The Path to Zero Carbon

Insights on Success from CDP Disclosures

Methodology

This research analyzes performance according to CDP's comprehensive scoring framework, as well as an ENGIE Impact's scoring criteria that assesses successful achievement of ambitious goals. The research spans:

6 Industries | **32** Sectors | **50** Countries

Risks and Governance

CDP Scoring Criteria to understand carbon leadership qualities

262

262 A-Listers

Strong performers across **emissions reduction, risks and opportunities, governance** and other key metrics

B-Listers

Not included in comparative analysis

337

337 C-Listers

Weaker performers across **emissions reduction, risks and opportunities, governance** and other key metrics

Ambition and Achievement

ENGIE Impact Analysis to understand successful target achievement

198

198 Leaders

Ambition: 4.6% targeted reduction per year
Achievement: 89% emissions reduction achieved relative to goal

Average Performers

Not included in comparative analysis

205

205 Laggards

Ambition: 1.7% targeted reduction per year
Achievement: 11% emissions reduction achieved relative to goal

2019 ENGIE Impact Analysis of 2018 CDP Response. For information on how the ENGIE Impact Ambition and Achievement metric was calculated please refer to Analysis Index

Table of Contents

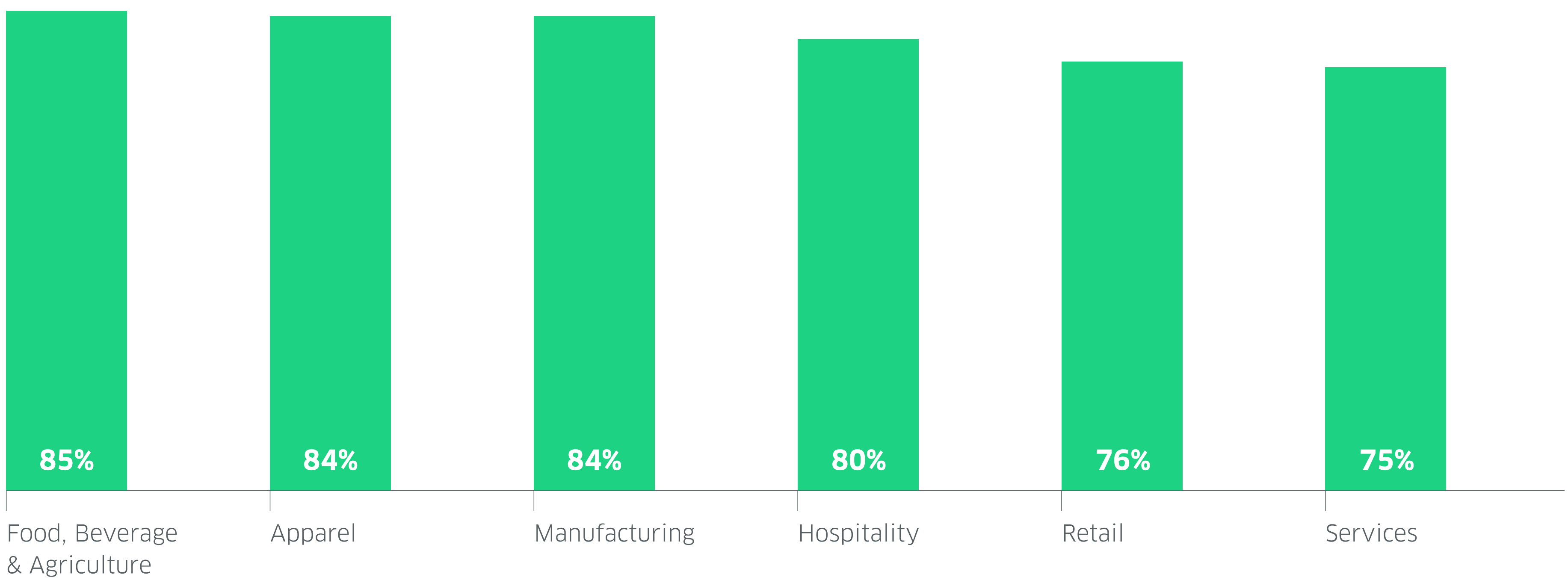
Setting and Achieving Targets
All CDP Respondents

Most CDP responding companies have set emissions reduction targets

Percent of companies in CDP targeted sectors that disclosed an emissions target

79%

Of companies disclosing to CDP have an emissions target



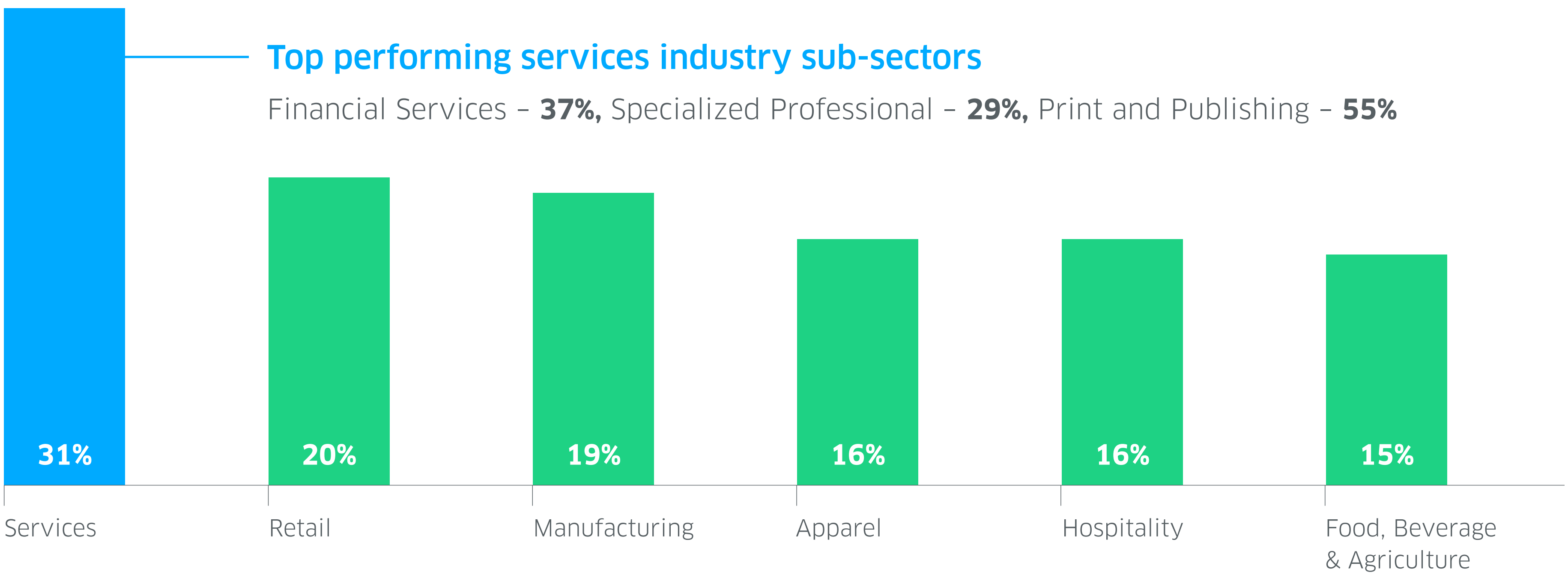
2018 CDP Response. C4.1a and C4.1b Provide details of your absolute emissions target(s) and progress made against those targets.

