

GS SUSTAIN

The Corporate Commotion - a rising presence of ESG in earnings calls

Since our report A Revolution Rising - From low chatter to loud roar (April 2018), **a virtuous cycle of ESG adoption has continued**, driven by consumers, employees, regulators, corporates, NGOs and investors, **leading to ESG strategy becoming a critical component of corporate & investor conversations**. This report revisits our analysis using earnings transcript analysis tools to track the development of ESG themes over the past 5 years among global corporates in the S&P 500, STOXX 600 and ASX 200.

Five key takeaways from this report:

1. The majority of corporates are now discussing ESG, with the growth in mentions accelerating in the past 2 years. 65%, 66% and 72% of the S&P, STOXX and ASX constituents discussed ESG topics in the latest period (2Q; 1H for ASX), while the total volume of ESG comments has grown 10%, 12% and 6% (5 year CAGR 2Q15-2Q20) for each index, respectively.

2. The CEO is leading the discussion across all regions, with 47%, 45% and 49% of total comments coming from the CEO presentation in the latest period for the S&P,

STOXX and ASX, respectively. ESG discussion in Q&A is also material, accounting for 37%, 39% and 32% of total comments for the S&P, STOXX and ASX.

3. Increased discussion appears to translate into better ESG performance on carbon and employee-related metrics. Matching relevant keywords, the top 10 commenters across Europe, US and Australia show signs of better ESG performance, momentum and target settings versus peers with no ESG commentary in earnings calls.

4. Trends in 1H20 during Covid show a decline in ESG discussion in 1Q, but a full recovery in 2Q.

Employee-related keywords increased (554%, 544% and 313% yoy in 2Q20 for S&P, STOXX and 1H20 for ASX) while growth in Environmental topics slowed globally.

5. The most discussed topics across each sector reaffirm our view of materiality, with Utilities, Industrials, Energy and Materials most engaged on the "E" (Water, Carbon, Emissions, etc.) and Communication Services and Information Technology focused more on the "S" (Diversity & Inclusion, Governance and Employee Engagement).

Evan Tylenda, CFA

+44(20)7774-1153 |
evan.tylenda@gs.com
Goldman Sachs International

Emma Jones

+44(20)7774-1080 |
emma.jones@gs.com
Goldman Sachs International

Sharmini Chetwode, Ph.D.

+852-2978-1123 |
sharmini.p.chetwode@gs.com
Goldman Sachs (Asia) L.L.C.

Derek R. Bingham

+1(415)249-7435 |
derek.bingham@gs.com
Goldman Sachs & Co. LLC

Dan Duggan, Ph.D.

+1(212)902-4726 | dan.duggan@gs.com
Goldman Sachs & Co. LLC

Nihar Kantipudi

+1(212)934-9541 |
nihari.kantipudi@gs.com
Goldman Sachs India SPL

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ESG cementing its place on the corporate agenda

The majority of companies are now talking about ESG... Reviewing earnings calls transcripts over the last 5 years, we observe an increasing prevalence of companies discussing ESG topics, with 65%, 66% and 72% of S&P 500, STOXX 600 and ASX 200 constituents mentioning ESG keywords in the latest period (2Q; 1H for ASX) ([Exhibit 1](#)). This is up from 43%, 48% and 59%, respectively, 5 years ago.

...with the amount of unique ESG discussions also significantly on the rise... Over the same 5-year period, total ESG comments in earnings calls have increased at a 10%, 12% and 6% CAGR for the S&P, STOXX and ASX. This trend has accelerated in the last two years, with 2Y CAGRs (2Q18-2Q20) of 18%, 26% and 9% for the S&P, STOXX and ASX. ([Exhibit 2](#), [Exhibit 3](#), [Exhibit 4](#)).

...and is increasingly being led from the top. Of the total number of ESG comments in 2Q20, 47%, 45% and 49% were made by the CEO in the S&P, STOXX and the ASX ([Exhibit 5](#), [Exhibit 6](#), [Exhibit 7](#)). This is up from 24%, 29% and 36%, respectively, 5 years ago.

