality

**Quality** Deliver best-in-class investment activities and services to our investors

**Stewardship** Treat our investors' money as if it were our own, balancing risk and reward

**Accountability** Take personal responsibility and deliver on commitments

**Teamwork** Create community and work together as One Carlyle

**Respect** Value each other, encourage professional development, respect personal contributions and reward effective performance

**Citizenship** Be responsible citizens in the communities where we work and live

**Entrepreneurship** Differentiate the firm through creative thinking and action

**Determination** Show a will to win in every aspect of our business

Our investments in more than

# 275 portfolio companies

employ more than

# 650,000 employees

# 1,750+ investors from 83 countries

4

## Business Segments

Corporate Private Equity
Real Assets
Global Credit
Investment Solutions

12

## Key Industry Sectors

Aerospace
Defense & Government Services
Consumer & Retail
Energy & Power
Financial Services
Healthcare
Industrial
Infrastructure
Real Estate
Technology & Business Services
Telecommunications & Media
Transportation

**31** offices

**19** countries

**6** continents

**650+** investment professionals

**1,575+** Carlyle employees

ONE CARLYLE

Carlyle professionals work together seamlessly and selflessly across funds, industries and geographies to deliver the wisdom, knowledge and resources required to invest wisely and create value for our investors. We call our collaborative spirit One Carlyle.

All data as of March 31, 2018.

# Our ESG strategy

At Carlyle, ESG issues intersect with our business in several different ways. We focus on three goals in our own strategy and work to make progress in each area.

**Providing strong ESG governance and transparency** Since 2008, we have sought to continuously strengthen governance and transparency, ensuring that the interests of our investors, portfolio companies and investment professionals are aligned with our ESG goals. Good governance processes enable Carlyle to monitor current and emerging risks and provide investors with the transparency they require.

**Creating value through tailored strategies at portfolio companies** ESG considerations play a growing role in our investment processes and the operations of our portfolio companies. As part of our investment process in our Corporate Private Equity segment and several other asset classes, we evaluate ESG risks and seek opportunities to create value through sustainability initiatives. During our ownership period, we support our management teams' efforts to develop strategic ESG programs, including through collaboration with other portfolio companies. At exit, we highlight relevant ESG accomplishments. Our case studies and ESG value drivers (see page 16) illustrate the range of opportunities for enhancing value.

**Advancing ESG practices in the private equity industry** Our tailored ESG strategy includes advancing ESG issues within our own firm. For example, we believe that diverse teams and experiences bring tremendous value to our firm and our industry. As such, we work to cultivate an environment rich in different backgrounds, perspectives and experiences. We participate in ESG events and organizations, aiming to stay at the forefront of emerging issues such as climate risk. We encourage our employees to get involved where they live, work and invest through our volunteer and wealth sharing programs. We also work to continually improve environmental stewardship within our firm, particularly in the areas of energy and materials use.


1
ESG
&
governance
transparency


2
value creation
at portfolio
companies


3
best practices in
the private equity
industry

# How we integrate ESG considerations into our investment process

Carlyle integrates ESG into our investment process to identify and monitor the most relevant ESG issues, therefore reducing risk and creating value. We provide our deal teams and portfolio companies with the resources and information they need to manage ESG issues effectively. While risk management strategies frequently evolve over time, we are increasingly confident in our ability to identify and manage ESG risks, including responding to incidents if they occur.

We formalized this approach through internal policies and processes that seek to improve ESG governance through three key approaches:

- **Our Guidelines for Responsible Investment** Developed in 2008, our guidelines were the basis of the industry standard adopted by the American Investment Council. These guidelines provide our global deal teams with a clearly defined policy to follow during the investment process. The guidelines—which draw on international standards, including the UN Principles for Responsible Investment and the UN Global Compact—can be viewed at www.carlyle.com/citizenship.
- **An annual review by all controlled Corporate Private Equity (CPE) boards** to affirm adherence to the policy. In 2017, 96% of Carlyle-controlled companies in our CPE segment reviewed their operations in accordance with our Guidelines for Responsible Investment.[1]
- **A review of material issues during due diligence** that is shared in the Investment Committee memo and included in the deal's transaction dashboard for most asset classes.

1 Three of the four companies who failed to review the guidelines were in active exit processes and left our portfolio in early 2018.

# ESG expertise and execution

Our Chief Sustainability Officer (CSO) and her team support investment professionals, portfolio companies and our investors on ESG issues. She also engages with the broader financial and ESG communities to advance sustainability in the private equity industry and provides training and support on a variety of related issues. We engage external experts as appropriate for environmental and social assessments in due diligence and to help develop and implement mitigation plans in areas needing corrective action.

Carlyle professionals receive training on ESG issues on a regular basis. Our CSO meets with the incoming class of associates every year and presents at our Vice Presidents Forum and Senior Leadership Conference concerning new developments in the space. Our employees also receive targeted training on many issues related to corporate governance and compliance, including anti-corruption, conflicts of interest, economic sanctions and anti-money laundering. Our Office of General Counsel provides expertise and support on all governance issues.

During due diligence, and continuing into ownership, investment professionals access relevant expertise through several channels, including input from our sustainability team, expert consultants who may conduct specific ESG assessments and third-party guidance, such as the SASB standards that we incorporated into our process in 2017. SASB helps us define material ESG risks and areas of concern for stakeholders and begins to create a road map for highlighting which areas might create value for various stakeholders if managed well.

**"The most important aspect of what I do is to understand the range of ESG issues that intersect with business—what are the most material issues for different sectors and how can we provide more support on ESG issues to reduce risks or create value."**

JACKIE ROBERTS
CHIEF SUSTAINABILITY OFFICER

> **"We believe that a focus on ESG is important, not just because it is the right thing to do, but because it makes good business sense. Over time, we observed across our portfolio that businesses that identify and focus on the material ESG issues outperform. Our ESG framework gives us a systematic and meaningful way to monitor material ESG risks and identify ESG opportunities."**
>
> MARCO DE BENEDETTI AND GREGOR BOEHM
> MANAGING DIRECTORS AND CO-HEADS
> CARLYLE EUROPE PARTNERS

## Carlyle Europe Partners: First fund to provide ESG reporting at the portfolio company level for all LPs

In 2017, Carlyle Europe Partners (CEP) augmented Carlyle's global ESG goals and practices by introducing its own enhanced ESG framework, starting with the latest vintage of its funds, Carlyle Europe Partners IV. Based in Europe and reporting to fund Co-heads Gregor Boehm and Marco De Benedetti, Eimear Palmer leads Carlyle Europe Buyout's ESG efforts, working closely with Carlyle's CSO to ensure a streamlined approach to detecting and managing ESG risks and identifying ESG opportunities. CEP's enhanced ESG framework involves systematically establishing and monitoring company-specific ESG KPIs for each controlled private equity investment.

CEP has established a three-step process for setting ESG KPIs:

1. First, to establish a baseline of issues for discussions, the deal team reviews SASB guidance to determine the key ESG issues for each portfolio company's industry sector, consults with our Chief Sustainability Officer about issue materiality, and, if necessary, engages external consultants to identify issues specific to the business.

2. Next, the team collaborates with management to formulate company-specific ESG metrics that are relevant and meaningful for each individual company and can be monitored regularly.

3. Finally, the Carlyle Europe team annually updates an ESG KPI reporting template for each portfolio company to highlight its key ESG challenges and opportunities, based on the company's sector, geography and size.

Establishing company-specific ESG KPIs is now included as standard in the 100-day post-acquisition plan for each new Carlyle Europe investment. The number of ESG KPIs varies by company, depending on the sector and the quality of the company's ESG management system. Each ESG KPI is monitored annually and discussed with management. Any ESG concerns identified during this process will be raised at the portfolio company board level.