Of those that have set goals, few are on track to achieve them

Percent companies achieving emissions reductions in alignment with stated goal horizon

24%

Of all companies are on track to achieve goals



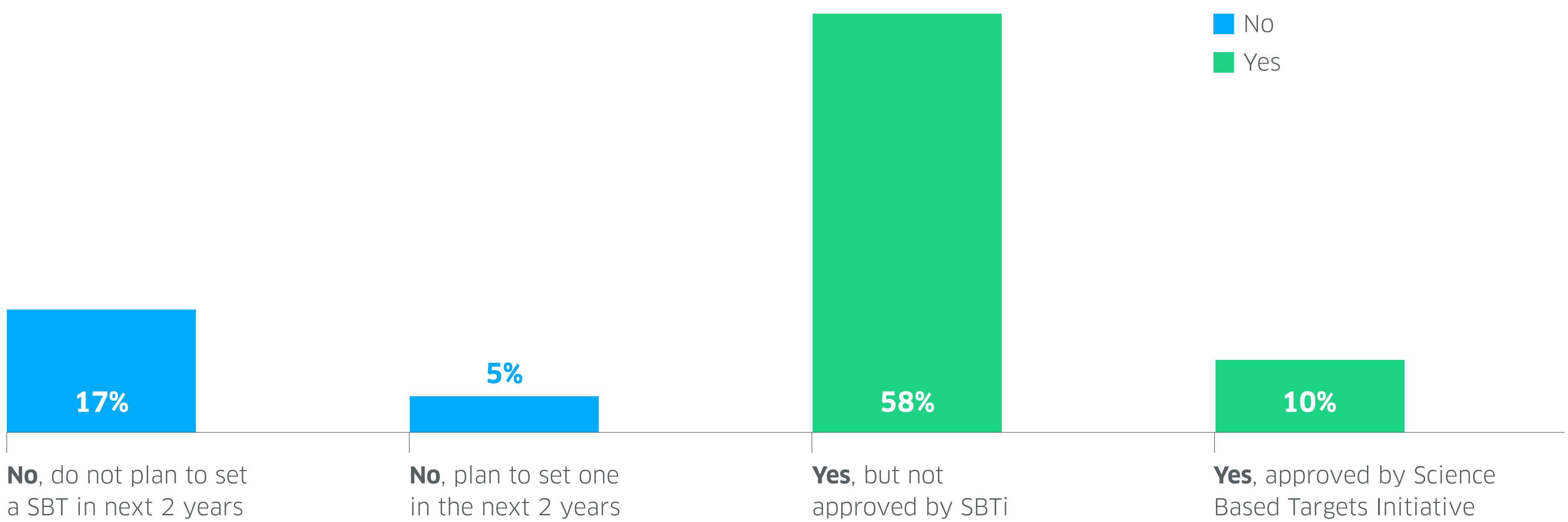
2019 ENGIE Impact Analysis of 2018 CDP Response. For information on how this metric was calculated please refer to Analysis Index

Yet goals are becoming increasingly ambitious, as more companies aim to set science-based targets

Is your target science-based? Percent of target-setting CDP respondents

Over 70%

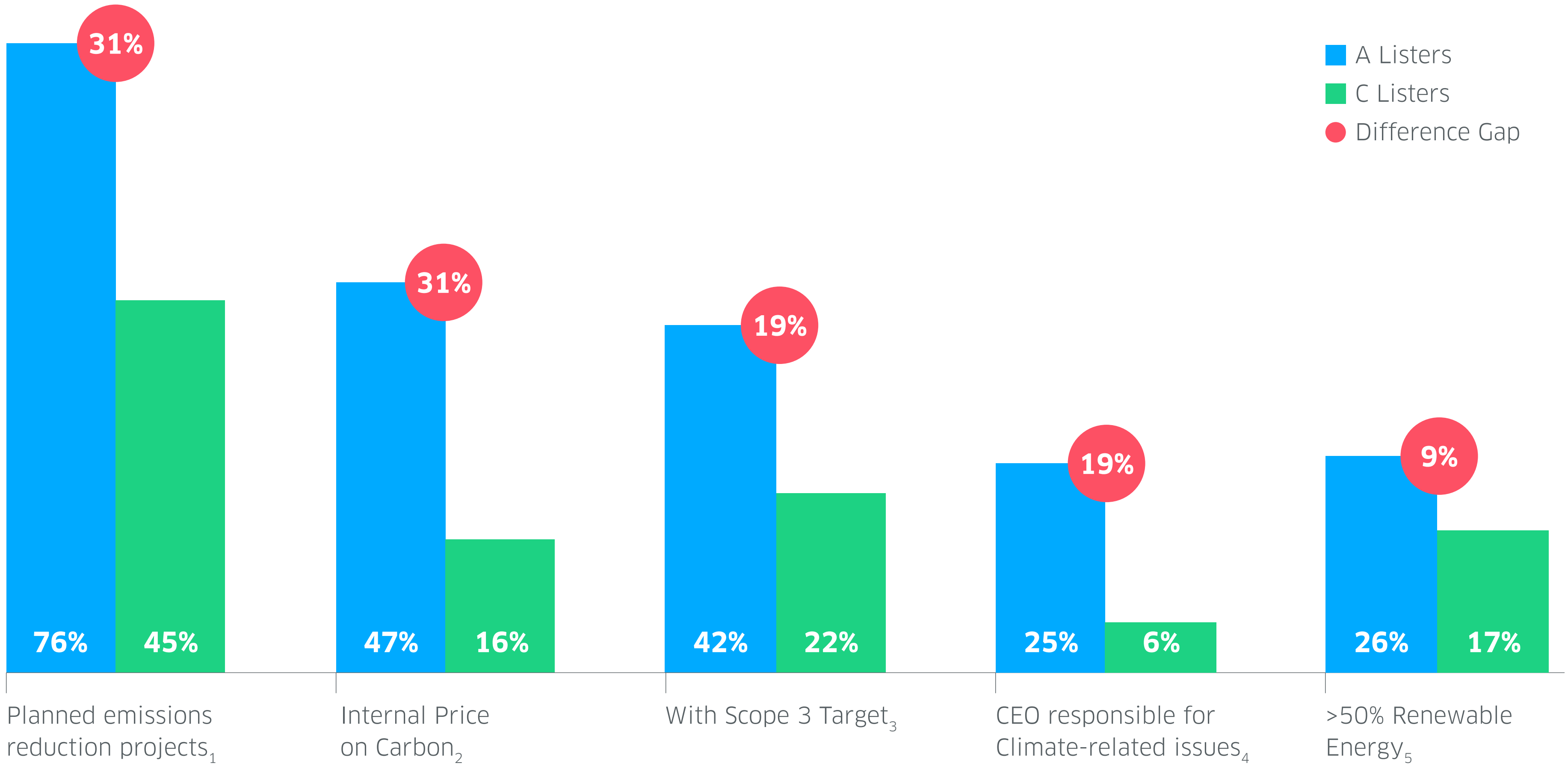
Of target-setting CDP respondents have set or plan to set a science-based target