Recent global events have elevated social issues on the corporate agenda. Across all three regions, 'Employee'-related discussions have been the major focus in 1Q20 and 2Q20 ([Exhibit 11](#), [Exhibit 12](#), [Exhibit 13](#)). The most discussed Environmental topic in both the US and Australia was 'Water' across 1H20 earnings calls, with 'Carbon' most discussed in Europe ([Exhibit 17](#)). As the current pandemic unfolded, focus on ESG topics remained more resilient in Europe versus the US, with +3% yoy growth in 1Q20 for the STOXX vs. a -24% yoy decline in the US.

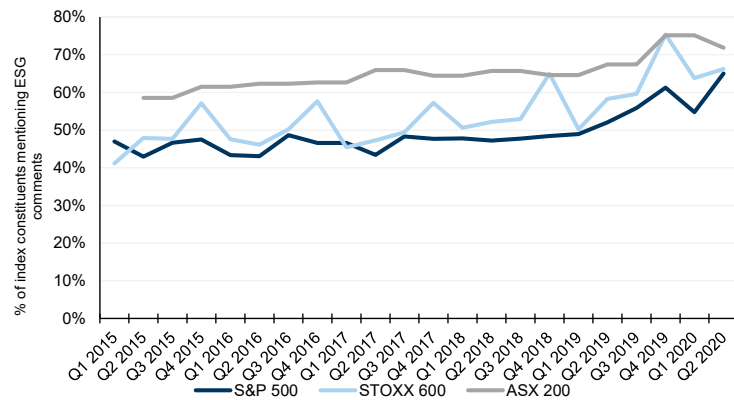
Sectors with the largest growth in ESG engagement in 2Q20 were Communication Services in the S&P (+200% yoy vs. +18% yoy for the broader index) ([Exhibit 128](#)), Real Estate in the STOXX (+138% yoy vs. +48% yoy for the broader index) ([Exhibit 96](#)), and Utilities for the ASX (+159% yoy vs. -4% yoy for the broader index) ([Exhibit 31](#)).

Other high-growth sectors in the S&P included Information Technology (+66% yoy) and Energy (+41% yoy); in the STOXX, Consumer Discretionary (+122% yoy) and Energy (+100% yoy); and in the ASX, Information Technology (+98% yoy) and Communication Services (+89% yoy).

More numbers are being used to articulate ESG strategy and performance, yet majority of ESG comments are still being discussed in a qualitative manner - presenting opportunities for differentiation and credibility. **We detail the ESG trends for each GICS 1 sector the appendix and highlight notable ESG quotes.**

Exhibit 1: The number of companies talking about ESG is growing in all three regions

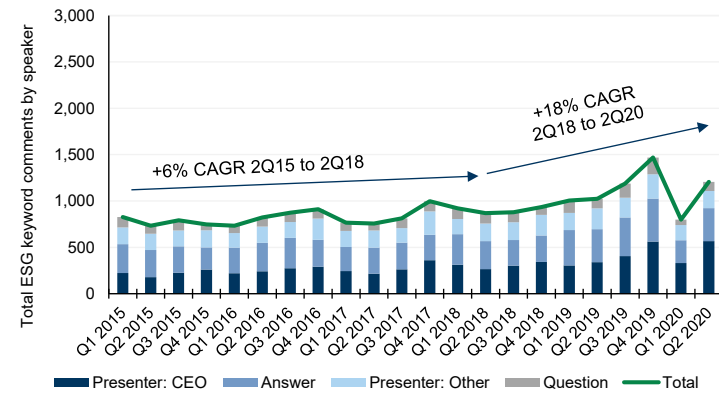
% of companies mentioning ESG keywords in the S&P 500 and STOXX 600 (1Q15-2Q20) and ASX 200 (1H15-1H20)