Key performance indicators (KPIs) are helping us monitor material ESG risks and opportunities to enhance Carlyle Europe investments




# Carbon neutrality

As the next step in strengthening ESG practices in our own operations, we are proud to announce that Carlyle, across our 31 global offices and the activities of our roughly 1,600 employees, is now carbon neutral, starting with our 2017 carbon footprint. Carlyle sees an opportunity to demonstrate leadership in our industry by measuring, reducing and offsetting our emissions.

**Measure** We gathered data on all of our major sources of carbon, including utilities in our offices, off-site data centers and business travel, covering Scopes 1, 2 and 3 in the World Resources Institute's Greenhouse Gas Protocol. Anthesis Group, a third party with expertise in carbon footprinting, helped us review and refine our methodology to calculate our carbon footprint.

**Reduce** We continue to look for opportunities to reduce our use of energy, water and resources in our operations. Our Global Technology & Solutions team engaged in significant virtualization of our servers and centralization of our printing resources, generating energy and material savings, including a 15.9% reduction in our data center energy use over the last year. We renovated and relocated to more efficient spaces at several locations around the globe, including our new London office, which was certified "Excellent" by BREEAM, the British green building standard. Our U.S. offices in New York and Rosslyn, Virginia earned LEED and Energy Star certifications.

Carbonfund.org

**Offset** With our measurements and reductions in hand, we worked with The Carbon Fund, an organization that provides verified carbon-offsetting projects, to purchase enough offsets to achieve carbon neutrality. They helped us identify a truck stop electrification project, verified by the American Carbon Registry, to offset the remainder of our footprint. This project averts carbon by installing electrical hookups at truck stops throughout the United States for use by truck operators during their federally mandated rest period, rather than relying on diesel generators or idling to produce electricity. The reductions in carbon come from the difference in carbon intensity between grid electricity and diesel combustion, combined with the fact that the solution is not yet commercially viable without the sort of investment Carlyle is providing. In addition to carbon benefits, electrification reduces conventional air pollutants, which is healthier for truckers at these locations and their surrounding communities. Since many of our portfolio companies rely on ground shipping for supplies and/or delivery of products, reducing emissions from trucking is important across our portfolio.

# Climate risk and resiliency

**Testing our own climate resilience** In 2017, what began as a tabletop exercise in business continuity planning quickly evolved into a climate risk exercise as our team concluded that weather-related risks outpace other risk categories in terms of scope and probability of occurrence. Georgette Kiser, Carlyle's Chief Information Officer, led the exercise.

This exercise led to three outcomes: focusing on physical safety to complement continuity; rearranging the Carlyle communications tree; and recognizing vulnerabilities in our U.S. data center structure that led us to explore additional backups (including cloud technology).

**Climate resiliency in our portfolio** After Hurricanes Harvey, Irma and Maria in 2017, our internal analysis showed little damage to our assets directly, partly due to better preparedness. For example, one of our portfolio companies, Clearly Petroleum, owns a field along the Brazos River in Texas that is subject to flood risk. Prior to the landfall of Hurricane Harvey in August 2017, Clearly's field personnel preemptively shut in the field and filled storage tanks with water at the production facility to prevent flotation. Clearly had previously taken several steps to minimize potential impacts from adverse weather events, including expanding berms around storage tanks and elevating electric equipment.

Carlyle's portfolio companies continue to pursue business continuity planning that takes extreme weather risks into account. Philadelphia Energy Solutions and Fort Lauderdale Marine are two more of our large assets where Carlyle teams invested in new procedures for storm preparedness. For example, the Philadelphia Energy team elevated key equipment to account for new floodplain maps.

"Risks are dynamic, and there is no question that climate risk and resiliency are emerging issues for investors," says Carlyle Chief Risk Officer Bruce Rosenblum. "Business continuity planning should expand to include these risks."

**"I am a strong advocate for tabletop exercises, which are meetings to discuss simulated emergency situations. Our own exercise on climate risk helped us prioritize physical safety, modify our company communications tree and explore the implementation of backup data centers."**

GEORGETTE KISER
MANAGING DIRECTOR
CHIEF INFORMATION OFFICER

## Annual sustainability workshop helps portfolio companies share ideas and build ESG strategies

In December 2017, Carlyle gathered a group of portfolio companies in Washington, DC to discuss sustainability trends and emerging issues and to share ideas. In this latest edition of a recurring event, the sessions focused on how we can help our portfolio companies identify and transform their ESG initiatives into full ESG strategies. We considered how to create value by integrating not just the most material ESG issues, but also input from key stakeholders, including customers, investors, employees, suppliers and communities. Our investment professionals discussed how our value creation strategies align with our four sustainability value drivers. Carlyle's Chief Information Officer, Georgette Kiser, led a session on weather risks and tabletop exercises, using a climate change risk assessment for Carlyle's own business operations (see page 13).

The group was inspired by George Serafeim's research from Harvard Business School, which affirms that the most effective ESG strategies reflect a solid understanding of how managing and improving ESG issues creates value. In contrast, those strategies that miss the right issues tend to simply spend money on initiatives that may be misdirected and add minimal value.[2]

(left to right) Brian Bernasek, Managing Director and Head of Global Industrial & Transportation Team, and Jay Sammons, Managing Director and Head of Global Consumer & Retail team, with Jackie Roberts, Chief Sustainability Officer.

2 Mozaffar Khan, George Serafeim, and Aaron Yoon. Corporate Sustainability: First Evidence on Materiality. The Accounting Review: November 2016, Vol. 91, No. 6, pp. 1697-1724.

# How our sector heads see the evolving role of ESG

Brian Bernasek and Jay Sammons head our industrial and consumer and retail sectors for our U.S. Buyout team, respectively. At our 2017 Portfolio Company Sustainability Workshop, they discussed the value and importance of ESG in their specific sectors, which we summarize below:

### How do you see value in ESG initiatives?

**JAY:** At the beginning of my career, ESG was seen by most as being mutually exclusive with profit. Things are different today. I focus on consumer-facing businesses, and a key impetus to improve our ESG performance comes straight from the end-consumers themselves. They're savvier, they have more access to information than ever before, and they want to buy from companies whose operations they respect, that reflect their own values and have more distinctive product attributes, such as more sustainable products.

**BRIAN:** We're definitely doing more on the growth side, but the cost side is still an essential driver for ESG initiatives. Improving operational efficiency is a priority in any new investment, especially carve out transactions. We often get strong energy and water savings from that process. After that, we can move on to growth strategies. Axalta is an industrial coatings company that responded to customers who needed better ESG attributes in paint and coatings by developing new, environmentally preferable formulations. This helped grow the business with new customer bases en route to an IPO.

### What does it take to identify or develop a culture of ESG success in a prospective investment?

**BRIAN:** If you're not on top of safety, governance, environmental impact and the like, it is a sign that your overall operations are not tightly run. As such, it's very much a part of the broader management culture. In terms of measuring impact, many areas of ESG are harder to quantify, although we're increasingly measuring KPIs where appropriate. For the areas that are more qualitative, you focus on your customer and encourage a strong ESG culture.

**JAY:** A big part of our job is pattern recognition, and through experience and instinct, we just know when a company's leaders believe in good ESG management and when they do not. Some of it is quantitative, but a lot of it is intuitive. A key focus for us is to make sure ESG issues and opportunities are discussed at the portfolio company board level, because if they aren't, they likely won't be discussed or implemented anywhere below it. So, we must start by getting the board membership right in order to drive ESG opportunities.

**BRIAN:** ESG used to be about playing defense, or what we would call "reputational risk." It's now an offensive, value-improvement tool. It's good for business. The best way we measure that is by our performance.

### What is driving the business case for ESG integration?

**JAY:** It's information. Consumers are more powerful than ever before because they have so much more information in hand—she can look things up on her phone when she's standing at the shelf making a decision between brands. And, millennials—their ways of consuming are totally different, so we need to pay close attention when demographics change.