2018 CDP Response. C4.1a and C4.1b Provide details of your absolute emissions target(s) and progress made against those targets. Is this a science-based target?

A-Listers consistently perform better than C-listers, yet still have significant progress to make

Practices disclosed by companies receiving an A or a C from CDP



2018 CDP Response. 1. C4.3 Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases. **2.** C11.1 Are any of your operations or activities regulated by a carbon pricing system? **3.** C4.1a Provide details of your absolute emissions target(s) and progress made against those targets **4.** 8.2a Report your organizations energy consumption totals in MWh. 8.2f. Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a low-carbon emission factor in the market-based Scope 2 figure reported in C6.3 **5.** C1.1a Identify the position(s) of the individual(s) on the board with responsibility for climate-related issues

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Though A-listers disclose many activities that advance climate leadership, most are not on track to achieve targets

Percent of A-listers not on track to achieve targets by industry

While A-listers may exhibit leadership qualities across the range of factors measured by CDP, many still struggle to remain on track to achieve targets.

To understand more about companies that were on track to goal, ENGIE Impact developed a separate ranking. The following analysis will use this ranking to compare leaders (those achieving ambitious goals) to laggards (those that are not on track or have very modest goals).

How did they stack up?

2019 ENGIE Impact Analysis of 2018 CDP Response. For information on how this metric was calculated please refer to Analysis Index

How industries stack up by ambition and achievement of goals

Industries ranked by targeted rate of emissions reduction and achieved rate of emissions reduction

Ambitiousness	Achievement	Impact Leaders Ranking	
Apparel	Services	1	Services
Retail	Hospitality	2	Retail
Hospitality	Manufacturing	3	Hospitality
Services	Apparel	4	Apparel
Food, Beverage & Agriculture	Retail	5	Manufacturing
Manufacturing	Food, Beverage & Agriculture	6	Food, Beverage & Agriculture

2019 ENGIE Impact Analysis of 2018 CDP Response. For information on how this metric was calculated please refer to Analysis Index