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 2: Growth in S&P ESG discussions accelerated significantly from 2019 onwards

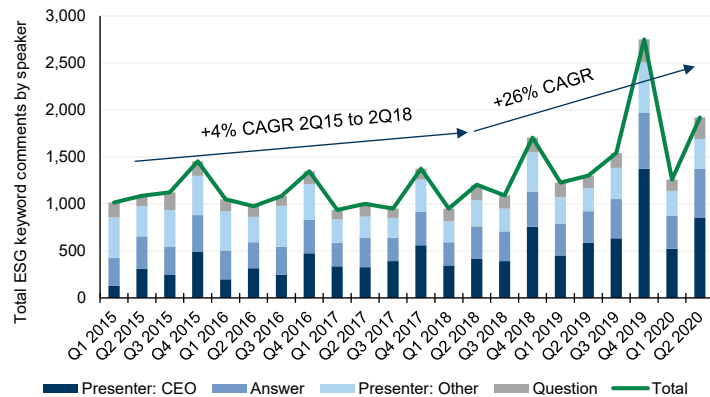
Total number of unique ESG keywords for S&P 500 companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 3: Similarly for Europe, growth has accelerated in recent years, despite more volatility between quarters

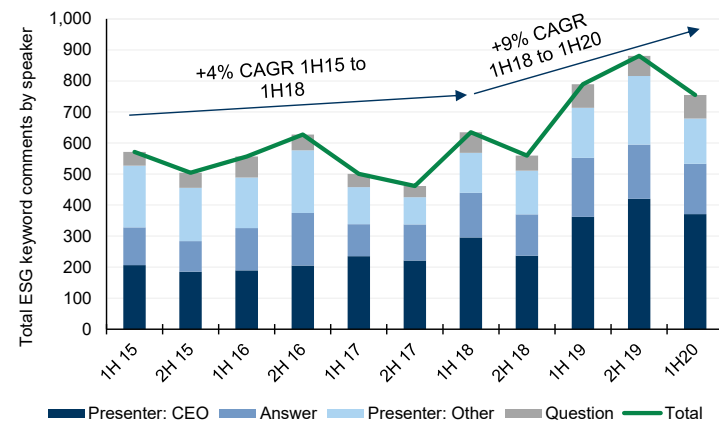
Total number of unique ESG keywords for STOXX 600 companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 4: In Australia, discussions have also increased since 2019

Total number of unique ESG keywords for ASX 200 companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

ESG a growing focus for the CEO in the US and Australia, with European companies fielding slight uptick in ESG questions from investors.

Total comments made during CEO presentations in the US grew +67% yoy in 2Q20 (to 47% of total comments), and +2% yoy in the ASX (to 49% of total comments). In Europe, ESG questions are on the rise, growing 73% yoy in 2Q20 (to 12% of total comments), while the CEO presentation remains the major form of ESG comments (45% of total comments). Meanwhile, ESG discussions in Q&A are also prominent, with 37%, 39% and 32% of total comments coming during Questions and Answers in the most recent period for the S&P, STOXX and ASX.

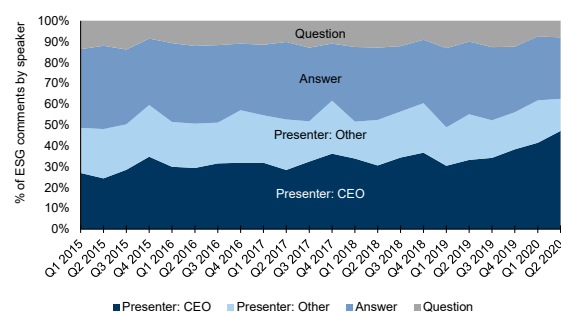
Unsurprisingly, heavier sectors are the most engaged in ESG discussion, with ~2x greater proportion of total ESG comments vs. their weights in the benchmark.

For the latest complete full year, across 2019, the combined proportion of total ESG comments made by Utilities, Industrials, Materials and Energy companies in the S&P, STOXX and ASX were 65%, 64% and 61%, respectively. This is significantly more overweight than their sector weights in each respective benchmark, with a combined 30%, 36% and 38% weighting in the S&P, STOXX and ASX. ([Exhibit 8](#), [Exhibit 9](#), [Exhibit 10](#)).

Significant focus on 'Employee' issues in 2Q20 slowed growth in Environmental discussions. In 2Q20, 'Employee' was the topic with the most growth across all three regions, with +554%, +544% and +313% yoy growth in the S&P 500, STOXX 600 and ASX 200, respectively. In comparison, discussions in 2Q20 on 'Carbon, Emissions & Energy', 'General Sustainability', and 'Water & Drought' grew modestly at +35%, +24% and -15% yoy respectively in the S&P 500, +96%, +50% and +3% in the STOXX 600, and +62%, +17% and -16% in ASX 200 ([Exhibit 11](#), [Exhibit 12](#), [Exhibit 13](#)).

Exhibit 5: Across the S&P, the CEO is mostly steering the ESG conversation...

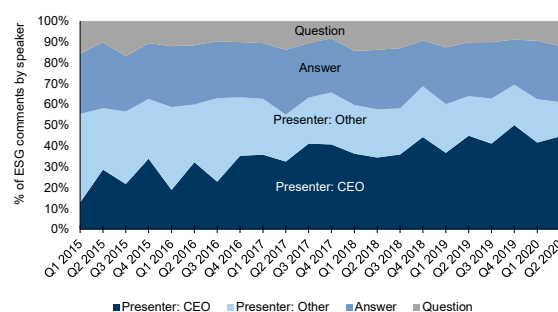
% of total unique ESG comments for S&P 500 companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 6: ...a similar trend across the STOXX, with companies also facing more Q&A

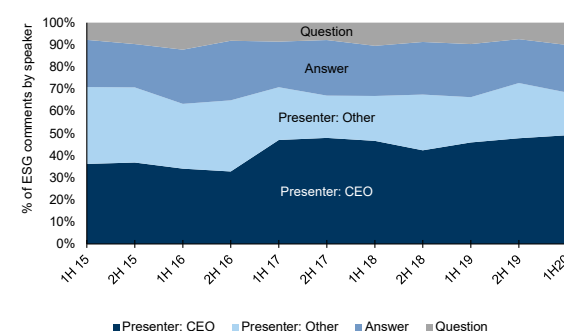
% of total unique ESG comments for STOXX 600 companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 7: CEOs in the ASX are also the most engaged on ESG topics

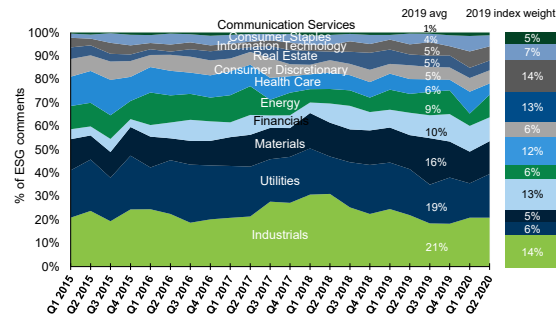
% of total unique ESG comments for ASX 200 companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 8: In the US, Utilities and Industrials have consistently been the most engaged...

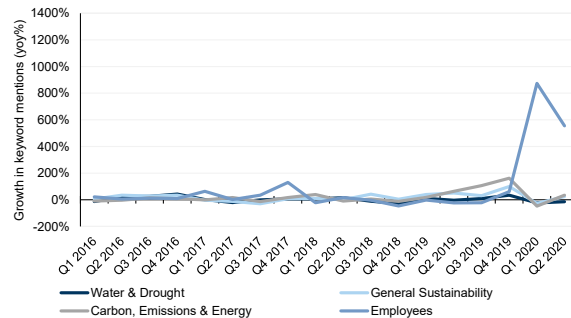
% of total unique ESG comments for S&P 500 companies by GICS 1 sector, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 11: Employee-related discussions spiked in the US in the first half of 2020, amid the pandemic...

Year-over-year growth in ESG comments for S&P 500 companies by topic, 1Q16-2Q20

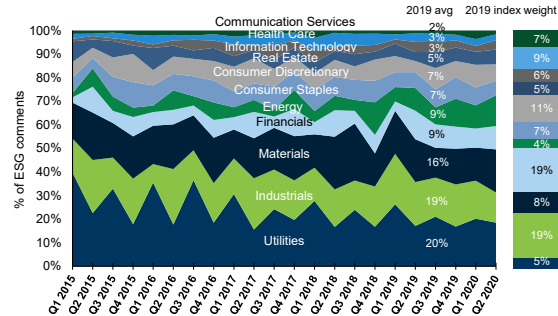


Excl. 'Employee' keyword

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 9: ...similarly in Europe, where heavier sectors are leading the discussion

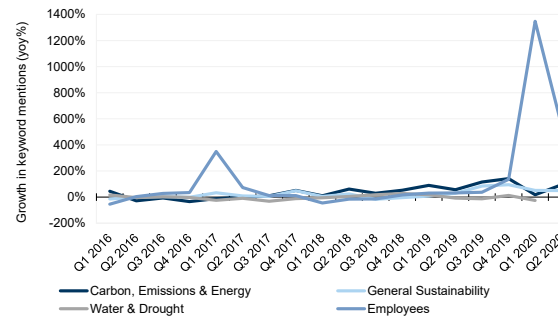
% of total unique ESG comments for STOXX 600 companies by GICS 1 sector, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 12: ...with similar trends seen across Europe...

Year-over-year growth in ESG comments for STOXX 600 companies by topic, 1Q16-2Q20

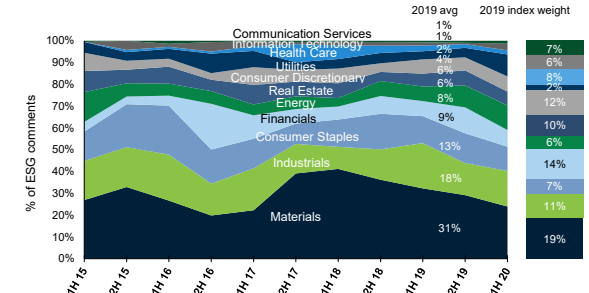


Excl. 'Employee' keyword

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 10: Materials are leading the discussion in Australia

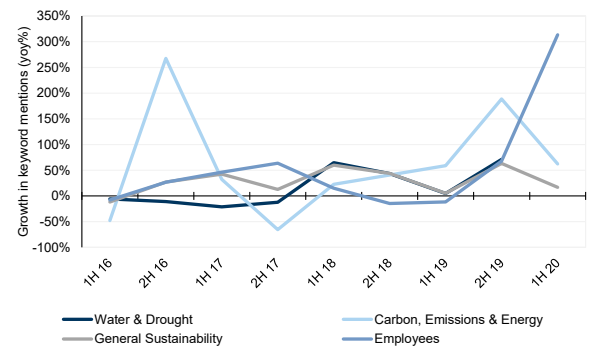
% of total unique ESG comments for ASX 200 companies by GICS 1 sector, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 13: ...as well as in Australia

Year-over-year growth in ESG comments for ASX 200 companies by topic, 1H16-1H20

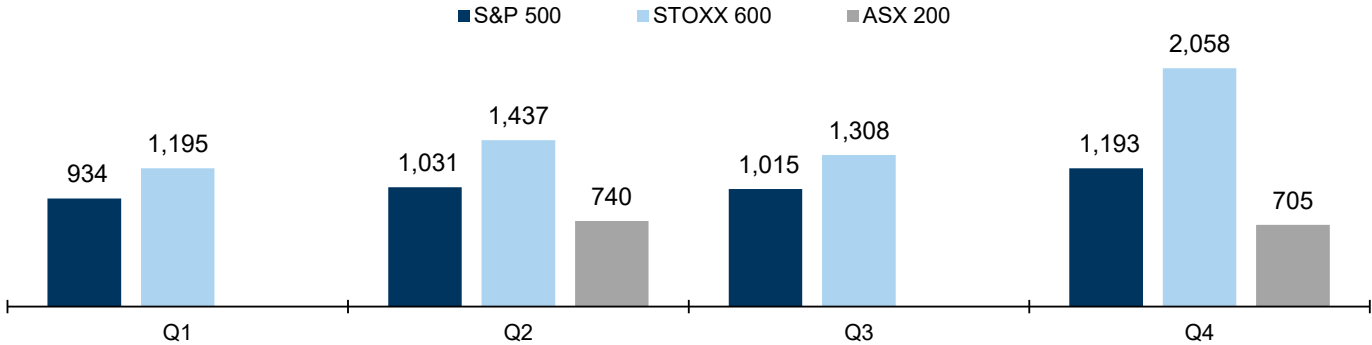


Excl. 'Employee' keyword

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

The majority of ESG discussions are coming from 4Q earnings calls, particularly in Europe. Across the S&P and STOXX, there are 20% and 68% more ESG discussions in 4Q earnings calls on average than in any other quarter (Exhibit 14), likely as year-end calls tend to be most focused on strategy and longer-term initiatives. Conversation in the ASX 200 is more evenly spread across 1H and 2H earnings (note that 1H earnings calls in Australia tend to be year-end earnings).

Exhibit 14: 4Q earnings calls tend to be most engaged in ESG discussions
Average number of unique ESG comments by quarter, S&P 500 and STOXX 600 (1Q15-2Q20) and ASX 200 (1H15-1H20)



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Our methodology

The SPX, STOXX and ASX were selected to ensure global representation from companies which spoke English during their earnings call - necessary for the transcript tool. This report uses calendar quarters, e.g. earnings calls that relate to the Jan - March period are 1Q for the S&P and STOXX. Earnings calls relating to Jan - June period are 1H for the ASX.

Partnering with our [GS Data Works team](#), our transcript analysis utilizes Refinitiv earnings call transcripts data from 1Q15 to 2Q20 across the S&P 500, STOXX 600 and ASX 200. Of note, while most constituents are captured in our analysis, we make small volume adjustments where any transcripts have not been analysed by grossing up reported volumes. For example, if only 80% of companies have transcripts available we gross up the total number of unique ESG comments by dividing total volumes by 80%. While for the S&P and STOXX our analysis is quarterly, for the ASX the majority of companies report half-yearly, and thus our analysis is conducted accordingly. Our basis for analysis in trends and exhibits uses calendar quarters rather than reporting quarters.

The analysis includes 99 ESG keywords, grouped into 16 topics: Water & Drought; Human Capital Management; Carbon, Emissions & Energy; General Sustainability; Global Goals & Agreements; Corporate Social Impact; Plastic; Sustainability Reporting & Labels; Health & Safety; ESG Regulation; Governance; Data Privacy; Sourcing & Supply Chain; Waste & Recycling; Sustainable Investment; and Product Safety (see [Exhibit 15](#) for keywords in each topic). A separate analysis for 2020 was also conducted on Employee and Covid-19 related keywords. We only consider unique ESG keywords in our analysis, meaning a keyword is only counted once even where a quote mentions that keyword multiple times.

The authors would like to thank Beatriz Rodeia, Xinyu Luo, and Raunak Chitlangia for their contributions to this report.

Exhibit 15: List of ESG keywords

ESG Topics	Keywords
Water & Drought	Water, Drought
Human Capital Management	Employee Engagement, Labour Strike, Diversity+Inclusion, Employee Turnover, Employee Satisfaction, Labour dispute, Labour issue, