



A merger of ClimateCare
& Natural Capital Partners

COMMITMENT ISSUES

Markers of Real Climate Action in
the Fortune Global 500

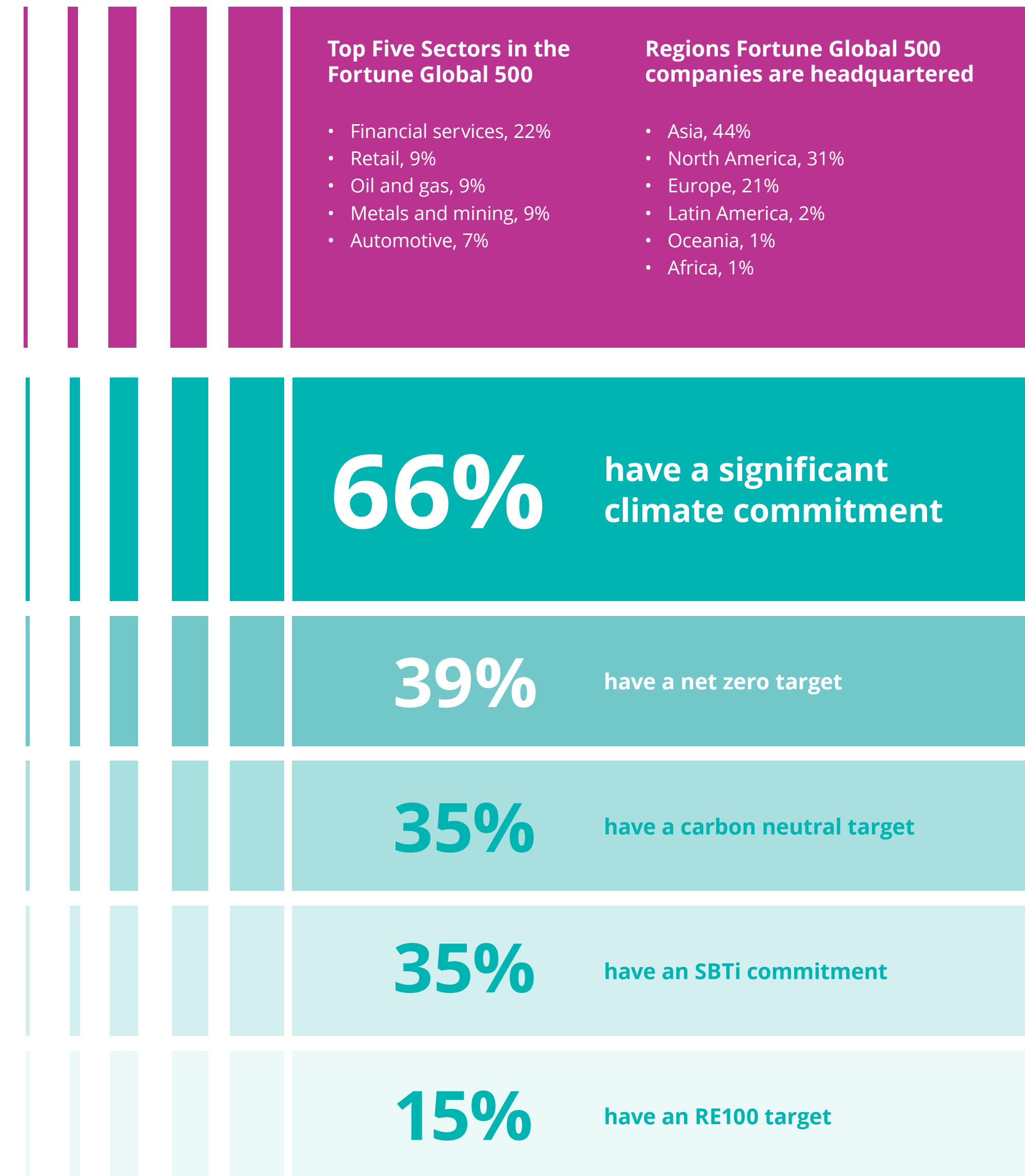
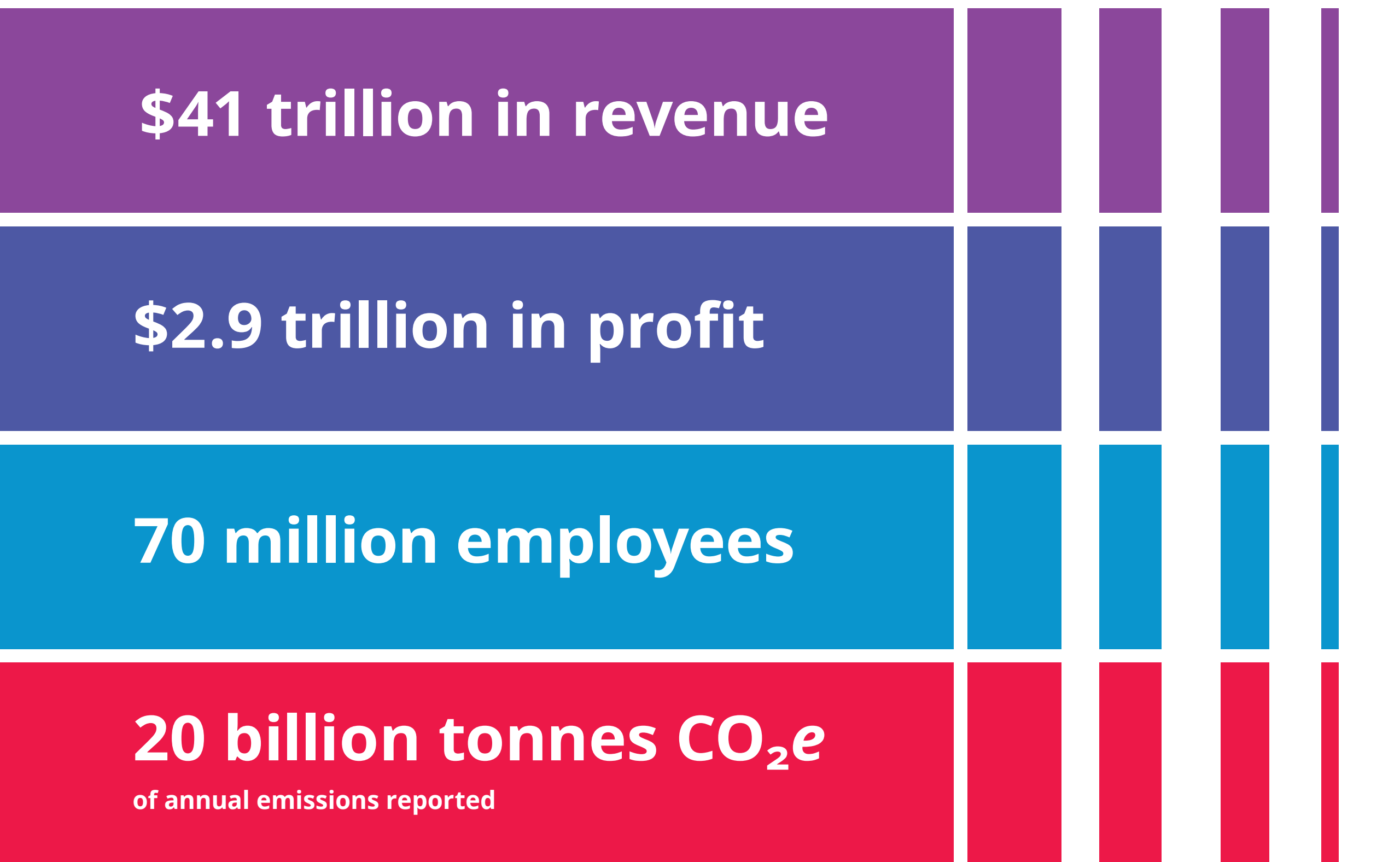
September 2023

With support from



FORTUNE GLOBAL 500

Snapshot of the five hundred largest companies in the world by revenue



01	EXECUTIVE SUMMARY	04
02	DELIVERING RESULTS: THE MARKERS OF CLIMATE ACTION	07
03	MEET THE CSOs LEADING CLIMATE ACTION	12
04	REGIONAL AND SECTOR INSIGHTS	17
05	METHODOLOGY AND DATA	23

01

EXECUTIVE
SUMMARY

EXECUTIVE SUMMARY

Our fifth annual report on the climate commitments of the world’s largest companies explores why climate pledges alone are not delivering enough real, immediate change.

As the UN Secretary-General António Guterres noted in July 2023, “the era of global warming has ended” and “the era of global boiling has arrived.” Our aim for this report is to provide the data and analysis to help companies meet the urgency of the moment, understanding what can deliver real, immediate progress today, and the business benefits of that leadership.

Despite a steady rise in climate commitments following the Paris Agreement in 2015, in the last year the number of Fortune Global 500 companies with a significant climate commitment has stagnated at around 66% of companies.

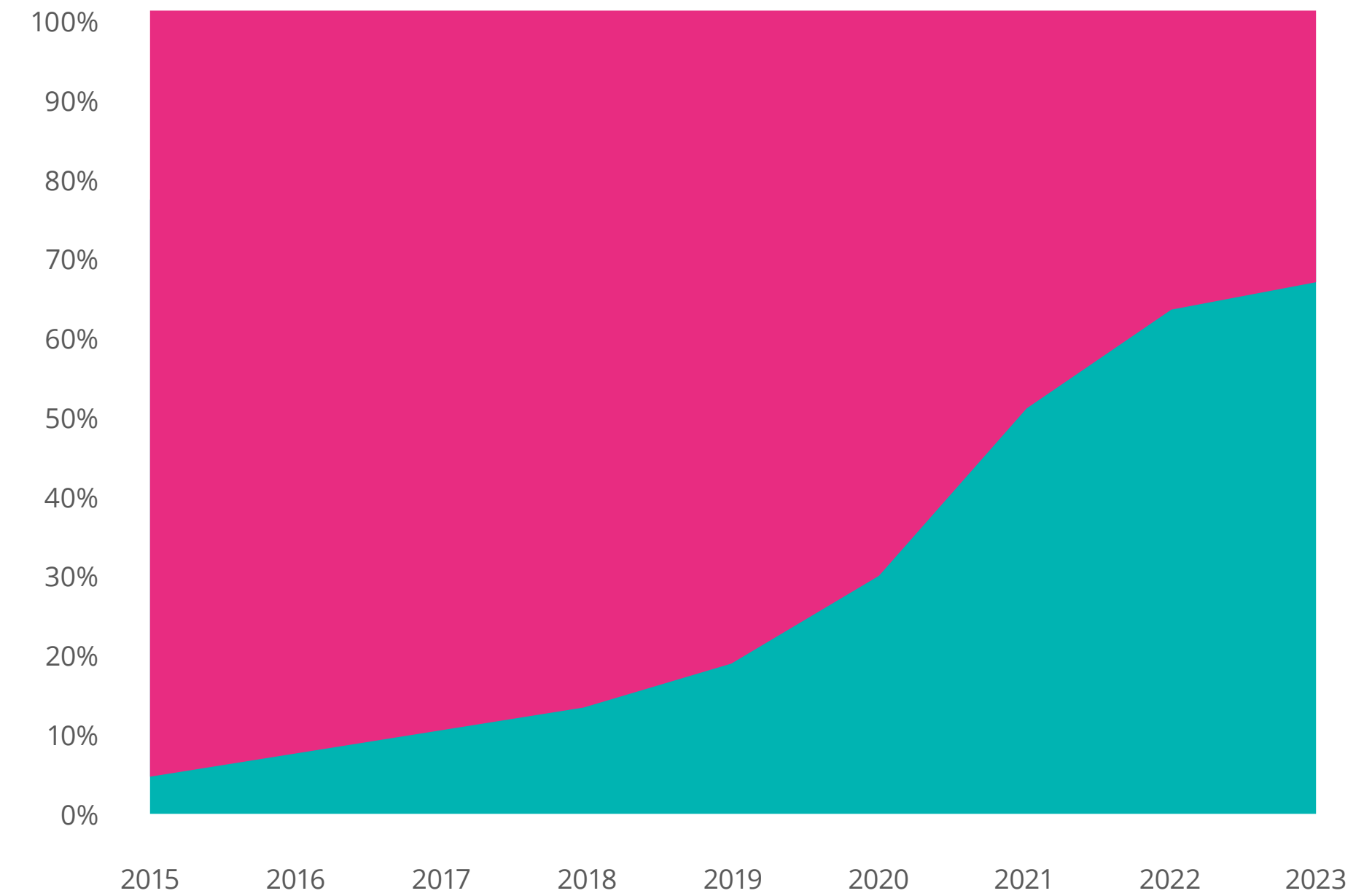
While commitments are stagnant, emissions are still on the rise. But reducing emissions pays off both environmentally and financially: companies that reduced reported emissions year over year earned on average nearly \$1 billion more in profit per company than their Fortune Global 500 peers.