**BRIAN:** And once the business case becomes clear, the boards and management teams of these companies start to drive ESG change themselves because they see the value.

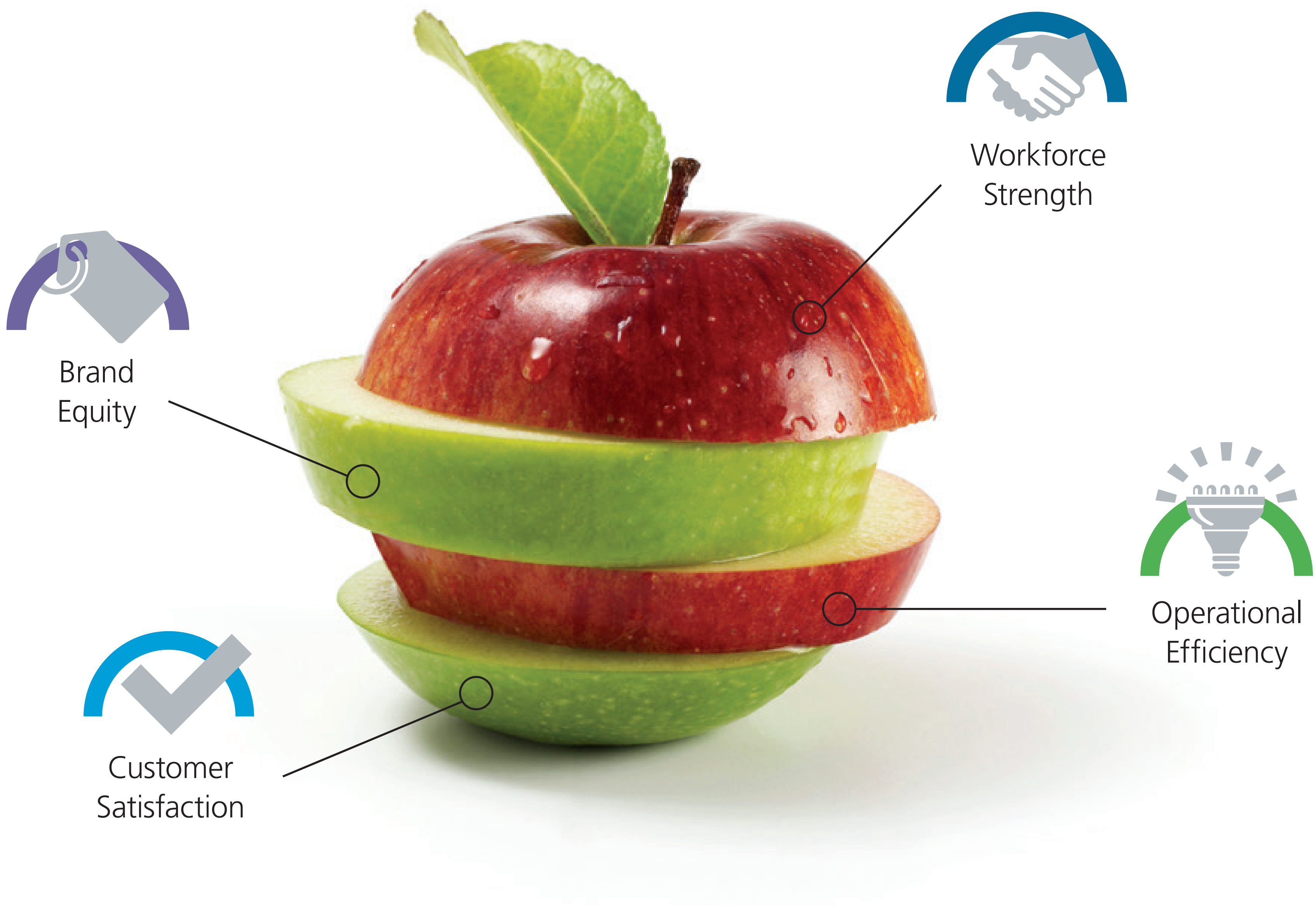
### What is the biggest mistake that companies make with regard to ESG?

**JAY:** Treating ESG like a check-the-box exercise. Board reviews can't just be tools to measure—the culture has to be built where ESG is considered in everything people do all around the organization. It's not the work for the sake of the work. It's not just about compliance. That type of approach can lead to a situation where there is a spread between aspiration and quality execution.

**BRIAN:** I've never seen a mistake when they've made an honest attempt at it. The place where the mistakes are made is when they're not committed to ESG in the first place. If anything, the mistake is usually the gap between excellent ESG work on the operations side and communicating it to your investors or your customers. Addison Lee car service and Axalta both had strong ESG performance in their operations, but each benefited from the insights of our Chief Sustainability Officer to really get the most out of it from a brand equity perspective.

# ESG Value Drivers

**Tailored ESG strategies most often add value in four core areas:**



To achieve the second pillar of our ESG strategy—value creation—Carlyle supports our portfolio companies' management teams in their journeys to develop sustainability strategies that improve value. We focus on the four primary value drivers that are most important to stakeholders in a particular company, be they customers, employees, investors or other communities. These value creation strategies come to life in our library of case studies, with examples from a variety of funds, geographies and sectors.

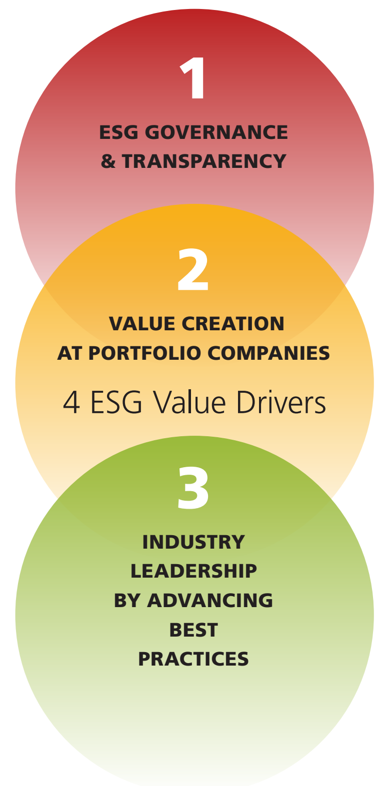
**Customer Satisfaction** Customer expectations increasingly include a demand for more sustainable products and services, along with assurances that suppliers effectively manage their environmental and social performance. We see this increased demand in a range of sectors, including consumer products, telecom and media, business services, and manufacturing sectors.

**Operational Efficiency** Operational efficiency means operating with maximum productivity and minimum waste. Savings in energy, water and waste often require new expertise or an infusion of capital. Our ability to bring new resources to the table can help modernize a plant quickly. Our investments frequently result not only in greater efficiency for a company, but also measurable environmental gains.

**Brand Equity** For some Carlyle portfolio companies, sustainability initiatives enhance their brand equity because more and more consumers value responsibly sourced products and transparent practices. These companies often develop innovative products that reduce their own and their customers' environmental footprints, disclose details about raw materials and work to ensure ethical practices throughout the supply chain.

**Workforce Strength** We evaluate workforce topics—including labor issues, diversity and inclusion, health and safety, and employee benefits—as part of our investment process. ESG initiatives can help engage employees, and an engaged workforce creates stronger companies and enhanced value. A strong workforce also reflects the important role employees play in a company's brand and customer relations.

Our value drivers tie directly to our second strategic goal, value creation



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**CASE STUDIES**



Additional case studies can be found in our previous citizenship reports, available at www.carlyle.com/citizenship.

ARCTIC GLACIER
PREMIUM ICE

## Arctic Glacier Inc

Industry: Consumer & Retail
Region: North America
Fund(s): Carlyle Global Partners
Invested: March 2017
Status: Current

38%
reduction in weekly driving risk rate

$400,000
projected annual energy savings from freezer defrosters

Workforce Strength

Operational Efficiency

## Putting driving accidents on ice

The trick in the ice business isn't so much in how to make ice—that is an old formula. Rather, the challenge is knowing how to distribute it to customers in a timely and efficient manner. To best serve its customers, Arctic Glacier built a sophisticated network of manufacturing plants, distribution centers and trucks throughout the United States and Canada.

Operating Arctic Glacier's fleet in a safe and efficient manner certainly helps meet ESG imperatives, but it also saves crucial dollars to improve the bottom line. Arctic Glacier implemented telematics and routing optimization software over the last few years, minimizing driven miles and maximizing the efficiency of miles driven. However, after years of implementation, the company reached the limits of what could be gained on its own.

With the injection of capital that came with Carlyle's investment, Arctic Glacier modernized and advanced numerous pieces of equipment, including the installation in 2017 of "critical event" recorders in a pilot grouping of the trucking fleet that allows for video recording of any accidents, which the Carlyle-controlled board approved. Trucks carrying these recorders scored 38% better in their weekly "risk rate" (correlated with 31% fewer collisions) and absolved drivers who were not at fault for their accidents. The pilot proved so successful that the entire Arctic Glacier fleet will carry recorders by the end of 2018. That decision pleased the firm's operations personnel, who addressed the company's value of treating "safety as a lifestyle and minimized any delays caused by accidents." It also delighted the sales team, which regards drivers as the face of their brand and the employees who most frequently interact with customers.

"We continue to look for ways to take care of our employees while delivering industry-leading service to our customers," says David Basto, Managing Director on the Carlyle Global Partners team. Arctic Glacier is exploring other areas for win-wins, including installing variable controls on their freezer defrosters, which is expected to deliver $400,000 in annual savings.

## Ortho Clinical Diagnostics

Ortho Clinical Diagnostics, a medical device manufacturer whose ESG practices were highlighted in prior citizenship reports, decided in 2017 to emphasize driver safety in its own distribution activities. The company does not use the same telematics or routing schemes as Arctic Glacier, but implemented a rigorous driver training curriculum and started tracking accidents per million miles as a KPI.

The early results are clear: in just one year, Ortho's accident rate in the United States declined from 5.18 to 4.1 per million miles, including a 16% decrease in "at fault" accidents. In its smaller Canadian fleet, the improvement was even more dramatic, declining from 12.2 to 3.4 accidents per million miles. This decrease benefits employee safety, reduces the cost of insurance and repairs and avoids disruptions to the company's business.

## CUPA Group

Industry: Industrial

Region: Europe

Fund(s): Carlyle Europe Partners IV

Invested: September 2016

Status: Current

**30–40%**
projected cost savings on energy consumption for new ESG cladding system

**ETA Certificate**
acquired in 2016, validating ESG attributes of CUPAclad

**55%**
compound annual growth rate of CUPAclad system since Carlyle's ownership

Operational Efficiency

Customer Satisfaction

## A natural approach to saving energy

Over the last few years, CUPA, a manufacturer of slate building products, focused their research and development on an array of products that provide durability and energy efficiency, helping customers meet their own environmental goals. As with many new products, market adoption of greener alternatives can require focused marketing and sales support. With its 2016 investment, Carlyle saw an opportunity to bring its resources and marketing experience to support further commercialization of CUPA's greener products.

One new product example is the development of a cladding system (material covering the exterior of a building) whose materials and design can improve the sustainability of the buildings installing it. Developed in Denmark, CUPA patented the system as CUPAclad and provided data to show that this cladding product significantly outperformed alternative forms of cladding in terms of air pollution, water consumption and energy consumption in the production process.

The design of the system builds in a vent to the structure of the cladding itself, creating an air chamber between the cladding and building, keeping thermal conductivity low, saving 30–40% on air conditioning or heating costs and associated energy consumption. CUPAclad launched in 2012 in Denmark and quickly established a steady stream of €1 million per year in revenues.

Upon Carlyle's investment in CUPA in 2016, the firm significantly expanded its sales and marketing efforts around CUPAclad. These efforts included a network of ten architects to discuss the system in markets where it could offer the greatest benefits, such as colder climates in greater need of CUPAclad's thermal attributes. Part of the new sales strategy under Carlyle ownership includes validating CUPAclad's attributes through environmental certifications in attractive markets, including the United States, France and the United Kingdom. CUPAclad received its ETA certificate in Europe in November 2016 and expects its BBA certificate in the United Kingdom in mid-2018.

Entering new markets with the relevant environmental certifications and expanding marketing efforts paid dividends almost immediately, with 55% year-on-year sales growth in the first year, and a projected further 77% growth in 2018.

"Developing products with strong sustainability attributes is an excellent way to differentiate in the market," says Carlyle Managing Director Mario Pardo, "but our experience shows that you need to invest in marketing and sales to help educate the market on the value these products present. In CUPA, we saw an opportunity to support the management team in developing those skills."

# Gallia UNCOMMON BERLIN

## Carlyle Europe Realty

Industry: Real Estate

Region: Europe

Fund(s): Carlyle Europe Realty

### England

Long Lane location certified BREAAM Excellent

### France

Green Generation audit for ESG value creation opportunities

### Germany

LEED Gold and DNGB Platinum-certified buildings

Brand Equity

Customer Satisfaction

## Development with a sensitivity to ESG concerns

In the last two years, Carlyle Europe Realty (CER) invested in four platforms to develop and acquire real estate assets. Over this time, CER demonstrated a focus on ESG considerations beyond simple compliance—navigating environmental factors in the real estate marketplace, pursuing "green" building certifications when appropriate and finding added value through ESG considerations.

Environmental certifications in past investments, including the DNGB Platinum qualification for CityGate in Stuttgart and the LEED Gold award for Eastside in Frankfurt, helped both assets lease well despite the financial crisis for major office developments in Germany. On exit, institutional investors valued the environmental standards.

"For our new investments, I believe we are taking this focus to an even higher level: to focus on high-quality and sustainable workspace, reduce energy and water use, increase recycling, consider different certification options, and identify practical ways to acquire and create premium real estate," says CER Managing Director Peter Stoll. "This starts with due diligence, extends through the management of an asset, implementation of ESG measures and CapEx, leasing, and ultimately our realization of the investment through sale."

In London for example, CER's co-working business Uncommon operates in a sector whose target demographic is particularly sensitive to ESG concerns. Design and operational enhancements include extensive interior green plantings, openable windows for natural ventilation, motion sensor lighting, high-end building management systems and a recycling practice that recycles over 90% of waste. All three current locations' designs comply with WELL standards, and the Long Lane location achieved a certification of BREEAM Excellent.

CER also worked to maximize greener building practices and generate operational cost savings across a portfolio of logistics assets in France, acquired in 2017. CER commissioned a full environmental assessment by Green Generation. The audit evaluated buildings for solar feasibility and the cost-savings potential from efficiency improvements and investment. With the survey complete, CER approved and initiated investments to capitalize on the value creation initiatives the audit identified.

itconic
CONNECTING THE FUTURE

## Itconic

Industry: Technology & Business Services
Region: Europe
Fund: Carlyle Europe Technology Partners III
Invested: April 2015
Status: Exited October 2017

**€1.5 million**
investment in new equipment

**6%**
improvement in Power Usage Effectiveness (PUE)

**1.7 gigawatts**
gigawatts green power installed capacity

Brand Equity

Operational Efficiency

## The power of renewable energy

Consumers and enterprises have moved to cloud services rather than onsite storage for convenience and capacity. However, cloud computing actually offers another major benefit: off-site data centers can be much more energy efficient than onsite solutions.

Itconic provides solutions for customers that want to externalize their IT infrastructures with a mixture of pure co-location services, bundled co-location managed services and a limited amount of related software integration and professional services. While it already offered energy-efficient solutions to its customers, Itconic deepened its ESG value by exclusively contracting green sources of power for its data centers through Enel Green Power España, including solar, wind, hydraulic and biomass, for a total consolidated installed capacity of 1.7 gigawatts. This commitment is helping the Spanish government reach its goal of 20% of national energy consumption coming from renewable sources by 2020.

Despite an already efficient operation, Carlyle commissioned a technical review by Bitgroup, a Spain-based expert in data centers, to identify potential additional improvements. After our investment, Itconic's 100-day plan included a substantial investment in new equipment, which resulted in an improvement in Power Usage Effectiveness (PUE) of 6% over the course of 2016 and the first quarter of 2017.

With increased capacity, efficiency and clean-sourced electricity, Itconic grew its market share among established global players. Carlyle successfully exited Itconic in October 2017.

J&J Transport


## J&J Transport

Industry: Transportation

Region: Sub-Saharan Africa

Fund(s): Carlyle Sub-Saharan Africa Fund (CSSAF)

Invested: February 2014

Status: Current

### Specialized driver training and mentoring

### Drivers ranked by fuel efficiency

Brand Equity | Workforce Strength | Operational Efficiency

UN Sustainable Development Goals

8 DECENT WORK AND ECONOMIC GROWTH | 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

## World-class business practices in the developing world

All of Carlyle's ESG efforts strive to create value "beyond compliance," but nowhere is there greater room to add value than in developing economies. Carlyle's global footprint allows us to share resources and expertise to help developing country-based companies operate consistent with international best practices.

Case in point: In 2014, Carlyle purchased J&J Africa, a transport logistics company with locations in Mozambique, Zambia and Zimbabwe. The deal team quickly prioritized hiring personnel to oversee key activities, including two in ESG—Head of Health, Safety, Environment & Security and Head of Training—both reporting to an existing executive-level manager of ESG issues.

These hirings allowed the creation of protocols and a culture surrounding the core material issue for the business: driving.

The company became a licensed Dangerous Goods training provider and began a defensive driver training program. J&J also uses a mentoring program that pairs junior drivers with senior drivers and rewards senior drivers whose mentees keep the safest driving records.

J&J's state-of-the-art IT systems enable electronic monitoring for route deviations, excess speed and night driving; any violation triggers a report to the control center. Driving in a fuel-efficient manner is a core part of driver training. J&J ranks drivers on their fuel consumption per mile and monitors them with a computerized system that can identify drivers performing below expectations. Saving fuel is not merely beneficial for the environment—it also represents a major cost savings for a region with fuel costs 50% higher than the United States. In addition, the company's warehouse facilities in Mozambique are powered by solar panels and lit with LED lighting.

Genevieve Sangudi, Carlyle Managing Director for Sub-Saharan Africa, says, "J&J provides a sterling example of what Carlyle can do with a willing company that simply has not had the resources or guidance to operate at the level of international best practice before, creating value both for its communities and our investors."

In addition to providing high-quality, well-paying jobs in line with UN Sustainable Development Goal 8 (employment), since Carlyle's entry, J&J grew its headcount by more than 50%, driven by organic growth along with some small acquisitions. The firm also provides benefits to its employees that go beyond salary. Nurses are available onsite at all times and doctor-led health clinics are run twice a week in the underserved Mozambique region, with first aid training for drivers and purified water that staff can bring home. In line with UN Sustainable Development Goal 9 (infrastructure), J&J invested over US$700,000 since 2014 in the public roads they use: the firm paid to clear roads affected by flooding and worked with local municipalities to build access roads in Zimbabwe and Mozambique.

## PA Consulting

Industry: Technology & Business Services
Region: Europe/United Kingdom
Fund(s): Carlyle Europe Partners IV
Invested: December 2015
Status: Current

**9.1%**
absolute reduction in its carbon footprint

**ISO 14001-certified Environmental Management System**

Brand Equity | Customer Satisfaction

## Demonstrating a commitment to ESG

A direct link to input or abatement costs often motivates traditional manufacturing firms' ESG activities. For a professional services firm, however, showing advanced ESG capabilities is not as much about managing costs as it is about demonstrating the scope of expertise the firm can offer its clients, and offering a brand aligned with its customers' values.

PA Consulting, based in the United Kingdom, is a management consulting firm that specializes in harnessing innovation and leading-edge technologies. Oliver Butler, Associate Director in Carlyle Europe Buyout, says, "The most sophisticated businesses, particularly those in Europe, are leaders in the ESG space. Given our brand as an innovator in consulting, we wanted to be well ahead of the curve and go beyond compliance in order to demonstrate our commitment and our expertise in ESG."

As such, PA Consulting took steps to reduce its carbon footprint in cooperation with the Carbon Trust, earning the Carbon Trust Standard for Carbon in 2013. As part of its reduction plan, the firm initiated a solar rooftop project at its only wholly-owned office building, located in Cambridge, England. The project payback period lasted just four years and helped the organization attain an absolute reduction of carbon footprint of 9.1% by 2015.

Since the firm is particularly interested in showcasing its management capabilities, it also took steps to become ISO 14001 certified, a standard that is similar to ISO 9000's quality management but concerned specifically with environmental impacts. To meet the standard, the firm developed policies for the environment around its sites, installed hand dryers in restrooms, reduced waste to landfill and began using an Environmental Management System to reduce energy use.

The benefit, according to Butler, is that, "When we make environmental recommendations to our clients, they know we walk the walk and really believe in its value. That not only satisfies customers who are unsure about its benefits, but it makes us a preferred partner to those who are already convinced."

Paradigm Precision

## Paradigm Precision Group (DPG)

Industry: Aerospace, Defense & Government Services
Region: North America/United States
Fund(s): Carlyle Partners V, Carlyle Strategic Partners II, Carlyle U.S. Equity Opportunity Fund
Invested: December 2011
Status: Current

45% less waste disposal cost

11 locations spanning 6 countries

Innovative waste disposal system implemented

Operational Efficiency

### An innovative way to conquer hazardous waste

Waste can present a safety risk for employees of manufacturing companies and their surrounding communities, but properly disposing of such waste can be extremely expensive. Aerospace parts manufacturer Paradigm Precision takes an innovative approach to waste disposal.

During its manufacturing process, Paradigm's sophisticated machinery becomes coated in grease and requires frequent cleaning. Historically, Paradigm used solvents and rags to clean its machinery and disposed of waste from this cleaning process via secured hazardous waste shipments. Because such shipments contained Volatile Organic Compounds (VOCs), they triggered an environmental air pollution fee, making this disposal process costly.

After searching the market for alternatives, Paradigm's facility in Poland discovered products that use enzymes in a non-toxic compound to break down waste into components. Once treated, the waste no longer requires special hazardous waste disposal. As a result, Paradigm avoided the fees associated with producing VOCs and reduced its waste disposal expense by 45% within just six months.

Ian Fujiyama, Managing Director on the Aerospace & Defense team for Carlyle U.S. Buyout, says, "Implementing this bio-digestion product in Poland has been a win-win, making the facility safer for our employees while significantly reducing our waste disposal expense. With the success of this approach, we will explore using this system at our plants in other geographies and will recommend it to industrial investments we make in the future."