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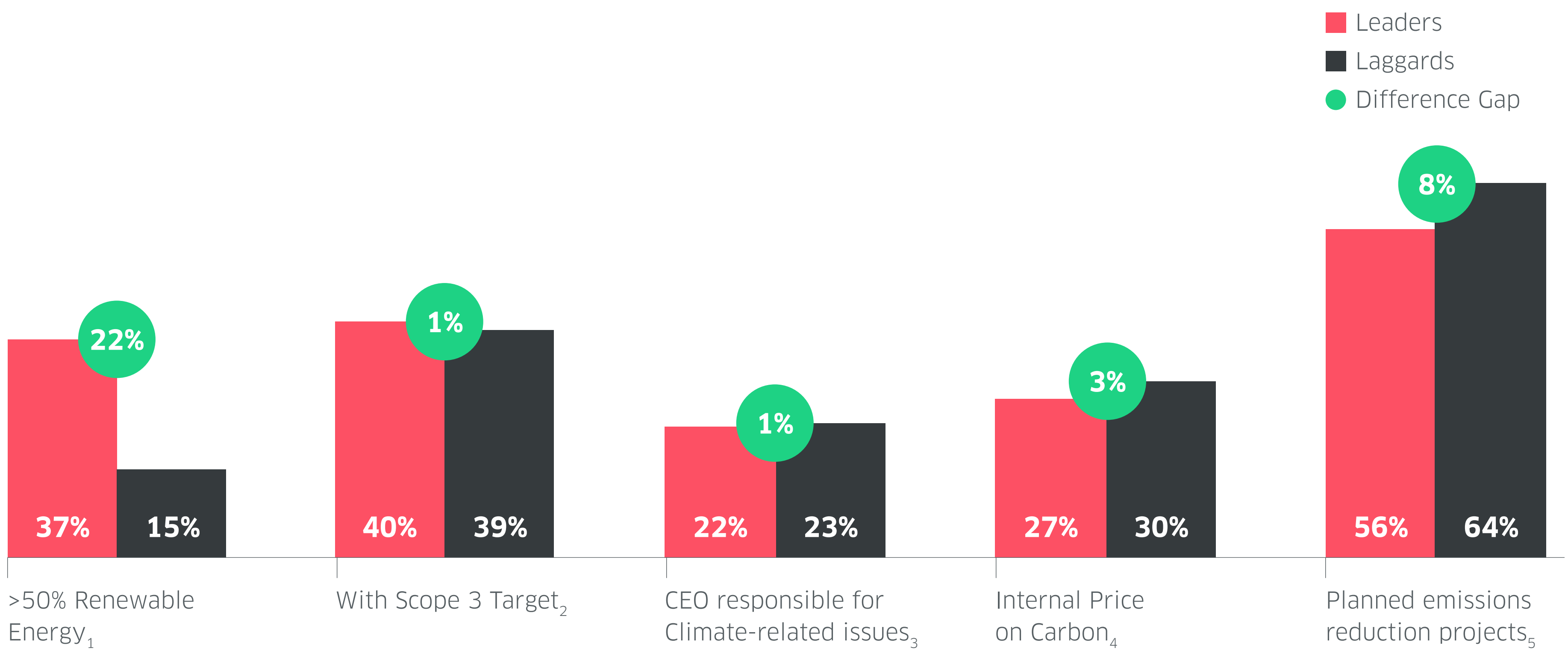
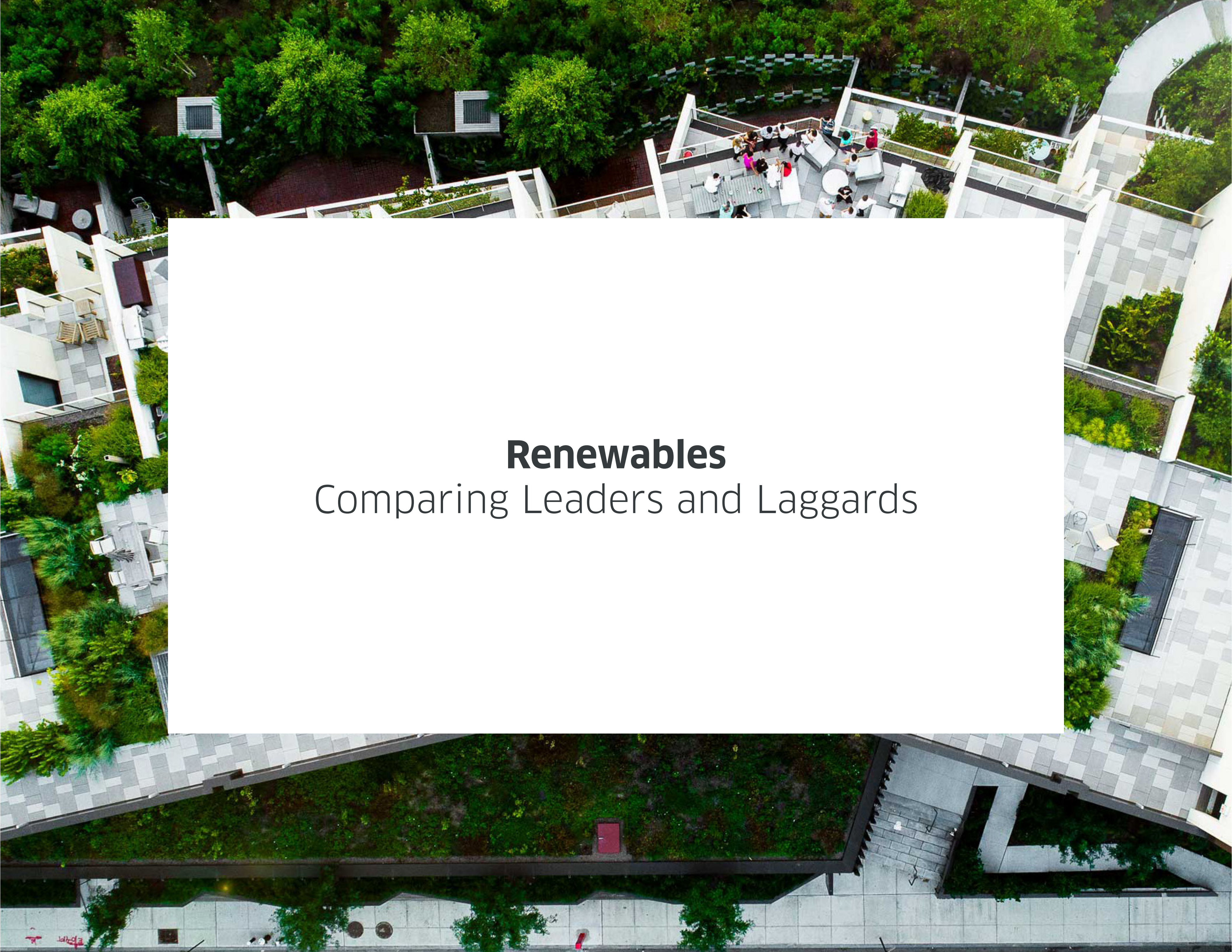
Companies with targets disclose similar practices, largest gap exists in percent renewable use.

Practices disclosed by target setting companies, ranked by ambition and achievement



2018 CDP Response. 1. 8.2a Report your organizations energy consumption totals in MWh. 8.2f. Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a low-carbon emission factor in the market-based Scope 2 figure reported in C6.3 **2.** C4.1a Provide details of your absolute emissions target(s) and progress made against those targets **3.** C1.1a Identify the position(s) of the individual(s) on the board with responsibility for climate-related issues **4.** C11.1 Are any of your operations or activities regulated by a carbon pricing system? **5.** C4.3 Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases

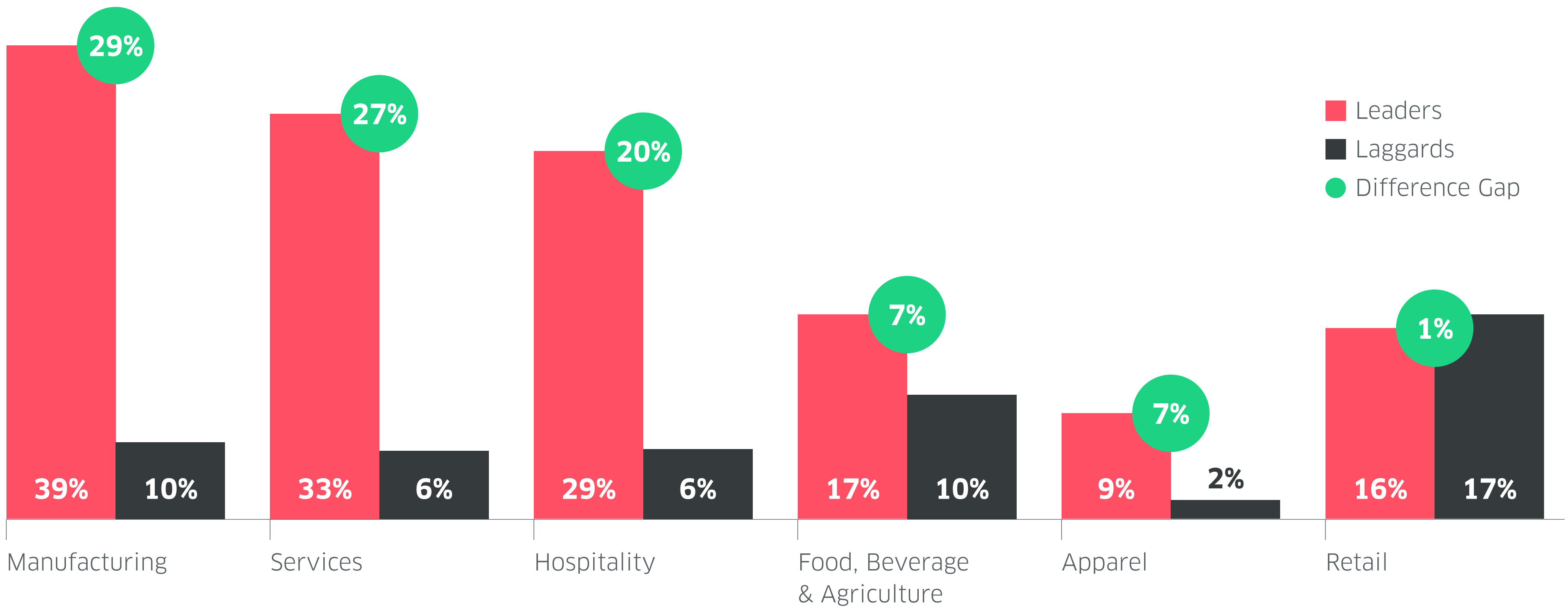


Renewables
Comparing Leaders and Laggards

Companies achieving ambitious targets have a larger percentage of renewables in their energy mix

Percent Share of MWh from Renewable Sources by Industry

Leading **Manufacturing, Hospitality & Services** companies use a significantly larger percentage of renewable power than laggards



2018 CDP Response. 18.2a Report your organizations energy consumption totals in MWh. 8.2f. Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a low-carbon emission factor in the market-based Scope 2 figure reported in C6.3

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Leaders pursue a more sophisticated mix of short and long-term renewable instruments

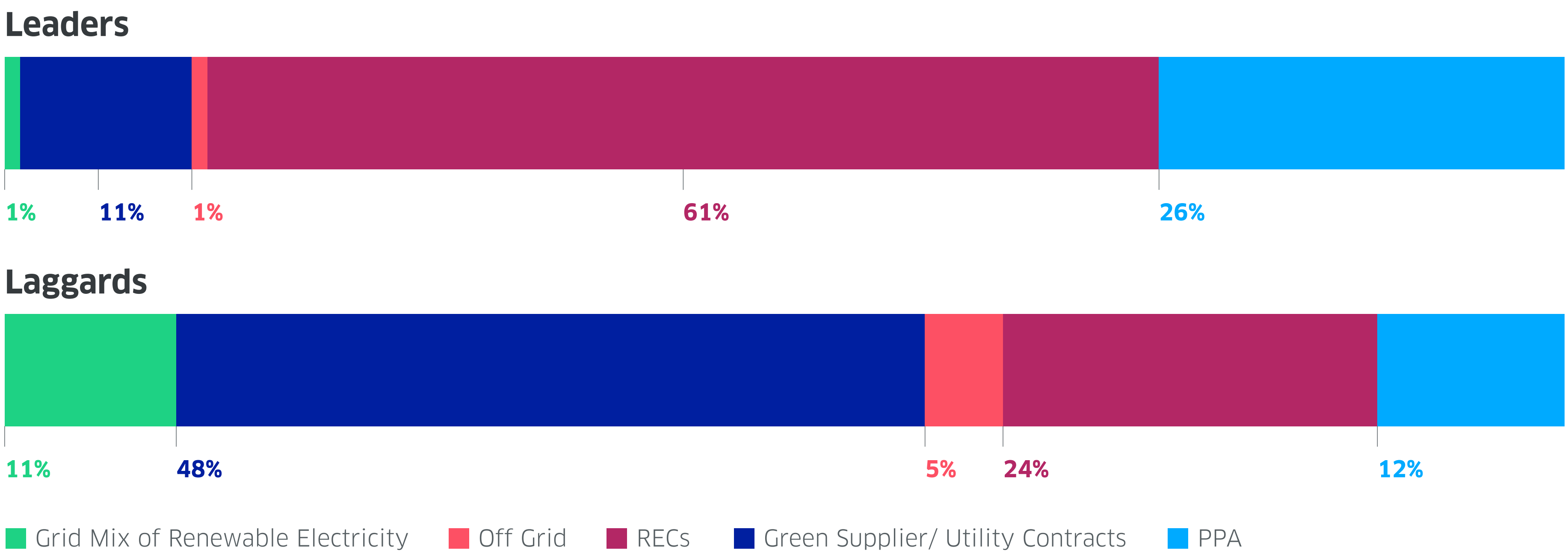
Renewable Strategy as a Percentage of Total Low-Carbon MWh

2x

Leaders leverage off-site renewable projects (PPAs and vPPAs) as a larger share of low-carbon energy. Laggards leverage green supply where available.

1-5%

Neither Leaders nor Laggards have invested significantly in on-site renewable power.



2018 CDP Response. 8.2a Report your organizations energy consumption totals in MWh. 8.2f. Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a low-carbon emission factor in the market-based Scope 2 figure reported in C6.3. Basis for applying a low-carbon emissions factor

Engaging your Supply Chain

Comparing Leaders and Laggards

Scope 3 targets are not widely adopted and few cover the most relevant emissions categories, likely due to complexity