What are the markers of real climate action: those that are not just making commitments, but actually reducing emissions?

Among those companies that are delivering emission reductions, three markers are emerging:

- 1. Reporting emissions:** 76% of the Fortune Global 500 companies are reporting annual emissions year over year. More than half of the companies (55%) are reporting on some form of Scope 3, and 23% have complete Scope 3 reporting. Scope 3 emissions are significant – they represent 90% of the Fortune Global 500’s total reported emissions.
- 2. 2030 targets:** The operational emissions of companies with a 2030 or sooner target reduced by 7% over the last reporting year, compared to a 3% increase among companies without a 2030 target. The UNEP calculates that annual emission reductions of 8% are needed throughout this decade to limit global warming to 1.5°C.
- 3. Chief Sustainability Officers (CSOs):** 43% of companies have a Chief Sustainability Officer or equivalent, leading to earlier climate targets. Companies with a CSO set carbon neutral and net zero targets, on average, seven and three years sooner respectively. This still relatively new role is expected to increasingly deliver greater impact.

The growth of significant climate commitments by Fortune Global 500 companies

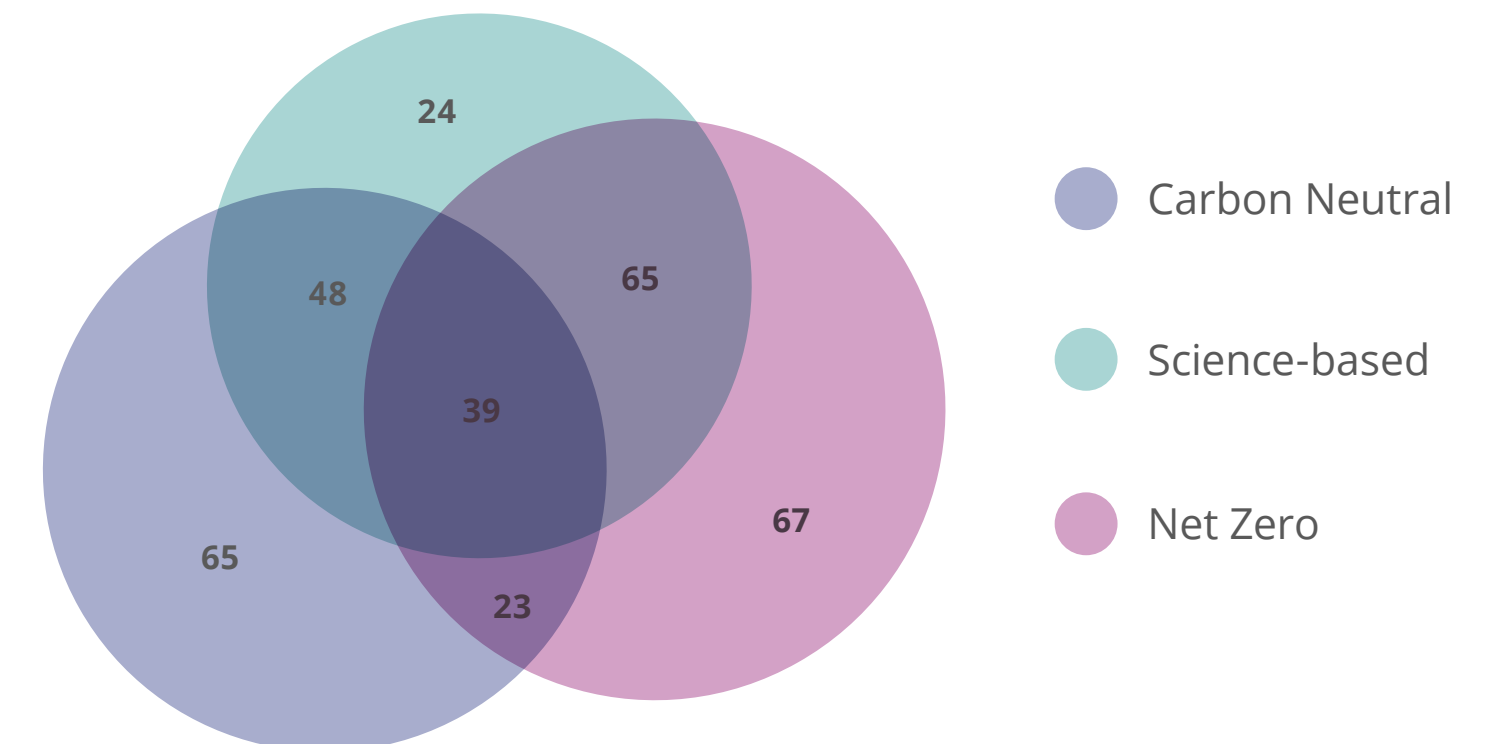


34%
Companies without climate commitments
'Climate Bystanders'

66%
Companies with climate commitments

Significant climate commitment refers either to a carbon neutral, net zero, science-based, or RE100 commitment.

Overlap of commitments among the 66% of Fortune Global 500 companies with significant climate commitments (331 of 500)



All companies with a RE100 commitment also have another commitment.

EXECUTIVE SUMMARY

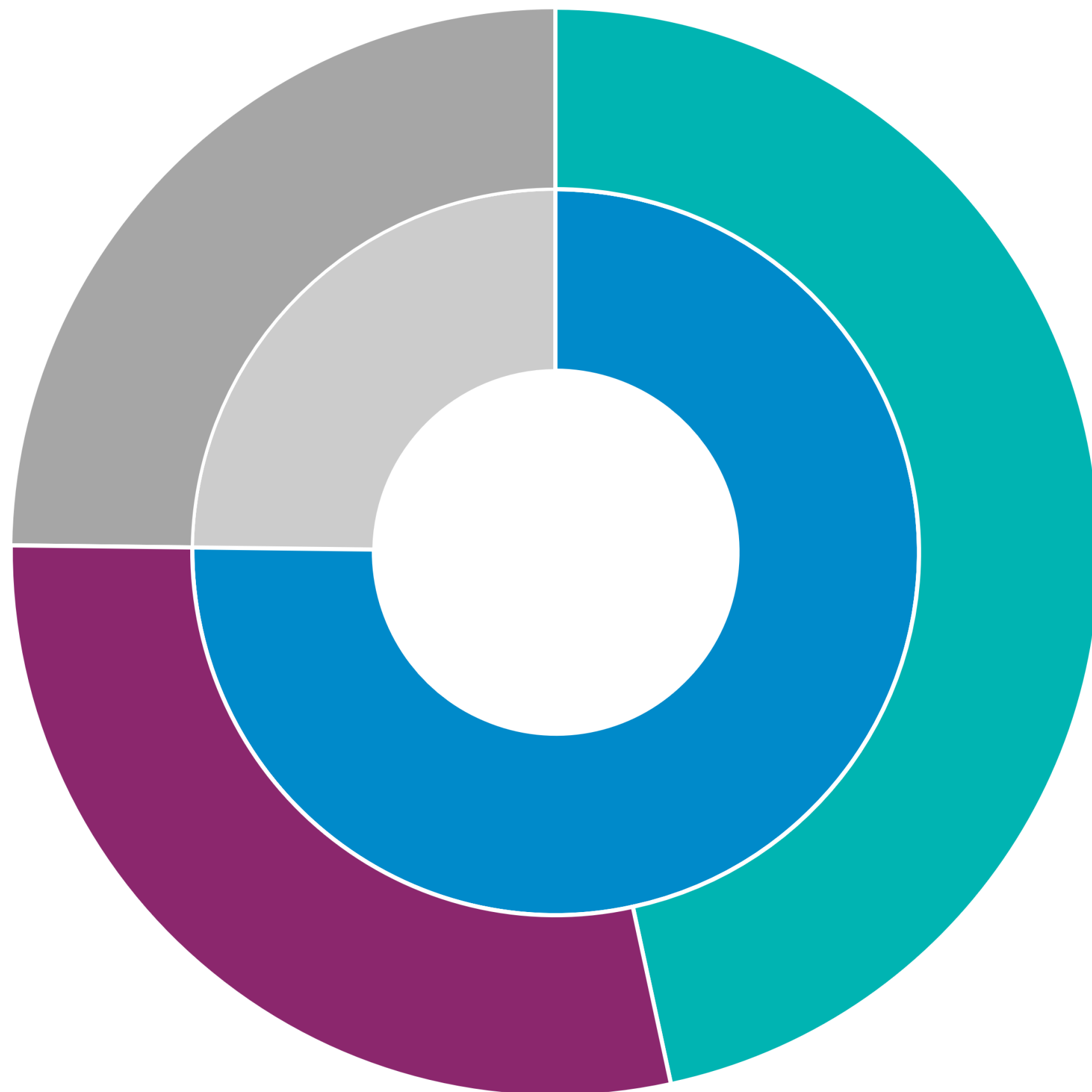
The share of Fortune Global 500 companies reporting and reducing emissions*

Reporting emissions*

- Reported emissions (76%)
- No emissions reporting (24%)

Reducing emissions*

- Reduced emissions (47%)
- Increased emissions (29%)
- Unknown, did not report (24%)



*Operational emissions Scope (1 + 2). For Scope 3 reporting details see full report.