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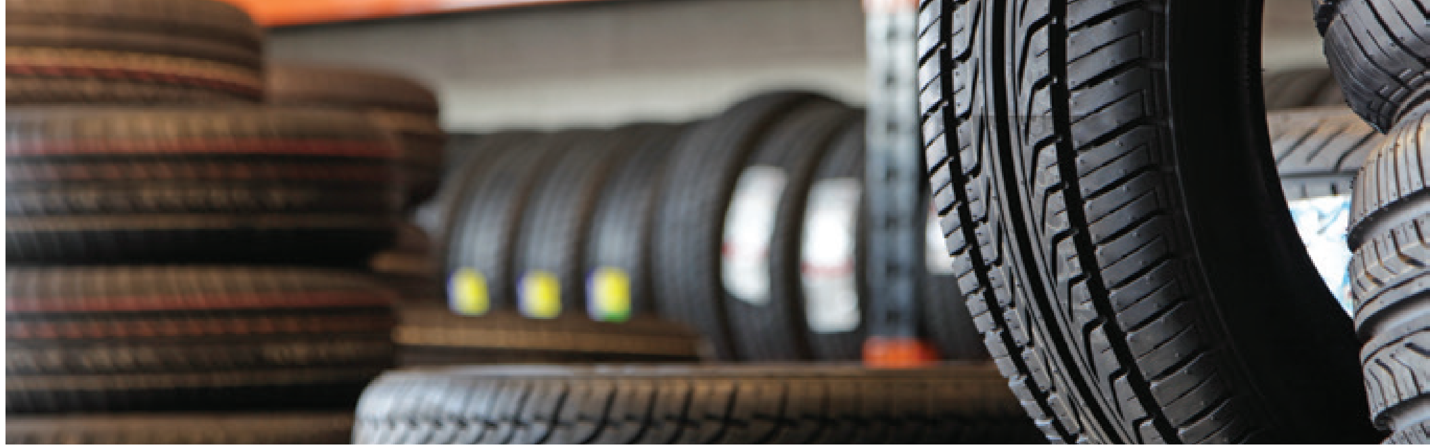


## Tuhu

Industry: Transportation

Region: Asia

Fund(s): Carlyle Asia Growth Partners V, Carlyle Beijing Partners II

Invested: November 2017

Status: Current

**440**

locations receiving regular ESG site visits

**New policy on handling & disposal of hazardous materials**

Brand Equity

Operational Efficiency

## Building ESG into a franchise model in Asia

While direct control of facilities certainly makes it easier to institute effective ESG practices, a strong value-add proposition and relationship with management can be powerful in a franchise operation. Nowhere is there a better example of Carlyle's ESG value-add capabilities than its investment in Tuhu, an independent automotive aftermarket retailer and services provider with over 400 franchises in major Chinese cities.

Without robust ESG management, auto maintenance and repair can present numerous environmental and worker safety issues. When Carlyle engaged specialist consultant Environmental Resource Management (ERM) for an ESG report, it recommended Tuhu establish adequate policies for the business's material ESG issues and strong management and oversight to ensure the policies are followed. Despite owning a minority stake in the business, Carlyle’s deal team reviewed the ESG findings with management and persuaded the company to adopt a portion of the recommendations.

First, the company adopted several basic policies covering ESG issues and incorporated new and or enhanced policies into the existing monitoring system of its franchise network. That system includes an electronic dashboard to track ESG-related KPIs and site visits to all franchise stores every other quarter. When Tuhu identifies particular concerns, the respective locations are flagged for closer scrutiny. To strengthen the firm’s ESG management capability, Tuhu assigned Environmental, Health & Safety (EHS) oversight to an operations-focused executive and hired two full-time EHS staffers. Tuhu hopes that having dedicated resources will help identify and add value that would not be obvious during basic diligence.

Although the franchise model creates certain challenges, Tuhu instituted standards of its choosing, promoting best practices among its franchisees. For example, after the ESG report identified the handling and disposal of hazardous materials as a potentially material issue, Tuhu developed a new policy and requires that new franchisees adopt it prior to operation.

# Varo Energy

Industry: Energy
Region: Europe
Fund(s): Carlyle International Energy Partners
Invested: December 2013
Status: Current

Signed convention with Swiss federal authorities to further improve energy efficiency

New blast-proof and fire-resistant control room building

Workforce Strength

Operational Efficiency

## Minimizing impact, maximizing returns

Responsible stewardship of oil and gas resources is essential as the world slowly transitions to renewable energy over the next few generations. Carlyle takes these responsibilities seriously, and is constantly evaluating ways to increase our energy efficiency and improve worker safety while minimizing the environmental impact of oil and gas operations. One example of this commitment is Carlyle International Energy Partners' (CIEP) investment in Varo Energy's refinery in Cressier, Switzerland.

Even before the investment closed, Carlyle's CIEP team identified an opportunity to make a significant improvement to safety with $10 million subsequently invested in a new control room building located away from the operating units. Experience shows it is critical that the operations team (present 24 hours a day, 7 days a week) can manage accidents from a safe distance and ensure that operational control is maintained at all times to minimize spills or leaks. The new building is blast-proof and fire-resistant, uses an overpressure system to protect workers, and all windows and doors are "gas and smoke tight." Finally, ergonomic concepts improve everyday working conditions around noise, light and the design of work stations.

With hard targets, continuous investment and a good relationship with government regulators, energy efficiency is a priority for the Cressier refinery. While current performance leads industry benchmarks, the Cressier refinery elected to sign a convention with the Swiss federal authorities to further improve energy efficiency by 6.8% by 2023.

The team is ahead of schedule, thanks to major energy efficiency projects, including:

- New capital to replace the hydrogen membrane to recover the maximum amount of hydrogen and reduce the amount of hydrogen manufactured
- Improved control of furnace operations to increase efficiencies
- Replacement of the tip on a flare to lower fuel gas consumption

Since 2012, the Cressier site has held a diploma from the Nature and Economy Foundation that recognizes Varo's work to manage onsite biodiversity by protecting nesting sites for various species and recognizing the impact of the onsite health, safety and environment policy. Besides the ongoing efficiency projects, these initiatives include a vapor recovery unit to reduce air emissions and a new flare project. According to CIEP Partner Joost Dröge, "Our energy efficiency investments, of course, directly benefit the bottom line, but broader ESG-related investments support the overall value of the asset by delivering the highest safety performance we can."

VERITAS

# Veritas

Industry: Technology & Business Services
Region: North America
Fund(s): Carlyle Partners VI
Invested: January 2016
Status: Current

"Rethink Storage" campaign launched

1st corporate responsibility report published

Brand Equity

Customer Satisfaction

## Reducing the environmental footprint of data

Many businesses across the world understand the environmental footprint of their paper use and instituted systems to reduce its use and recycle the waste created. But each unit of digital storage comes with an environmental footprint too. Data centers are energy-intensive, with specific climate requirements and processing power. They already account for 3% of the world's electricity usage, an amount Cisco expects to soar to 13% by 2030. Most users don't consider the energy they use by saving a document to the cloud.

Veritas offers comprehensive data management solutions for enterprise customers and focuses on educating customers and supporting their efforts to reduce their environmental footprint. The company's "Rethink Storage" campaign encourages its customers to be more mindful of their data storage through an education initiative that includes data use trainings and an email signature: "Rethink Storage. Grow Trees, Not Data. Please consider your digital waste, duplicates & storage choices."

"Veritas's core value proposition is to help companies manage their data better," says Ashley Evans, Carlyle Principal. "As infrastructure becomes more complex and data proliferates, Veritas's solutions benefit customers by reducing both waste and corporate risk."

The "Rethink Storage" campaign, combined with other ESG initiatives that focus on topics such as workplace diversity and carbon footprint, are part of Veritas's push to establish a strong ESG brand after Carlyle carved it out of Symantec in 2016. This year, to strengthen this commitment to ESG, Veritas published its first corporate responsibility report, available at www.veritas.com.

**"Not only do solutions like these improve cost efficiency, but the physical upgrades also signal to tenants and prospective tenants that our property and property systems are best in class."**

DAVE KINGERY
MANAGING DIRECTOR
CARLYLE U.S. REAL ESTATE

## 6000 Shoreline

Industry: Real Estate
Region: North America
Fund(s): Carlyle Realty Partners VII
Invested: July 2015
Status: Exited

**23%**
annual return on efficiency investment

**103 metric tons**
of carbon per year averted from the atmosphere

Brand Equity

Operational Efficiency

## Operating efficiency boosts value

Commercial real estate investors are always seeking new ways to improve the operating efficiency of their assets to increase margins and make them more attractive to potential buyers. Energy efficiency projects serve this function while providing ESG value to environmentally conscious buyers and tenants—particularly in regions like the one that is home to the 6000 Shoreline project, a mixed office/life sciences lab in San Francisco, California.