Percent of Target-Setting Companies with a Scope 3 Target

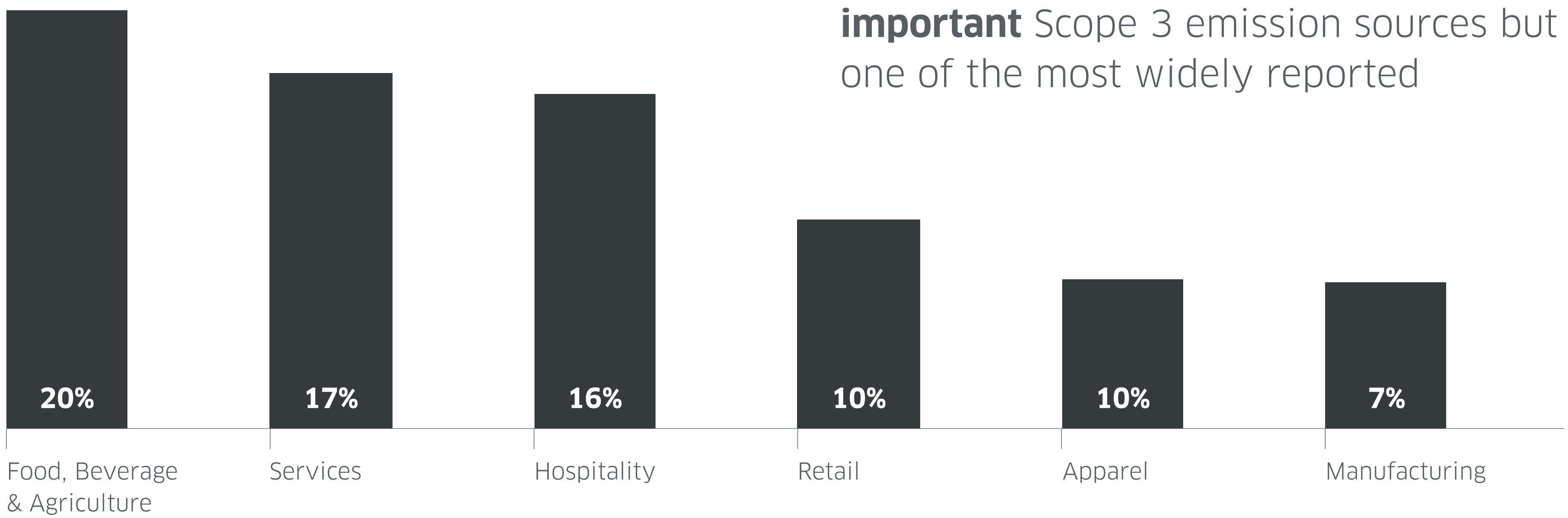
25%

Of target-setting CDP respondents have a Scope 3 Target

68%

Of companies say **purchased goods** is the most relevant category and **business travel** is next most relevant

Business travel is among the lowest important Scope 3 emission sources but one of the most widely reported



1. 2018 CDP Response. C4.1a Provide details of your absolute emissions target(s) and progress made against those targets.
2. 2016 CDP Report. Out of the Starting Blocks

Upstream supplier engagement: Leaders actively engage suppliers with rigorous policies

	Passive Engagement Laggard Disclosures	**Active Engagement** Leader Disclosures
Compliance & Onboarding	Expect suppliers to "*read and adhere to the code of supplier conduct*"	**Audit** suppliers to **verify** they follow the companies' code of supplier conduct
Innovation & Collaboration	Send recommendations to their suppliers on sustainability improvements	**Implement** data collection processes that suppliers **must** utilize to be transparent
Engagement & Incentivization	Have clear and open communication with their suppliers based on shared values	**Request/track** suppliers resource usage to possibly **influence** supplier behavior
Information Collection	"*Read & gather public information to learn more about the suppliers*"	**Conduct** scheduled meetings/events to better **understand** supplier behavior

2019 ENGIE Impact Summary of 2018 CDP Responses. C12.1a Provide details of your climate-related supplier engagement strategy

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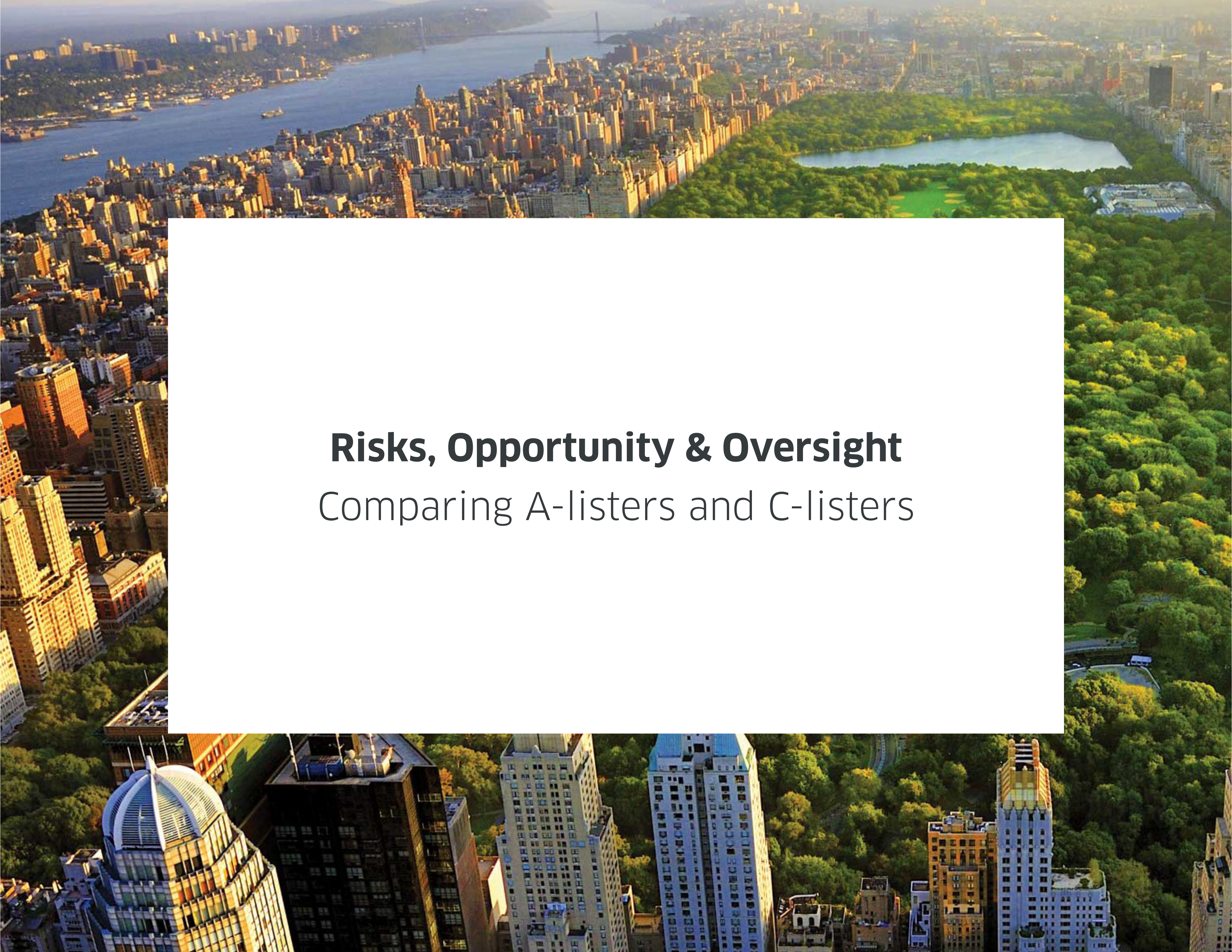
Downstream engagement: Leaders actively reduce impact with targeted, innovative measures

	Reactive Engagement Laggard Disclosures	Proactive Engagement Leader Disclosures
Compliance & Onboarding	Pledge a contribution to our largest customers sustainability initiative	Invite customers to **stakeholder dialogues** to provide input into material sustainability topics
	Find alternative solutions for customers that have a sustainability interest	Provide **Take Back programs** with free on-site services to address customer privacy concerns
Engagement & Incentivization	Adhere to customer requests for sustainability information	**Visualize customer use patterns** to provide insights to reduce carbon emissions
	Share information about low-carbon products on our website	Provide energy-efficiency measures, their CO2 **impact, benefits and financing options**

2019 ENGIE Impact Summary of 2018 CDP Responses. C12.1b Provide details of your climate-related engagement strategy with your customers

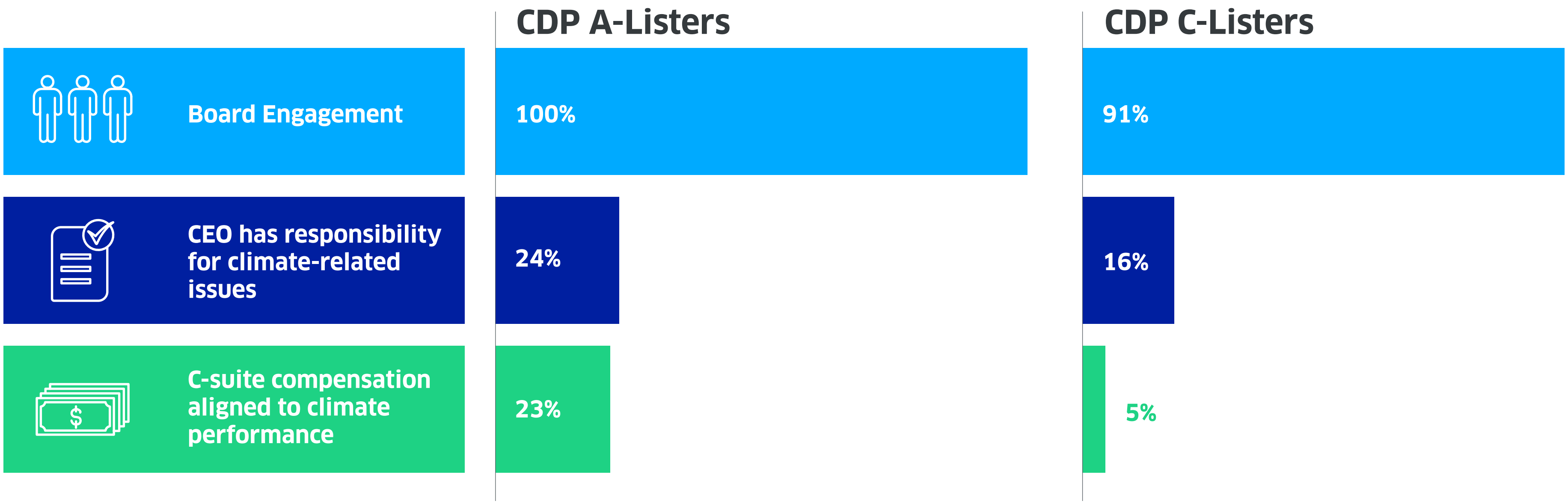


Risks, Opportunity & Oversight

Comparing A-listers and C-listers

While many companies claim good board engagement, incentives are not aligned to climate performance

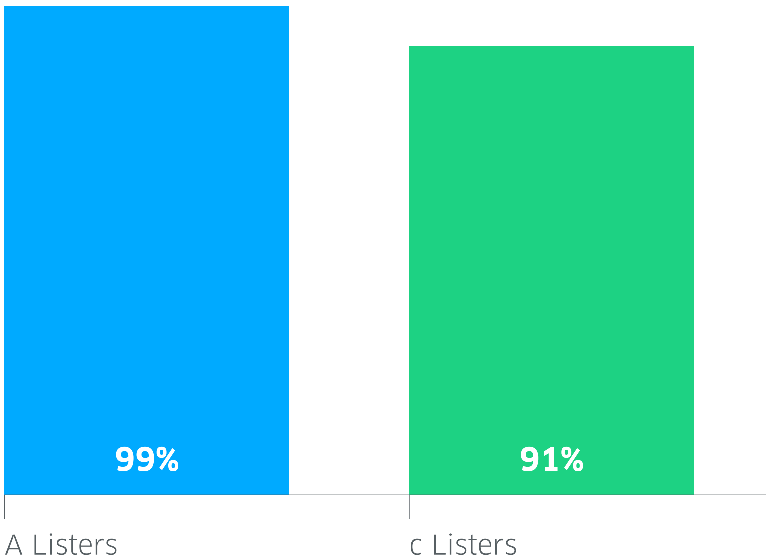
Percent of A-list and C-list companies, on governance practices



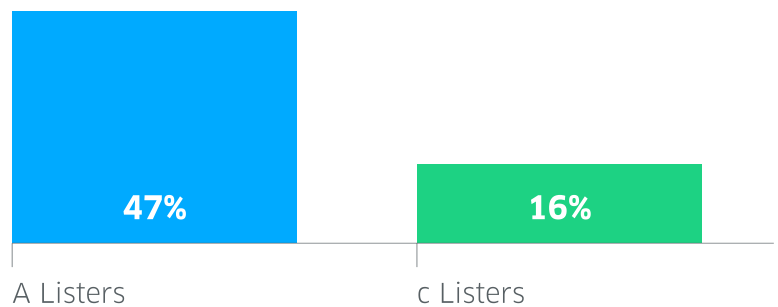
2018 CDP Response. 1. C1.1 Is there board-level oversight of climate-related issues within your organization 2. C1.1a Identify the position(s) of the individual(s) on the board with responsibility for climate-related issues 3. C1.3 Do you provide incentives for the management of climate-related issues, including the attainment of targets? C1.3a Provide further details on the incentives provided for the management of climate-related issues.

Both A and C-listers see regulations, such as carbon pricing, as a significant risk, yet A-listers are far more likely to have an internal price on carbon

Percent of companies that include current or emerging regulation in their risk assessment[1]



Percent of companies with an internal price on carbon[2]



2018 CDP Response. 1. C2.2c Which of the following risk types are considered in your organization's climate-related risk assessments? Risk types: Emerging Regulations, Current Regulations, Technology, Legal, Market, Reputation, Acute Physical, Chronic Physical, Upstream, Downstream. **2.** C11.1 Are any of your operations or activities regulated by a carbon pricing system? Calculation includes shadow pricing.

ENGIE Impact Conclusions

Accelerate renewables adoption & efficiency measures

- Benchmark performance to identify and evaluate optimization opportunities
- Develop a balanced renewables strategy by conducting thorough assessments of market conditions and technologies
- Explore financing mechanisms to overcome internal payback hurdles and accelerate deployment of renewable or demand-side measures

Engage your value chain

- Assess what percent of your emissions come from scope 3 factors, and which Scope 3 factors have the greatest emissions.
- Actively engage suppliers with audits, ongoing meetings and rigorous data collection practices
- Engage experts to support lifecycle assessments to identify your greatest sources of impact. Allot funding to support innovation designed to target emissions reduction in prioritized areas.