And the Climate Bystanders? One in three companies are still holding out with no public significant target declared. This list represents a disproportional amount of total emissions. Only 78 companies in the Climate Bystander group (16% of total Fortune Global 500) have reported emissions but they are responsible for more than half (55%) of all reported emissions across the Fortune Global 500. The remainder do not report emissions at all. These Climate Bystanders stand out because they do not follow the three key markers of climate action that are driving real emission reductions.

How to inspire the Climate Bystanders?

Behavioral science theories behind bystander inaction have identified the following two drivers:

- Responsibility diffusion means our collective responsibility to shared problems can reduce individual action.
- Ambiguity means that if a situation lacks a clear first step, we fear potential criticism for acting and not getting it right. This fear is likely driven by increasing accusations of greenwashing.

To support companies to overcome barriers in this critical decade for climate action, this year we have included reflections and advice from Chief Sustainability Officers at Fortune Global 500 companies including Barclays, Delta Air Lines, GE and GM.

Who are the Fortune Global 500?

This is our fifth year tracking the growth of climate ambition of the Fortune Global 500, which are the five hundred largest companies in the world by revenue. In 2022, they earned \$41 trillion in total revenue, over one-third of global GDP, and employed more than 70 million people.

The Energy Transitions Commission, an international think tank focused on economic growth and climate change mitigation, estimates \$3.5 trillion per year of capital investment will be needed to build a net zero global economy by 2050. The Fortune Global 500 earned a total of \$2.9 trillion in net profits last year, seemingly giving them the capacity to increase their climate investments and make a meaningful contribution to the global goal.

In addition to the importance of climate action within their own operations, Fortune Global 500 companies have significant influence on their suppliers, customers and the wider world of business and government. The efforts taken by the companies highlighted in this report can provide a benchmark for broader changes in the private sector sustainability landscape. However, the focus on this group does not diminish the value of many other businesses – small, medium, and large – throughout the world, who have also realized the urgency of our climate situation and are already taking action, delivering results, and making real change possible.

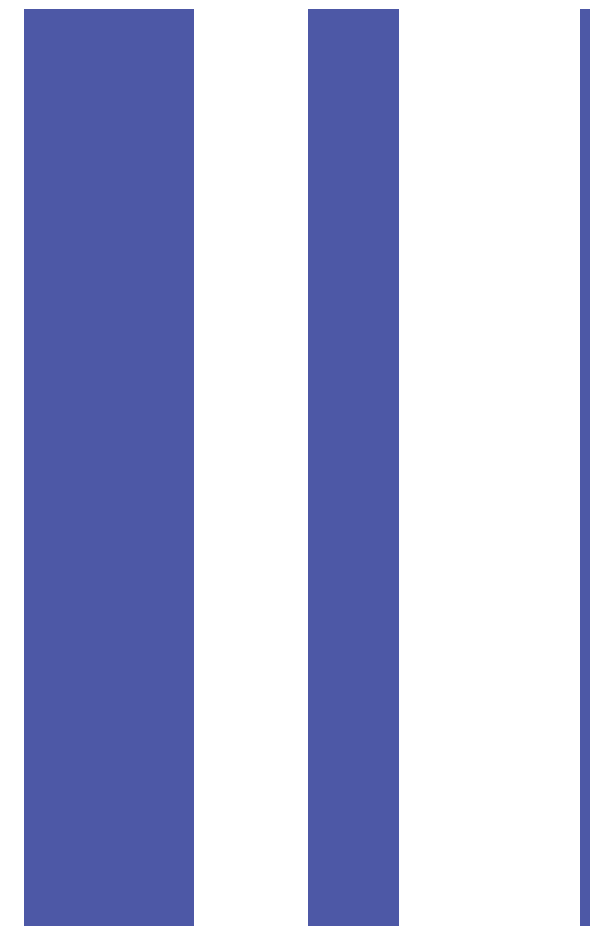
02

DELIVERING RESULTS: THE MARKERS OF CLIMATE ACTION

DELIVERING RESULTS: THE MARKERS OF CLIMATE ACTION

Reducing Emissions – It Pays.

Business case for reducing emissions: Companies that reduced reported emissions year over year earned on average nearly \$1 billion more in profit per company than their Fortune Global 500 peers.



Emission reductions are the true measure of climate action and 47% of Fortune Global 500 companies (235 of 500) reported an annual reduction in their operational emissions, meaning Scope 1 and 2. Scope 1 emissions are from owned and operated sources, Scope 2 emissions are from purchased electricity. The emissions of these companies decreased by 9% over the last reporting year.

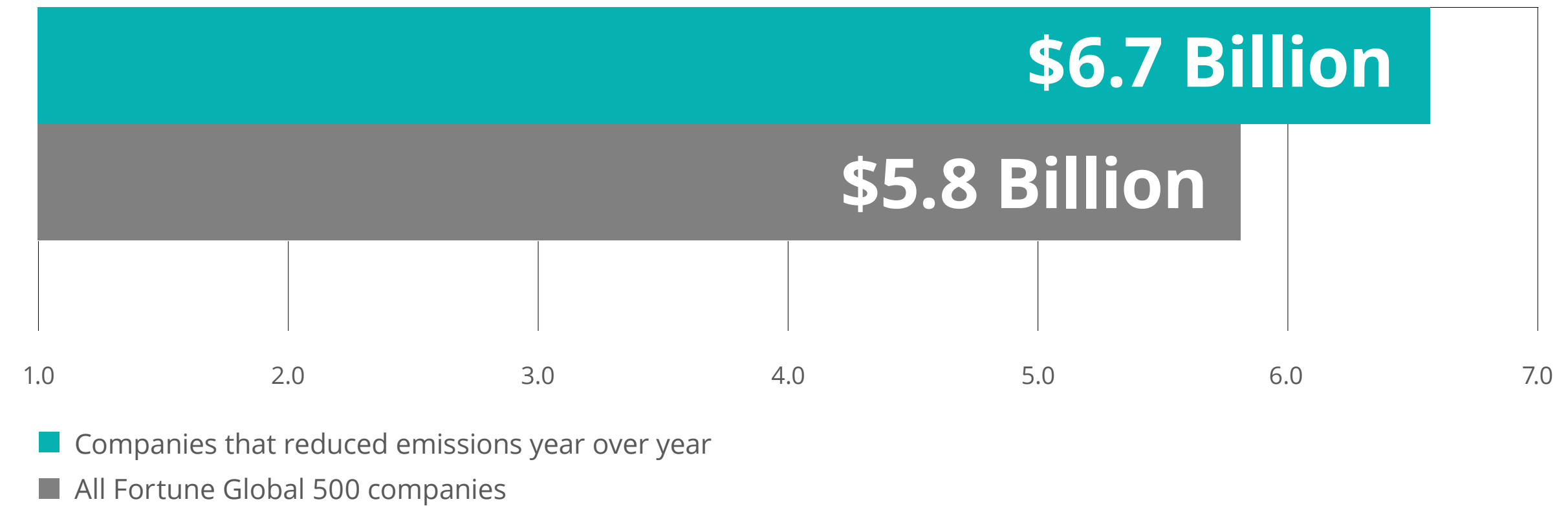
Companies that reported an annual increase in operational emissions, increased those emissions by 10%. Across all companies that reported operational emissions data (76% of companies), the change was an increase of 1.5%.

Fewer than 3 in 10 Climate Bystanders reduced operational emissions over their last reporting year, compared to 6 in 10 companies with a climate commitment.

With reducing emissions as the only true measure of action, rather than commitments alone, we found the three markers that indicate a company is more likely to achieve their emission reductions:

1. Reporting emissions
2. Setting 2030 targets
3. Having a CSO

Average Profit in Billions USD of Fortune Global 500 Companies



DELIVERING RESULTS: THE MARKERS OF CLIMATE ACTION

1. Reporting Emissions

Business case for reporting emissions: 76% of Fortune Global 500 companies now report emissions year over year.

By accurately measuring emissions, companies can set more robust targets, evaluate the success of emission reducing initiatives, and quantify the risk climate change impacts and policies may have on their operations. Beyond the benefits to the company, good emissions reporting helps to inform better policy and highlights areas of support that certain regions or sectors may benefit from.

Reporting requirements are also growing across the globe through initiatives including the Task Force on Climate-Related Financial Disclosure (TCFD), new guidelines from the Securities and Exchange Commission (SEC) in the United States, and the Corporate Sustainability Reporting Directive (CSRD) in Europe. The companies that reliably measure and report emissions will have an advantage in meeting increasing regulation and expectations from investors.

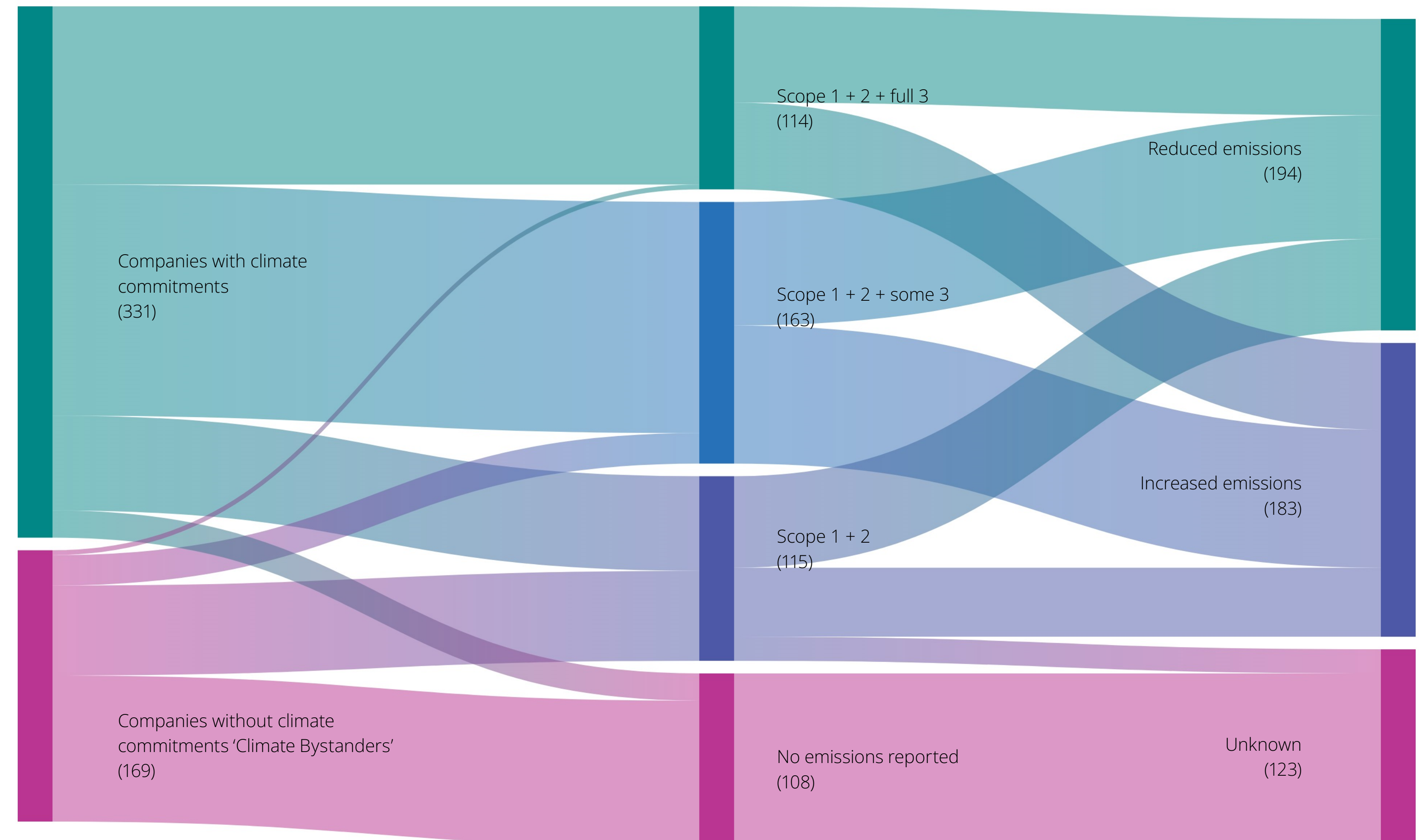
Fewer than 5 in 10 Climate Bystanders report any emissions data whereas more than 9 in 10 companies with commitments do.

Reporting empowers companies to take action, as the overwhelming majority of companies that report full Scope 3 emissions have significant climate commitments.

And for robust emissions reporting, scope matters. More than half of all companies (55%) are reporting on some form of Scope 3 and 23% have complete Scope 3 reporting.

Last year's emission reporting by Fortune Global 500 companies with and without significant climate commitments*

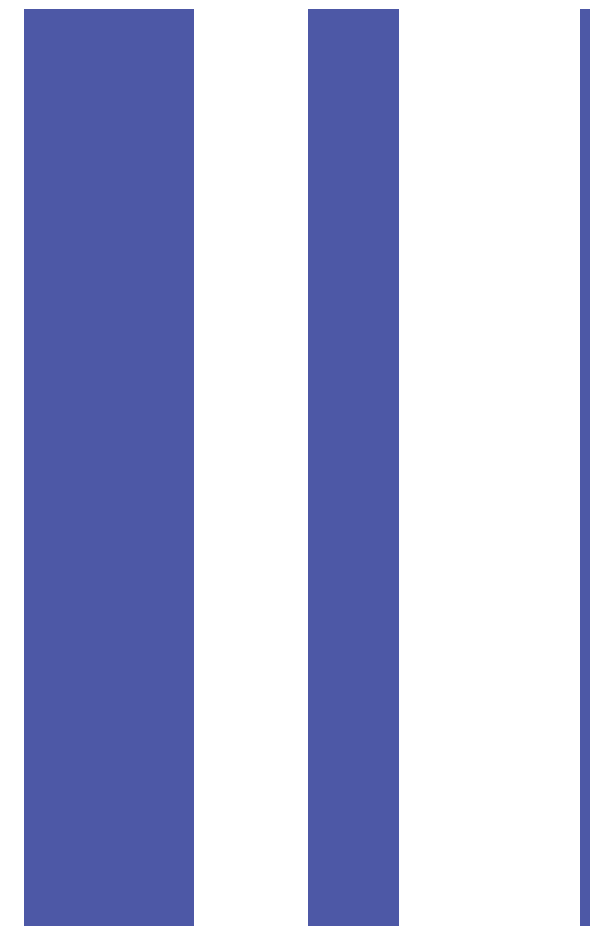
**The figures in the flow chart represent the companies' most recent reporting year. These differ slightly from the year over year emission reduction figures in this report which only considered companies that had reported for two consecutive years thus enabling us to calculate emission reductions. Significant climate commitment refers either to a carbon neutral, net zero, science-based, or RE100 commitment.*



DELIVERING RESULTS: THE MARKERS OF CLIMATE ACTION

2. 2030 Targets

Business case for setting 2030 targets: Companies with a 2030 or sooner target reduced operational emissions by 7% over the last reporting year, compared to a 3% increase by companies without a 2030 target.



Earlier climate targets are focusing the strategic decision-making of businesses, enabling them to make real changes now and deliver impact. Climate strategies must be science-based, ambitious, achievable, and provide near-term checkpoints to keep us on track for the mid-century goal.

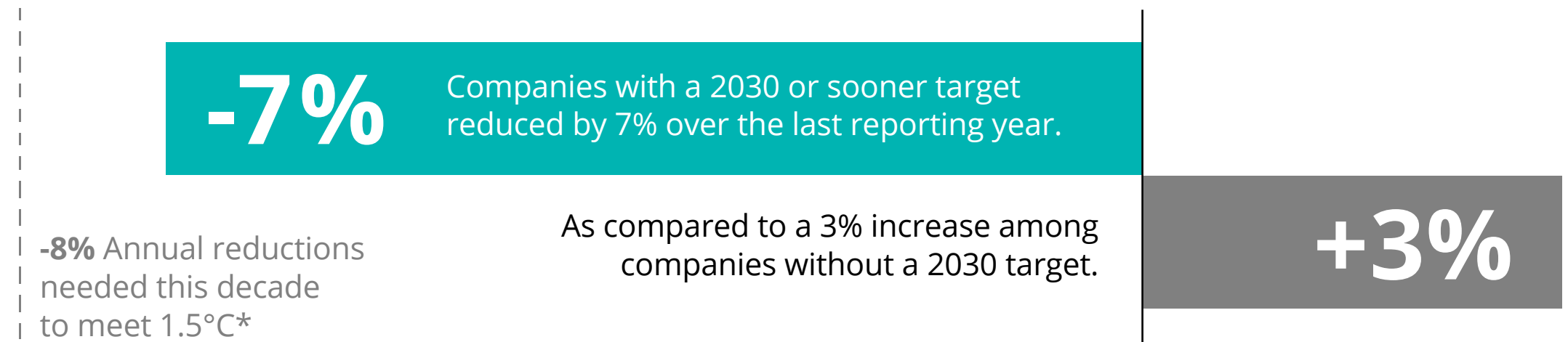
Further, the average tenure length of a listed company CEO is five years according to a [2018 study by PwC](#). Setting a goal beyond 2030 would mean that not only is it not the current CEO's problem but that it is also unlikely to fall under the responsibility of the next CEO. Earlier targets can incentivize current leadership to take more action sooner, as ambitious and achievable targets mean accountability, and accountability drives change.

42% of companies have a target for 2030 or sooner, but those targets only cover 18% of total reported emissions.

72% of reported emissions are not covered by a significant climate target because while two thirds of companies have significant climate targets, only 38% of companies have targets that touch on their Scope 3 emissions.

Just under 6 out of 10 companies with a climate commitment have set a target before 2030 and by definition those without commitments have no 2030 targets.

2030 targets are driving real operational emission reductions



Only 18% of reported emissions from the Fortune Global 500 are covered by a 2030 reduction target or significant climate target**

72% of reported emissions are not covered by any target

18% of reported emissions are covered by a 2030 or sooner target

10% of reported emissions are covered by a target beyond 2030

* UN Environment Programme, 2019, *Cut global emissions by 7.6 percent every year for next decade to meet 1.5°C Paris target* - UN report, [link](#)
 **Significant climate target refers either to a carbon neutral, net zero, science-based, or RE100 target.

DELIVERING RESULTS: THE MARKERS OF CLIMATE ACTION

3. Chief Sustainability Officers

Business case for having a CSO:
43% of Fortune Global 500 companies have a CSO or equivalent, leading to earlier climate targets.

Having a Chief Sustainability Officer encourages companies to be more ambitious in their plans of action as compared to companies without a CSO or equivalent. Companies with a CSO or equivalent set carbon neutral and net zero targets, on average, seven and three years sooner respectively.

Corporate sustainability can be a complex space, with many stakeholders and paths to consider. Having a CSO dedicated to the quality, creation, and implementation of a company's climate strategy produces better results.

Only 1 in 10 Climate Bystanders have a CSO or equivalent but 6 in 10 companies with a climate commitment have someone in that role.

While companies with a CSO or equivalent have achieved modest emission reductions as a group over the last reporting year, companies without a CSO saw emissions increase by 3% in the same period. This still relatively new role is expected to increasingly deliver greater impact.

This year, to support companies in overcoming barriers to climate action, we have included reflections and advice from Chief Sustainability Officers at Fortune Global 500 companies including Barclays, Delta Air Lines, GE and GM.

Almost half of all Fortune Global 500 companies have a Chief Sustainability Officer (CSO) or equivalent



Unlocking Chief Sustainability Officers' potential

Companies with a CSO or equivalent reduced operational emissions by 0.2% over the last reporting year.

-0.2%

As compared to a 3% increase among companies without a CSO or equivalent.

+3%

03

CSOs LEADING
CLIMATE ACTION

CSOs LEADING CLIMATE ACTION

Laura Barlow Group Head of Sustainability Barclays



Why and how did you commit your career to sustainability?

After 30 years in consulting and banking where I led businesses through turnarounds and transformation, I wanted to apply my skills and experience to the critical societal challenges we face, in particular climate change and nature and biodiversity loss.

While still working in mainstream finance, I invested time to learn about sustainability and sustainable finance, including through external courses, extensive reading and numerous discussions with colleagues and others in the industry, who were very generous with their time and knowledge. I became the bank's executive sponsor of sustainable finance and climate change which accelerated my learning. In 2020, having steered the corporate banking division at NatWest through the first phase of Covid, I decided to focus full time on sustainability and in 2021 I moved to Barclays as Group Head of Sustainability.

What are the most common challenges or obstacles that CSOs, and other sustainable business leaders are facing now when trying to advance or garner support for climate-related programs?

Climate change programs have moved rapidly from being CSR or risk-led to a key strategic priority for many businesses. The challenge is no longer 'why should we do this' but 'how do we do it' – the scale and complexity of the transition, the timescales involved (which are much longer than usual financial planning cycles) and in particular the data and reporting requirements to set and implement net zero strategies are daunting for most organizations. It's also common for these programs to be competing for resources and investment with other strategic change programs and for companies to be competing in the market for experienced hires.

If you could give one piece of advice for sustainability teams struggling with common barriers like: internal or senior buy-in, budget, fear of reputational risk, uncertainty, what would it be?

It is very helpful to have a clear North Star – such as a Net Zero Ambition – and it's vital to have strong leadership and support from the Board and senior executives. Making the business case for change such as setting out the estimated costs and benefits of different courses of action, both financial and reputational, can be very helpful to securing a strong mandate for change.

What actions do you think need to be taken to ensure climate change is on the agenda for all companies by 2030?