A sticking point for many efficiency projects can be high upfront costs and long payback periods. At 6000 Shoreline, our U.S. Real Estate team overcame those barriers by collaborating with Carbon Lighthouse. The company installs numerous sensors on all major energy-using components, including HVAC and lighting, and uses machine learning technology to determine how to operate existing equipment more efficiently.

Our team invested capital upfront to lock in the potential savings for the asset. While Carlyle exited the investment during the first year after implementing this solution, Carbon Lighthouse continued working on 6000 Shoreline. The results for the asset were clear: a 23% annual return on investment, as tracked through their data analytics. In addition to the financial benefit, the reduced energy use translated to 103 metric tons of carbon per year averted from the atmosphere, an impressive number for a facility of just 140,000 square feet.

## SDG-Aligned Investing

### Supporting UN Sustainable Development Goals

In recent years, interest in the non-financial outcomes of investments grew substantially, leading to the growth of "impact" funds. These funds possess a dual mandate to pursue both financial and ESG goals, and often categorize their non-financial outcomes through the UN Sustainable Development Goals (SDG) framework. While Carlyle does not manage a separate fund focused on these goals, many of our investments align with SDGs, including Rede D'Or São Luiz and PNB Housing Finance, both detailed here.

## Rede D'Or São Luiz

Industry: Healthcare

Region: Latin America & Caribbean

Fund(s): Carlyle Partners VI, Carlyle South American Buyout Fund

Invested: May 2015

UN Sustainable Development Goal

3 GOOD HEALTH AND WELL-BEING

## Meeting a growing demand for healthcare

Since its inception, healthcare provider Rede D'Or São Luiz has focused on the dual mandates of business viability and providing access to care. Founded in 1977 by Dr. Jorge Moll and Dr. Alice Moll, Rede D'Or has helped meet the growing demand for private healthcare services in Brazil over the last 40 years.

Brazil's publicly funded healthcare system, SUS, coordinates and makes direct payments to providers. However, due to a lack of government investment, excess demand and poor infrastructure, SUS has not met the demands of the Brazilian population. As a result, the private healthcare market continues to be a critical part of Brazil's system by ensuring access to quality care.

However, Brazil's healthcare market suffers from numerous structural inefficiencies. The supply of private hospital beds continues to lag behind demand for services: In 2017, there were 47.3 million private health plan members but only 133,600 private beds. The World Health Organization (WHO) considers three to five beds per thousand inhabitants to be ideal, implying a significant deficit of beds in both the private and public healthcare systems.

As the largest independent private hospital network in the country, Rede D'Or plays a foundational role in helping meet this demand. Rede D'Or currently holds 36 owned hospitals, one hospital under management and more than 35 specialized oncology outpatient clinics. Supported in part by Carlyle's investment in 2015, Rede D'Or has achieved strong and sustainable growth.

Rede D'Or's primary objective is to provide a comprehensive array of high-quality healthcare services efficiently and cost effectively. Scale is a key characteristic for efficiency, as it allows fixed-cost dilution and provides bargaining power with insurers. The company's scale also allowed for an investment in an affiliated research institute, the D'Or Institute. Most of the company's hospitals are either accredited or certified by Brazilian or international entities—such as Joint Commission International, or JCI, Accreditation Canada and National Accreditation Organization (Organização Nacional de Acreditação), or ONA—or are in the process of being accredited or certified by one of these entities.

While Rede D'Or's core business serves a UN SDG, the company also worked hard to make sure that its manner of operation serves ESG goals as well. Within a year of Carlyle's investment, the company published its first corporate sustainability report, based on material ESG issues identified through the Global Reporting Initiative framework. During Carlyle's ownership period, Rede D'Or also invested $13.5 million in water and energy projects to improve efficiency and continuity of care.

## PNB Housing Finance Ltd

Industry: Financial Services
Region: Asia
Fund: Carlyle Asia Partners IV
Invested: February 2015
Status: Current

Developed new tool that enables incorporating green elements into building design process

Partnership to expand green housing finance

UN Sustainable Development Goals

11 SUSTAINABLE CITIES AND COMMUNITIES
13 CLIMATE ACTION

## Efficient houses make better investments

PNB Housing Finance Limited (PNBHFL) is the fifth-largest housing finance company in India. In 2016, about a year after Carlyle's investment, the India Pride Awards recognized the company for its contributions to corporate social responsibility. The investment supports community development through housing finance. It also advanced a key partnership between PNB Housing and the International Finance Corporation (IFC), the private investment arm of the World Bank, to promote the development of green and sustainable buildings in India.

Beyond developing more housing options, PNBHFL advanced sustainability goals by financing housing infrastructure with reduced energy, materials and water consumption. Aside from the environmental benefits, research out of the United States suggests that more efficient homes are at lower risk of default.

In March 2016, IFC invested $75 million in PNBHFL through a green bond product. PNBHFL used the green bond to support its brand and highlight its progress in going green to existing clients and prospective investors—all of which supported its 2016 IPO. PNBHFL deployed the proceeds of the bond to developers building green-certified residential projects and worked jointly with IFC to increase awareness of green building development and help PNBHFL's staff execute on the program's promise.

The IFC team developed and contributed EDGE, a new tool that enables development partners to identify potential green elements in their building design process quickly and early in the process. EDGE factors in local market conditions to provide cost-benefit data on specific green building features. EDGE, which is available free online, allows developers to design their projects to minimize water, material and energy use. To become EDGE-certified, developers must achieve at least a 20% improvement compared to the baseline structure in all three categories in a given geography. The organization also provides ongoing training to partner developers on how to use the EDGE tool and acquire EDGE certification.

# Diversity & Inclusion

**"Solving problems, thinking of creative investment ideas and responding to client needs demand the best thinking. Teams get the best output when they think somewhat differently and debate. Therefore, diversity of thought is critical to what we do… it is important to make people feel integrated into the firm so that they can fully participate in that debate."**

GLENN YOUNGKIN, CO-CHIEF EXECUTIVE OFFICER

Our experience shows that diverse and inclusive teams create greater employee engagement and greater value for our investors. We know this makes us more competitive in the market—not just in the boardroom, but also as an employer of choice.

That is why we are committed to growing and cultivating a culture rich in different backgrounds and perspectives. As an example, Carlyle's Diversity & Inclusion Council sponsors the firm's global mentoring program, which since its inception four years ago has engaged more than 500 participants from across the firm at various levels, backgrounds and interests.

## Fostering diversity through grassroots efforts

Our seven Employee Resource Groups (ERG) strengthen our community of inclusion and respect with a focus on recruiting and developing and retaining women and men of all ethnicities, sexual orientations, generations and life experiences. In the past four years, Carlyle's ERGs hosted nearly 120 events, including external speaking engagements, charitable fundraising, recruiting and skills training.

We are particularly proud of our Lesbian, Gay, Bisexual, Transgender and Queer (LGBTQ) ERG and African American ERG for their efforts.

**LGBTQ ERG** Thanks to the ERG's dedication, Carlyle earned a 100% rating on the 2018 Corporate Equality Index, a national benchmarking survey and report on corporate policies and practices pertinent to LGBTQ employees, administered by the Human Rights Campaign Foundation.