Align internal performance metrics to climate performance

- Align the compensation of the entire C-suite to climate performance, to broaden accountability across all functions of the organization
- Educate your leadership team on emissions reduction practices relevant to their domain
- Establish an internal price of carbon to mitigate future risk and invest in tools to simplify carbon accounting

Accelerating Your Sustainability Transformation For Growth And Progress.

Contact Us

If you would like to discuss any of the findings or best practices presented in this report, please reach out to your ENGIE Impact representative or contact us at:

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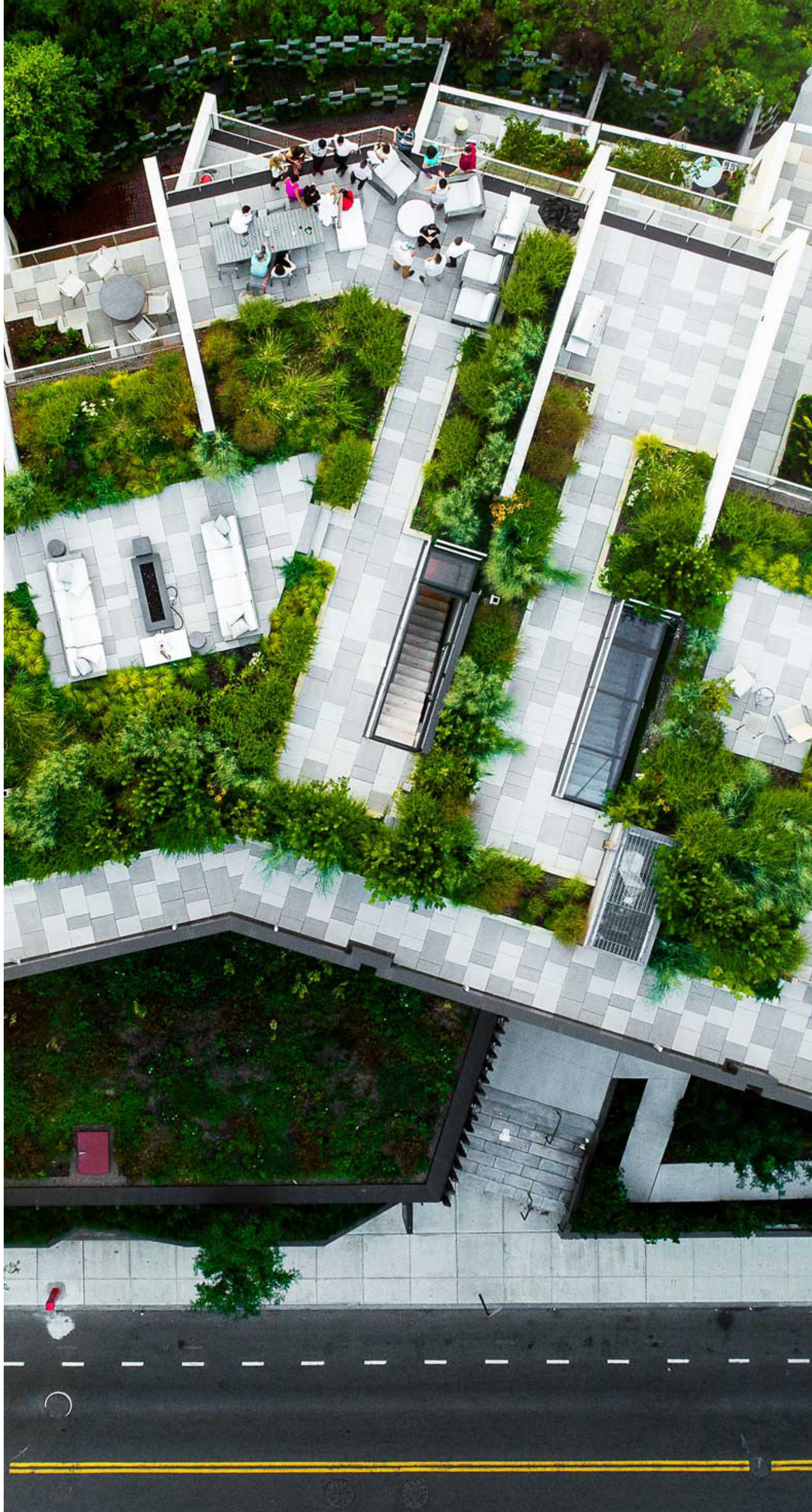

Analysis Index

ENGIE Impact Ambition and Achievement Metric

Leading and lagging companies were determined by using a combination of two metrics: target achievement and target ambition. As such, this analysis focused only on companies with stated targets. Companies were ranked by ambition and separately ranked by achievement. The rankings were normalized to equally weight each metric and combined to provide a single ranking. Of this ranking, leaders were designated as the top third, and laggards as the bottom third.

Ambition was calculated by dividing targeted percent reduction by duration of target (difference between target year and base year, C4.1b). Achievement was calculated by dividing the percent of target achieved by the percent of time elapsed toward target year (C4.1b). Ranking was further refined to favor inclusiveness, rigor, and near-term target dates.

Industry Focus

To best compare industries by ambition and achievement of goal, industries were selected that shared common characteristics such as operational similarities, a larger site count and a concentration of emissions in Scope 2 and 3. As such, some of the highest emitting industries (such as minerals, energy, power) are not included in this analysis. To further refine our analysis, companies that had emissions less that 15% of the median were also excluded.

On Track to Meet Targets Metric

Companies were determined to be "On Track" if their disclosed percent of target achieved (C4.1a and C4.1b) was greater than the percent of time elapsed toward target year. This calculation captures current state of progress, assuming linear progression to targets, and will therefore not include reductions resulting from planned future emissions reduction projects.

Data Limitations

There are multiple instances of data inconsistencies from CDP respondents of all types. These inconsistencies may come as a result of data entry errors, misunderstanding or misinterpretation of a CDP question, or lack of specification on the part of CDP guidance. In significant cases, certain questions were excluded from our analysis (e.g. 4.3b estimated savings from emissions reduction initiatives).

Analysis conducted by ENGIE Impact's carbon advising department. Peer reviewed by World Resources Institute Greenhouse Gas Protocol certified analysts. For more information on CDP disclosure and scoring criteria, visit http://cdp.net.