Policy makers have a critical role to play in ensuring there are clear roadmaps, by sector and geography, to inform company strategy and investment decisions. When the policy signals are clear and consistent, the business community responds positively with innovation and investment. Regulation will also play a key role in maintaining stakeholder and societal confidence by addressing, for example, consistent taxonomies and labeling and disclosures to address the risks of greenwashing and set clear parameters for companies to allow them to innovate with confidence.

“When the policy signals are clear and consistent, the business community responds positively with innovation and investment.”

CSOs LEADING CLIMATE ACTION

Amelia DeLuca Chief Sustainability Officer Delta Air Lines



“...no single company can decarbonize the industry alone – we all need to work together to test and learn new solutions, share best practices, and accelerate sustainability across the industry.”

What are the significant accomplishments you are most proud of in your current or past role?

A recent moment where I felt immense pride for our organization and our work was Delta’s participation in our second annual Sustainable Flight Challenge earlier this year.

This challenge, organized by the SkyTeam Alliance, tasks airlines around the world to use passenger flights to accelerate sustainability innovation throughout the industry. Participating airlines have the opportunity to showcase their individual strategies in action, while learning from each other in the process.

It’s not easy to coordinate a feat like this with a company of Delta’s size and scale, but there were incredible people involved across our entire organization who made it possible. Our team had the chance to show off some of the best solutions available to us today while pushing the boundaries of what’s possible for tomorrow. This included the use of sustainable aviation fuel (SAF) in our most efficient aircraft, electric ground support equipment, and swapping single-use plastics with reusable cups and recycled materials onboard.

It was an incredible and exciting demonstration of our dedicated team at Delta, but also an important reminder that no single company can decarbonize the industry alone – we all need to work together to test and learn new solutions, share best practices, and accelerate sustainability across the industry.

What are the most common challenges or obstacles that CSOs, and other sustainable business leaders are facing now when trying to advance or garner support for climate-related programs?

While not necessarily new, challenges arise when

businesses forget the number one rule - embedding sustainability strategy throughout the entirety of its operations - this is what makes or breaks success. At Delta, we believe that sustainability is not only good for the planet – it’s a business imperative as it ensures that our business is future-proofed and can help us navigate any uncertainty or seize opportunities that come our way.

The other obstacle – but one I would like to consider an opportunity – is cross industry collaboration. The complexity of decarbonizing the aviation industry means that no single company can do it alone. A perfect example of that is through scaling the sustainable aviation fuel market – which is one of the most important levers to decarbonize our industry today as it decreases total lifecycle emissions by 80% compared to conventional jet fuel. Delta is doing our part to grow demand, expand supply sources and increase accessibility of SAF but we’re also working with diverse partners – from start-ups to legacy refiners – and across the public sector to develop incentives to accelerate this innovation.

Whether it’s corporations, academia or the public sector, we all need to work together and do more than our part to be successful on a global scale.

If you could give one piece of advice for sustainability teams struggling with common barriers like: internal or senior buy-in, budget, fear of reputational risk, uncertainty, what would it be?

Understand that the role of a sustainability leader is to provide the energy and advocacy required to champion progress in this area, even when it is difficult or inconvenient for their organizations to do so. This does not necessarily mean being optimistic 100% of the time. Rather, it means providing the rational and unrelenting voice that does not shy away from challenges or barriers. It

requires the ability to fully understand and communicate the stakes at play to ensure that organizations do not lose sight of the bigger picture when it comes to this work.

At the end of the day: listen. Listen to what your employees, consumers, investors care about and what they’re saying to help inform action. Now more than ever these key stakeholders are paying attention to what companies are doing – and not doing – to navigate the climate transition.

What actions do you think need to be taken to ensure climate change is on the agenda for all companies by 2030?

Organizations must be consistent and transparent around their climate strategy and the progress they make to implement and action against it. As organizations embark on their sustainability journeys – setting and committing to aspirational goals and showing progress against them – they bring the rest of their industry along and draw attention to the urgent climate issues we all face.

This isn’t to say that driving progress should be up to the largest or loudest organizations, it is more about holding each other – and ourselves – accountable as we work toward a more sustainable future.

CSOs LEADING CLIMATE ACTION

Roger Martella Chief Sustainability Officer GE



“Be unapologetic in advocating that we first have to succeed as a business in order to succeed for sustainability.”

Why and how did you commit your career to sustainability?

Throughout my career, I have been driven to help solve some of the world’s most pressing environmental, climate change, and environmental justice challenges. For the first few decades, it seemed that gaining enough momentum to create meaningful change always seemed elusive.

What’s transformative today is the growing corporate commitments to sustainability. For the first time, I feel optimistic about the pace of progress and our trajectory. First, we’re seeing the private sector increasingly as a unified front, in partnership with the public sector, toward succeeding for sustainability goals. Second, with private sector leadership, companies are tackling sustainability challenges like running a business - setting targets and performance indicators, operationalizing goals, making investments, showing accountability and sharing progress transparently. Finally, we’re seeing efforts to build the next generation of global economic development on a foundation of sustainability.

I’m thrilled to see action accelerating and proud to work for one of the companies that’s having the biggest impact globally.

What are the significant accomplishments you are most proud of in your current or past role?

I believe we’re in a transformative era of action for sustainability and climate change. For my work at GE, the biggest game changer has been elevating the role of partnerships: companies partnering with each other, with NGOs, and, importantly, with governments, toward shared goals. This has been the true catalyst toward action and progress.

This transition of “odd bedfellows” not only brings diverse parties together, but it also helps us work in new ways with governments and entities that historically have been on opposite sides of the table on many of these issues. My goal is to show examples of such partnerships among the private and public sectors – and even with our competitors - and prove that we can trust and work together while delivering for both sustainability and for business. Last year at COP27, I had the honor of introducing the Corporate Coalition for Innovation and Technology toward Net Zero, a new coalition of diverse companies partnering on innovating and technology to net zero at the U.S. Center’s opening ceremonies.

Recently, after working with the White House for the last 12 months on implementing the Inflation Reduction Act to achieve both government and private sector goals, I was honored to represent the GE team with President Joe Biden and reflect on how these partnerships are ushering in a transformative moment for the clean energy economy, climate change, and energy security. I reflected on how far we’ve come on partnerships to have the opportunity, as a corporate leader, to be speaking on the stage with the Administration on climate change policy and our joint efforts.

If you could give one piece of advice for sustainability teams struggling with common barriers like: internal or senior buy-in, budget, fear of reputational risk, uncertainty, what would it be?

Be unapologetic in advocating that we first have to succeed as a business in order to succeed for sustainability. It’s in our DNA to want to pursue the most ambitious goals for sustainability in our companies. But if we don’t succeed first and foremost for our employees, customers, and investors, these best intentions will be for nothing.

The overarching goal of a CSO should be to succeed for both sustainability and business simultaneously. Approach everything you do in sustainability with the same business acumen by which leaders run your businesses – key performance indicators, metrics, budgets, operationalizing goals, lean. So while it’s important to bring that unfettered passion for sustainability to the job – and be the company’s strongest advocate – it’s critical to be mindful of what it takes for the business to succeed and to bring alignment with sustainability.

What actions do you think need to be taken to ensure climate change is on the agenda for all companies by 2030?

Every business is competitive by nature. By 2030, the companies that can successfully integrate sustainability and climate change solutions into their business plans and operations are going to be at a competitive advantage. Some of this is going to be required – increasingly, employees, customers, investors and regulators are mandating sustainability performance alongside business performance. And some of it is where the business opportunities will be - innovating the technology to solve for climate change while improving quality of life for people everywhere. The companies that succeed in integrating sustainability into their purpose will be the ones who attract the best talent, better compete for customers, recruit investors, and are best prepared to thrive in the transformative era ahead.

CSOs LEADING CLIMATE ACTION

Kristen Siemen Chief Sustainability Officer General Motors



Why and how did you commit your career to sustainability?

My background is in engineering; I received my bachelor's and master's degrees in Electrical Engineering and spent the majority of my 29 years at General Motors working in Product Development with assignments in many areas including electrical, interior, thermal, validation and manufacturing engineering. I became Chief Sustainability Officer about 2 years ago and I've come to learn that my background set me up seamlessly for leading the company towards a zero emissions future. As an engineer, I'm trained to solve complex problems and my technical experience in the business has enabled me to think holistically about how we integrate sustainability into all aspects of our business. Our sustainability strategy and our business strategy are one in the same and core to creating an all-electric future that works for everyone. I'm proud to be working towards a cleaner and healthier future for generations to come.

What are the significant accomplishments you are most proud of in your current or past role?

Most recently, I am proud of our progress towards our ambitious climate goals. GM is working harder than ever to become carbon neutral in our global products and operations by 2040 and we're advancing on this journey in large part due to the level of integration and support both across the enterprise and across industries.

I have also been fortunate enough to be part of building teams that have been creating true impact. From expanding teams that are putting incredible products on the road and to helping create and launch our career re-entry program, "Take 2," I'm incredibly proud to have played a role in helping everybody in on our transition to the all-electric future.

What are the most common challenges or obstacles that CSOs, and other sustainable business leaders are facing now when trying to advance or garner support for climate-related programs?

Sustainability has been placed front and center as organizations work to address the growing impacts of climate change but with that attention comes an equal amount of confusion. In this challenging landscape, it's important to remember that sustainability doesn't have to be a choice; it can be the right thing for the planet and for the business.

Another common challenge can be fully integrating sustainability into every aspect of an organization. It's less about getting buy-in to reach a perfect goal and more about making wide-spread progress and better strides on a sustainability journey.

If you could give one piece of advice for sustainability teams struggling with common barriers like: internal or senior buy-in, budget, fear of reputational risk, uncertainty, what would it be?

My one piece of advice would be to get started. Get started educating yourself, your teams and your leadership on how sustainability is good for the business. Get started on building relationships in different industries and collaborating on innovative ideas and solutions. Get started on setting goals, even if they are far out or maybe don't have a clear path of how to get there. It's surprising what you can accomplish once you get started and often times you learn you can get there even faster and easier than you originally thought – but the trick is just to get started.

What actions do you think need to be taken to ensure climate change is on the agenda for all companies by 2030?

Climate change is a complex topic and not everyone experiences its impacts the same way. It's important for us to focus on the education piece and take the time to bring our current and future workforce as well as the next generation of leaders along on our journey. We won't get to a more sustainable future if we don't help everyone understand the role they have in this transition.

"Our sustainability strategy and our business strategy are one in the same and core to creating an all-electric future that works for everyone."

04

REGIONAL AND SECTOR INSIGHTS

REGIONAL AND SECTOR INSIGHTS

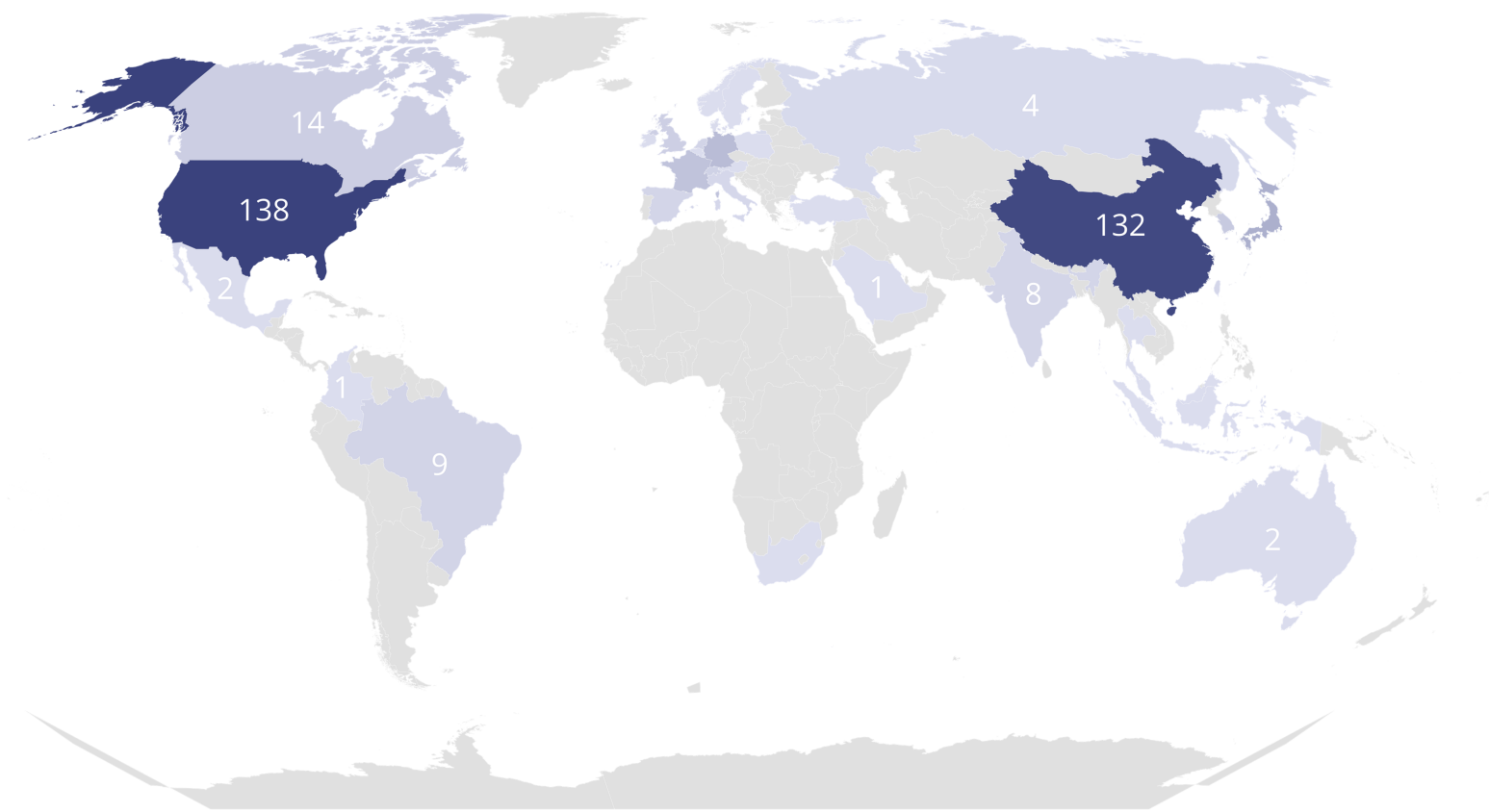
Regional Data

Europe is leading the way in terms of commitments with 108 out of 112 companies in the Fortune Global 500 list with a significant climate commitment.

The United States and China remain the individual countries with the most companies in the list with a combined total of 270 companies. 74% of Fortune Global 500 companies in the United States have a significant voluntary climate commitment whereas only 15% of those in China have one.

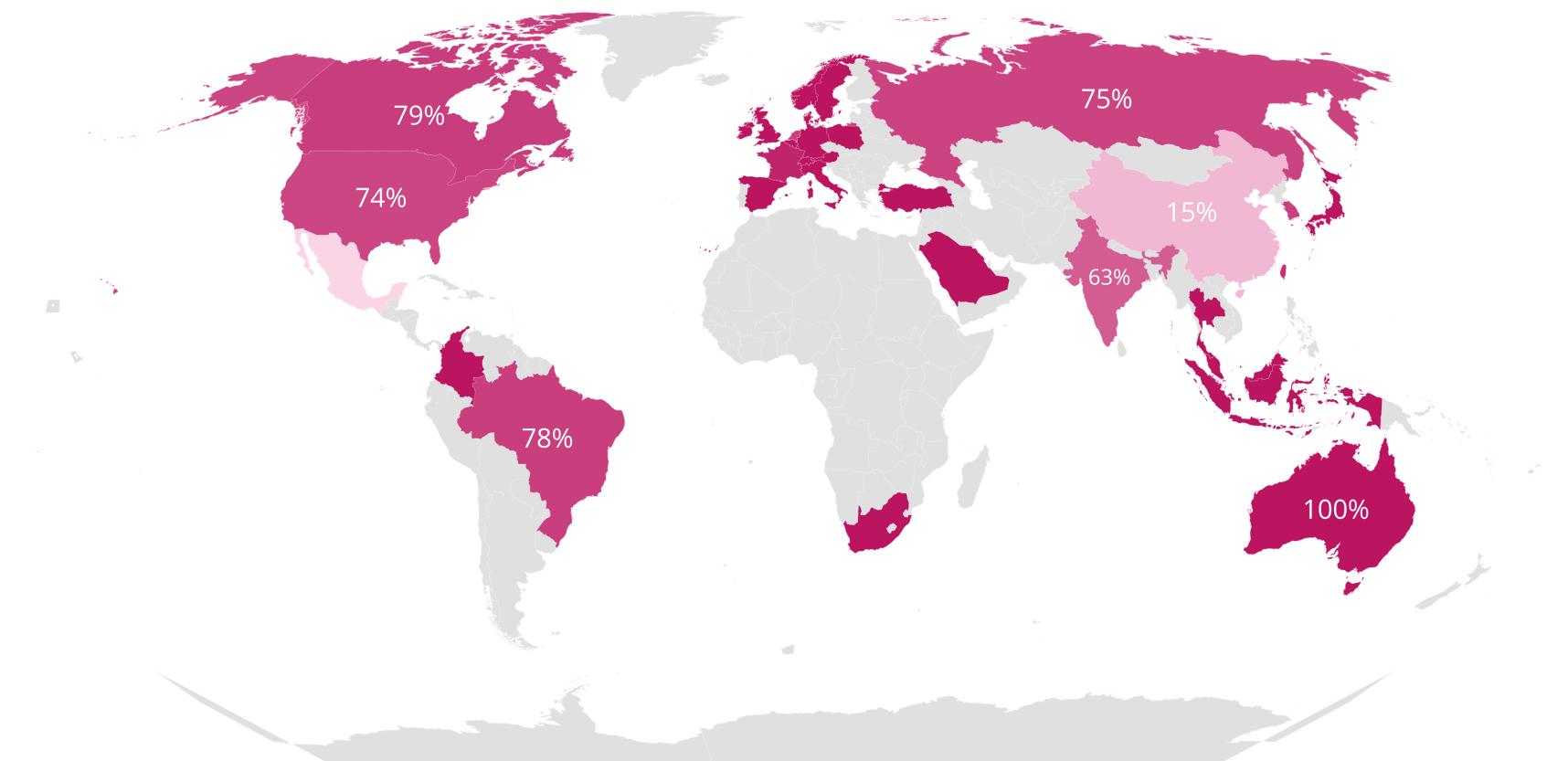
In terms of commitments, SBTi targets are the most popular type of new targets in every region making up 42% of new commitments in the last year. Between net zero and carbon neutral targets, net zero targets are more popular among new commitments across Europe and North America whereas new carbon neutral commitments are favored in Asia.

Fortune Global 500 Companies per Country



Powered by Bing
© Australian Bureau of Statistics, GeoNames, Microsoft, Navinfo, Open Places, OpenStreetMap, TomTom, Zenrin

Percentage of Companies with a Significant Voluntary Climate Commitment



Powered by Bing
© Australian Bureau of Statistics, GeoNames, Microsoft, Navinfo, Open Places, OpenStreetMap, TomTom, Zenrin

Region	Companies in Fortune Global 500	Companies with significant voluntary climate commitments (331)
Asia	222	101
North America	153	112
Europe	112	108
Latin America	10	7
Oceania	2	2
Africa	1	1

REGIONAL AND SECTOR INSIGHTS

Reducing Emissions

In 15 out of 17 sectors in the Fortune Global 500, the majority of companies that reduced emissions also made a profit in the last reporting year, showing that emission reductions do not come at the cost of profitability.

There are a few standout sectors in the group of 235 companies that reported emission reductions. The standouts for emission reduction achievements are:

- Household and personal products
- Automotive
- Healthcare and pharmaceuticals
- Food, beverages, and agriculture

Unsurprisingly, these high emitting sectors are the standouts for fewest share of companies reducing emissions:

- Engineering and construction
- Transportation and logistics
- Metals and mining
- Energy and utilities

While each of these operational, Scope 1 and 2, emission reduction achievements are positive, Scope 3 emissions represent the overwhelming majority of the Fortune Global 500's reported emissions. That is because Scope 3 emissions are from all other indirect upstream and downstream product or travel sources. Which brings us on to the importance of reporting emissions, especially Scope 3 emissions, in our next section.

Sector	Number of companies that have reduced operational emissions (Scope 1 + 2) out of total companies in that sector	Percentage of companies in that sector reducing operational emissions (Scope 1 + 2)
Health care and pharmaceuticals	18 out of 26	69%
Food, beverages and agriculture	14 out of 21	67%
Automotive	21 out of 34	62%
Real estate	3 out of 5	60%
Household and personal products	4 out of 7	57%
Aerospace and defense	6 out of 11	55%
Oil and gas	24 out of 45	53%
Telecommunications and media	11 out of 21	52%
Technology	9 out of 18	50%
Financial services	54 out of 110	49%
Retail	23 out of 47	49%
Industrial goods	16 out of 33	48%
Chemicals	6 out of 13	46%
Energy and utilities	8 out of 25	32%
Metals and mining	12 out of 43	28%
Transportation and logistics	6 out of 22	27%
Engineering and construction	0 out of 19	0%

REGIONAL AND SECTOR INSIGHTS

Reporting emissions

Scope 3 emissions represent 90% of the Fortune Global 500's reported emissions.

In the GHG Protocol, which is the most widely used emissions reporting framework, there are 15 Scope 3 categories, which include, for example, the emissions generated through the use of a company's products. By reporting all three scopes, a company has a full picture of its emissions, enabling it to identify high intensity areas, helping to shape an effective climate strategy.

Reporting emissions, especially Scope 3, can be complex. The complexity and ease of reporting also varies by sector. The table shows the steep fall off, on average 46%, between companies reporting any emissions to those reporting on full Scope 3 even among sectors that have a good emissions reporting record.

The three sectors with the highest average reported emissions per company, metals and mining, oil and gas, and aerospace and defense, also have some of the lowest reporting levels on Scope 3 meaning these emission figures would be even higher with proper reporting.

Sector	Share of companies in each sector that reported any emissions data for 2021/2022 (descending)	Share of companies that reported Scope 3 fully	Average reported emissions per company in each sector in tonnes of carbon dioxide equivalent (tCO ₂ e)
Health care and pharmaceuticals	96%	42%	13,000,000
Telecommunications and media	95%	52%	10,000,000
Technology	94%	50%	10,000,000
Retail	91%	35%	18,000,000
Oil and gas	89%	4%	246,000,000
Automotive	88%	35%	105,000,000
Food, beverages and agriculture	86%	38%	32,000,000
Financial services	80%	5%	2,000,000
Industrial goods	79%	39%	132,000,000
Transportation and logistics	77%	18%	26,000,000
Energy and utilities	68%	36%	4,000,000
Chemicals	62%	38%	55,000,000
Real estate	60%	0%	700,000
Household and personal products	57%	57%	76,000,000
Aerospace and defense	55%	0%	229,000,000
Metals and mining	42%	7%	1,244,000,000
Engineering and construction	32%	5%	4,000,000

REGIONAL AND SECTOR INSIGHTS

2030 Targets

Technologies available today can get us to net zero by 2050.

The extent to which this is true is, of course, industry dependent. The bar chart shows that the sectors where the majority of companies have a 2030 or sooner climate target tend to be consumer facing and tend to be less carbon-intensive. 2030 has become a focal point for climate change since the Intergovernmental Panel on Climate Change (IPCC) said in 2018 that carbon dioxide emissions would need to fall by about 45% from 2010 levels

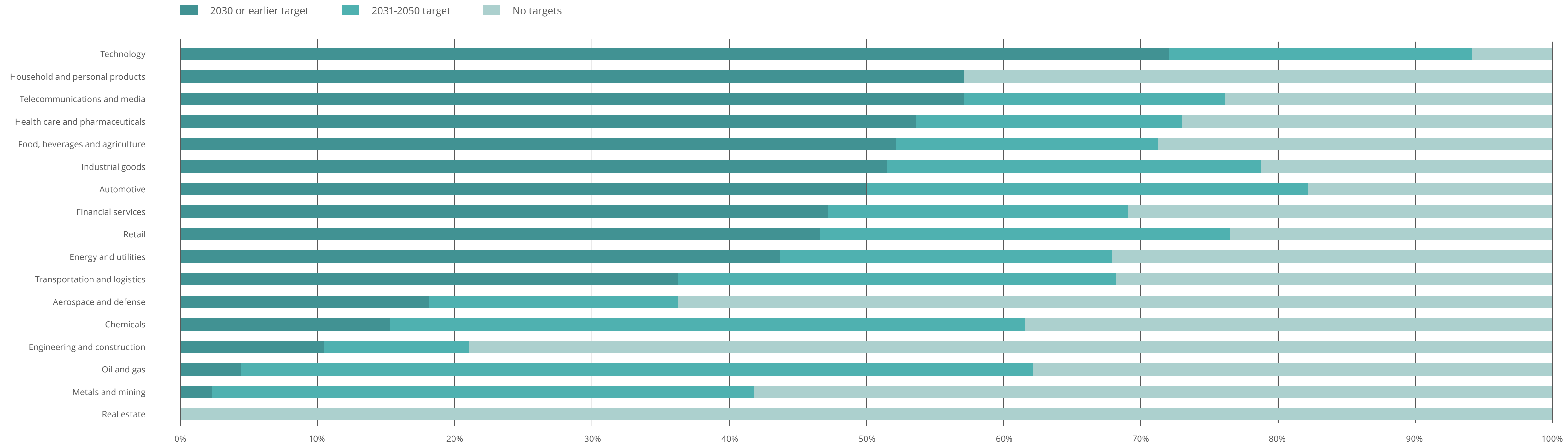
by 2030 to limit global warming to 1.5°C. So which sectors look to be on track?

Household and personal products is a clear standout as all of the targets in that sector are set for 2030 or sooner.

Overall, technology is the best performing sector with both the highest proportion of companies with long-term and near-term targets. Chemicals, and oil and gas are each interesting sectors to note as in both sectors over 60% of companies have a target, but only 25% for chemicals and 7% for oil and gas

are targets for 2030 or sooner. As per the previous section on reporting emissions, oil and gas has the second largest reported emissions per company, after metals and mining whilst technology has the fourth smallest of 17 sectors.

Despite the large gap in 2030 ambition between technology and oil and gas, these two sectors are the most profitable within the Fortune Global 500 making on average \$17 billion and \$10 billion in profits per company last year. Strong leadership is needed to transform these extremely profitable businesses into more sustainable ones.



REGIONAL AND SECTOR INSIGHTS

Chief Sustainability Officers

Technology companies are one and a half times more likely to have a CSO than oil and gas companies, suggesting that C-suite governance over sustainability and climate related topics translates to higher near-term ambition across sectors.

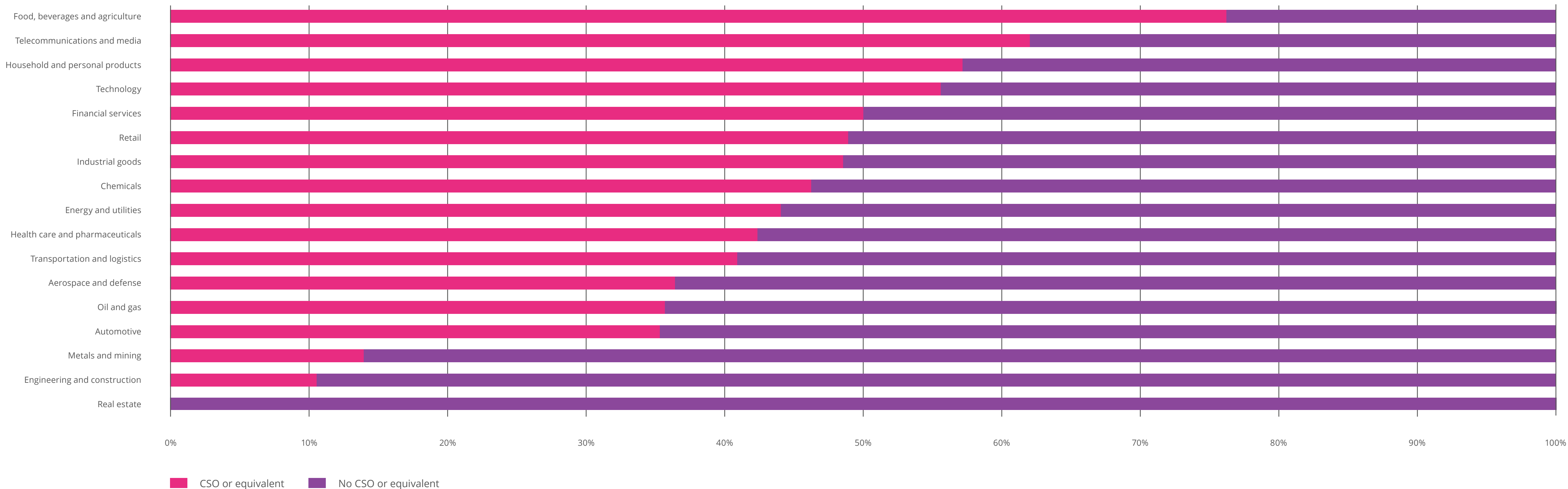
Currently it is the consumer facing sectors that lead, with the food, beverages and agriculture sector having the highest percentage at 76% of companies

in that sector with a CSO or equivalent. This is possibly because communicating plans and actions are seen as more of a priority with consumers increasingly demanding climate action from the brands they purchase from.

However, the CSO role is evolving beyond communications and into company strategy. This is why in our research we have only included titles

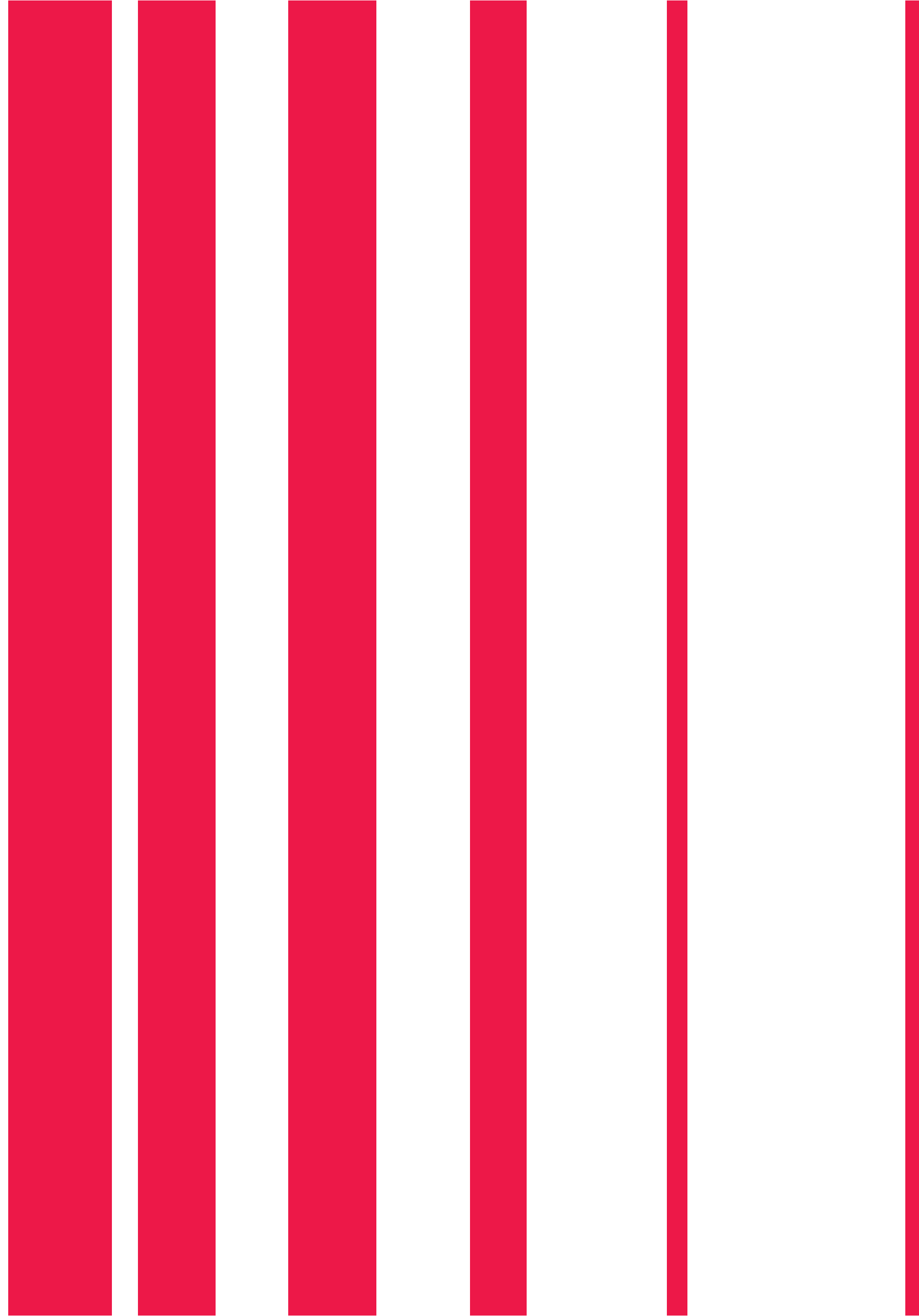
that imply direct access to boards and senior management as CSO equivalents.

While the topline figure is 43% of Fortune Global 500 companies have CSOs, there are now five sectors where half or more companies in that sector have a CSO, which is a powerful datapoint in proving the growth of this important role.



05

METHODOLOGY AND DATA



METHODOLOGY AND DATA

Methodology

Data was collected from desk-based research conducted from 20th June to 7th August 2023. The research looked at publicly available climate commitments and actions of the 2023 Fortune Global 500 companies. Data sources included company websites, press releases, and publications such as annual and sustainability reports. For documents published in languages other than English, Google Translate was used to search for relevant information and key words.

Data point: Carbon Neutral

Definition: “Greenhouse gas (GHG) emissions or other activities with warming effects attributable to an actor are fully compensated by GHG reductions or removals, or other activities with cooling effects, exclusively claimed by the actor, such that the actor’s net contribution is zero, irrespective of the time period or the relative magnitude of emissions and removals involved”. (Race to Zero (UNFCCC)). For this research, we accepted companies’ self-identification as “carbon neutral”, “climate neutral”, “fully offset”, “CO2 neutral”, “compensated emissions”, “net carbon neutral” “carbon negative”, or “greenhouse gas neutral” across either: all GHG scopes (1, 2 and 3); all Scope 1 and 2 emissions; “company”; or “operations”.

Methodology notes: Subsidiary targets were only counted towards the parent company if the subsidiary made up the majority of the parent company’s annual revenue. Where companies had multiple carbon neutral targets that grew in scope over time, we used the earlier target date and associated scope for our analysis. When companies use the terms carbon neutral and net zero interchangeably, we recorded them as having both carbon neutral and net zero targets.

Data point: CSO or equivalent

Definition: Chief Sustainability Officer

Methodology notes: Chief Sustainability Officer equivalents included “chief”, “managing/group/senior director”, “head”, “vice president”, or “president” of “sustainability”, “ESG”, “environment”, or “CSR”.

Data point: Emissions Data

Definition: Self-reported emissions most commonly reported in metric tonnes of carbon-dioxide equivalent (tCO₂e). Scope 1 emissions are from owned and operated sources, Scope 2 emissions are from purchased electricity, and Scope 3 emissions include all other indirect upstream and downstream product or travel sources.

Methodology notes: Emissions data of the most recent reporting year and the year prior were taken from annual reports and webpages. Where available, market-based values were used to calculate emission totals. Complete Scope 3 coverage was demonstrated if it was shown that all categories the company defined as relevant, usually according to the GHG Protocol, were considered or if the value reported was said to cover at least 95% of their total Scope 3 emissions.

The percentage changes of the companies with/without a 2030 target/a CSO are the percentage changes in absolute emissions from those companies that reported two years of Scope 1 + 2 emissions, taking their latest two years (most commonly calendar years 2022 vs 2021). When collecting emissions data, we found three companies that increased/reduced operational emissions by a surprising amount. We included those companies in the analysis of companies with a 2030 target/a CSO on pages 8, 10 and 11. Excluding the three statistical outliers would change the data as follows: with a 2030 target, no change; without a 2030 target, 3.4% would change to 3.3%; with a CSO, no change; no CSO, 2.5% would change to 2.3%. The drastic increases in emissions of these three companies could be a result of many factors/events including company expansion and acquisition as well as increases in the quality of emission reporting. Without access to the data companies have about their emissions it is not possible to confirm that these statistical outliers we identified are indeed incorrect emissions numbers.

The three companies were: Agricultural Bank of China 2022 emissions 2.2Mt, 2021 emissions 0.3Mt, JD.com 2022 emissions 3.6Mt, 2021 emissions 0.5Mt, and Xiamen C&D 2022 emissions 0.5Mt, 2021 emissions 0.01Mt. All but these three of the 376 Fortune Global 500 companies that reported two years of Scope 1 + 2 emissions reported changes between -82% and +260%.

Data point: Emission reduction targets

Definition: Our threshold for a self-reported target by which a company aims to reduce their emissions required the inclusion of a percentage decrease in emissions and a target year. Both absolute and intensity reduction targets were considered.

Methodology notes: Science Based Targets as well as targets found in publications, press releases and on company websites were considered. Both absolute and intensity targets were recorded and data including the content of the targets, the timelines, reductions and scopes were collected.

Data point: Net Zero

Definition: “An actor reduces its emissions following science-based pathways, with any remaining GHG emissions attributable to that actor being fully neutralized by like for like removals (e.g., permanent removals for fossil carbon emissions) exclusively claimed by that actor, either within the value chain or through purchase of valid offset credits.” (Race to Zero (UNFCCC)). For this research, we accepted companies’ self-identification as “net zero”, “zero net emissions”, “zero CO₂ emissions”, “zero carbon”, “net zero carbon” or “neutralized residual emissions”.

Methodology notes: Subsidiary targets were only counted towards the parent company if the subsidiary made up the majority of the parents company’s annual revenue. Where companies had multiple net zero targets that grew in scope over time, we used the earlier target date and associated scope for our analysis. There is no standardized way that companies report on their plans to use carbon removal as part of a net zero strategy, so we counted all net zero targets regardless of whether removals were mentioned, on the grounds that we may not have found them.

When companies use the terms carbon neutral and net zero interchangeably, we recorded them as having both carbon neutral and net zero targets. Net zero targets were classified as covering value chain emissions if: they referenced the company’s ‘value chain’, ‘Scope 3 emissions’ (in addition to operations / Scopes 1 and 2), ‘product lifecycle emissions’; if a financial services company, their ‘financed emissions’ or ‘investments’ (in addition to operations / Scopes 1 and 2); or if the company had committed to setting an SBTi-approved net zero target (as per the value chain emission requirement of the initiative).

Data point: RE100

Definition: “RE100 companies make a public commitment to secure 100% of their electricity from renewable sources. For the purpose of the RE100 campaign, for a company to be considered ‘100% renewable’ it must procure or self-produce 100% of its electricity from renewable sources” (RE100).

Methodology notes: Data taken from a publicly available dataset from the RE100 website. Data last accessed: 7th August 2023.

Data point: SBTi

Definition: The Science-Based Targets Initiative (SBTi) was created in 2015 by CDP, UN Global Compact, World Resources Institute (WRI) and WWF. “Targets are considered ‘science-based’ if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement – limiting global warming to well-below 2°C above pre-industrial levels and pursuing efforts to limit warming to 1.5°C.” (Race to Zero (UNFCCC)).

Methodology notes: Data taken from a publicly available dataset from the SBTi website. Both companies that have a target set or have committed to setting a target were considered to have climate commitment. Data on the target status and content of the targets were considered. Data last accessed: 7th August 2023.

METHODOLOGY AND DATA

Data Table

**Now relates to the year the data was collected for example, for the 2019 report, "now to 2030" was defined as 2019-2030.*

The data on which our findings rely is available in [our data spreadsheet](#)

	2019	2020	2021	2022	2023
One of the below actions	24%	33%	51%	63%	66%
One of the below actions by 2030	23%	30%	38%	42%	42%
One of the below actions already achieved	4%	8%	10%	12%	9%
Carbon neutral	10%	17%	30%	32%	35%
Already achieved	4%	6%	8%	9%	7%
Now * - 2030	3%	5%	9%	8%	10%
2031 - 2050	3%	6%	13%	15%	17%
Net zero	Did not measure	8%	25%	38%	40%
Already achieved	Did not measure	3%	1%	1%	1%
Now * - 2030	Did not measure	1%	3%	7%	5%
2031 - 2050	Did not measure	6%	22%	31%	33%
Net zero covering value chain	Did not measure	Did not measure	Did not measure	24%	26%
Already achieved	Did not measure	Did not measure	Did not measure	0%	0%
Now * - 2030	Did not measure	Did not measure	Did not measure	2%	2%
2031 - 2050	Did not measure	Did not measure	Did not measure	22%	25%
Science-based target	16%	21%	27%	34%	35%
Already achieved	0%	0%	0%	1%	0%
Now * - 2030	16%	21%	26%	31%	30%
2031 - 2050	0%	0%	1%	2%	4%
RE100	10%	12%	13%	14%	15%
Already achieved	1%	2%	3%	3%	3%
Now * - 2030	8%	8%	7%	8%	8%
2031 - 2050	1%	2%	2%	3%	4%

METHODOLOGY AND DATA

Average Profile of a Company With Commitments (66% of 500)

Revenue	\$ 83.5 billion
Profit	\$ 7.1 billion
Employees	138,000
Reported operational emissions	7.5 MtCO2
Reported Scope 3?	Yes (77% reported)
Reported Scope 3 fully?	No (34% reported fully)
CSO?	Yes (58% have one)
Change Fortune Global 500 in rank from 2022 to 2023:	+4.2
Years on list:	21

Average Profile of a Company Without Commitments 'Climate Bystanders' (34% of 500)

Revenue	\$ 78.9 billion
Profit	\$ 3.3 billion
Employees	140,000
Reported operational emissions	23.7 MtCO2
Reported Scope 3?	No (13% reported)
Reported Scope 3 fully?	No (2% reported fully)
CSO?	No (12% have one)
Change Fortune Global 500 in rank from 2022 to 2023:	+0.6
Years on list:	11

ABOUT US



A merger of ClimateCare
& Natural Capital Partners

About Climate Impact Partners

Climate Impact Partners delivers solutions for action on climate. Together with the world's leading companies and quality project partners we will reduce 1 billion metric tons of CO₂ to transform the global economy, improve health and livelihoods and restore a thriving planet.

Climate Impact Partners builds on the expertise, integrity, and innovation of two companies that have led the voluntary carbon market – Natural Capital Partners and ClimateCare. Fuelled by a relentless drive for rapid action and results, our global team continues to pioneer the market's development, and set the standards for quality that will maximize its impact.



About Imperial College Business School

As part of Imperial College London, a global leader in science and technology, Imperial College Business School drives global business and social transformation through the fusion of business, technology and an entrepreneurial mindset.

We are grateful to Raya Schrauwen who contributed to the research into corporate climate action as a summer intern as part of their Master of Science program in Climate Change, Management and Finance at Imperial College Business School.



CLIMATE
IMPACT
PARTNERS

A merger of ClimateCare
& Natural Capital Partners

www.climateimpact.com