**African American ERG** In May 2017, the African American ERG sponsored a networking event in Washington, DC that drew more than 120 participants interested in the private equity industry. Carlyle hired several individuals that participated in the event and gained a robust pipeline of potential future hires. Several senior leaders across various Carlyle segments attended the event, which Chief Information Officer Georgette Kiser kicked off with an overview of our diversity and inclusion initiatives. Co-CEO Glenn Youngkin spoke of the firm's culture and the importance of diversity. In September, the African American ERG co-hosted a similar diversity networking event with the Women's ERG in New York, which created another strong recruiting pipeline. Keynote speaker Sandra Horbach, co-head of Carlyle U.S. Buyout, shared her perspective about how diversity and inclusion is a competitive advantage for the firm.

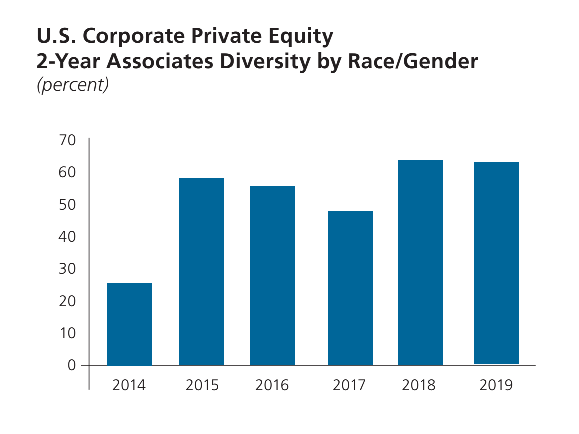
**"The Carlyle Group has been a long-time partner of Out for Undergrad and shown tremendous support for LGBTQ people, especially at the outset of their careers. We are proud to see that the firm's efforts to create a diverse and inclusive culture are being recognized by the Human Rights Campaign."**

BRANDON FAIL
FORMER EXECUTIVE DIRECTOR
OUT FOR UNDERGRAD

# A focus on diversity in recruiting and hiring

We recruit from diverse channels and foster an environment that supports retention and promotion of a more diverse workforce. We track a range of diversity and inclusion KPIs.

**All U.S. employees**




**63%** Corporate Private Equity 2-year Associate diversity (by gender and race)
More than 50% diverse each of the last five years, with 2019 class at 63%

**100%** Corporate Private Equity Senior Associate diversity by gender 2018 incoming post-MBA class at 100%

All data as of December 31, 2017.

**45%** Overall hiring diversity (by gender and race) in Analyst-Partner levels

**40%** Overall population diversity (by gender and race) in Analyst-Partner levels

**23%** Women in senior positions (Principal-Partner levels)

**17%** Female Managing Directors and Partners

**All global employees**

**20%** Women in senior positions (Principal-Partner levels)

**17%** Female Managing Directors and Partners

# Driving change in our workplace

An Interview with Ian Fujiyama, Managing Director and Co-Chair of Carlyle's Diversity & Inclusion Council

### What are the goals of the Council?

To foster an environment at Carlyle that encourages and shapes the firm's strategy for a more diverse and inclusive culture. The Council includes a broad cross-section of colleagues throughout the firm—Investment Professionals, Investor Relations and Investor Services—at a variety of levels to make sure all voices are represented and that we elicit diverse input for firm strategy.

### What did the Council focus on in 2017?

We focused on the Human Rights Campaign's Corporate Equality Index and on broadening and strengthening our communications—specifically on our website—by harmonizing our messaging and recognizing our role as a leader in the industry. In addition, our co-founder and co-executive chairman, Bill Conway, signed on to "CEO Action for Diversity & Inclusion," the largest CEO-driven business commitment to advance diversity and inclusion in the workplace.

### How are you leveraging the Council to drive change at Carlyle?

Carlyle's tailored strategy for diversity is bolstered by the firm's One Carlyle culture that has evolved over 30 years. We leverage our history of collaboration to bring together the best ideas from diverse backgrounds and experiences. For example, our new co-CEOs Kewsong Lee and Glenn Youngkin made it clear that all new hire searches are required to have a diverse slate of candidates. Diversity and inclusion is a key differentiator and part of our culture as a firm. It isn't so much an initiative as it is just who we are. In addition, we are working to maintain more diverse boards of directors for the portfolio companies we own.

### What are your plans for 2018?

We plan to strengthen the leadership of the Council. I am happy to announce that Georgette Kiser, Carlyle's Chief Information Officer, will co-chair the Council with me. We are also in the process of hiring a dedicated Chief Diversity Officer, a senior professional who will help the Council and Carlyle drive its diversity and inclusion strategy. We will continue to prioritize greater diversity for our portfolio company board of directors, and we will conduct unconscious bias training as part of the firm's "Respectful and Inclusive Workplace" training module. We will also continue to partner externally with world-class diversity organizations.

### How do you see the future role of the Council?

To date we have been very deliberate about our approach. We spent a lot of time learning from others who implemented initiatives before us. We are very conscious of identifying programs that are culturally compatible with Carlyle. We recognize that we are on a journey. We are proud of our accomplishments and where we stand as a firm and within our industry, but we also recognize there is a lot more to do.

**Carlyle's 12-member Board of Directors features two women and two African Americans. We are proud Savoy Magazine named Janet Hill and Anthony Welters to its list of 2017 Most Influential Black Corporate Directors.**

**Carlyle's Diversity & Inclusion Council Steering Committee**

Ian Fujiyama, Managing Director and Co-Chair (center), with (clockwise) David Marchick, Managing Director and Head of Global External Affairs; Lori Sabet, Managing Director and Chief Human Resources Officer; Curt Buser, Managing Director and Chief Financial Officer; and Georgette Kiser, Managing Director, Chief Information Officer and Co-Chair.

ONE COMMUNITY

# Philanthropy

### One Community Volunteer Program

Carlyle's One Community program encourages employees to volunteer in their own local communities—as well as at organizations across the country and around the world. This year our colleagues shared their time, talent and resources with a variety of charitable organizations as they worked to improve the places where they live and invest.

### Global Volunteer Month

Employees from across the globe volunteered with several organizations during Carlyle's sixth annual Global Volunteer Month.

**Washington, DC, and Rosslyn, Virginia, United States** Employees volunteered with a range of organizations:

- Served meals and cleaned facilities at So Others Might Eat, a local organization that cares for the homeless.
- Participated in hands-on urban farm work at DC Greens, a local organization working to advance food justice in the nation's capital.
- Prepared meals for families living at Ronald McDonald Houses.
- Coordinated a group birthday party with veterans at the VA Hospital in Washington, DC.
- Assisted with outdoor chores and landscaping at House with a Heart Pet Sanctuary, a local organization that houses and cares for elderly pets.
- Volunteered for an eighth consecutive year with Junior Achievement's "JA in a Day" program to teach financial literacy to first- through fifth-grade classes in a Washington, DC elementary school.

**London** Employees ran in the JP Morgan Corporate Challenge benefiting Cancer Research UK, an organization that funds scientists, doctors and nurses dedicated to cancer research. Employees also held a bake sale with proceeds benefiting Macmillan Cancer Support.

**Hong Kong** Volunteers prepared meal boxes for Food Angel, a food rescue and assistance program that provides meals for underprivileged communities in Hong Kong.

**Mumbai** Carlyle employees from Mumbai collaborated with United Way to nurture the habit of reading among kids from marginalized communities.

**Tokyo** Colleagues participated in clean-up activities at Komazawa Olympic Park, Tokyo Port Wild Bird Park and Fukudenkai Orphanage.

### A Commitment to Sharing Wealth

Our Wealth Sharing Program supports Carlyle employees in their charitable giving by matching on a dollar-for-dollar basis any contributions made to educational and humanitarian organizations. In the United States, Carlyle matches up to $2,000 per year per employee. In 2017, Carlyle matched nearly $300,000 in employee contributions. A similar matching program in the United Kingdom raised $38,000 in 2017.


Mumbai
Hong Kong
Washington DC
NYC
Tokyo

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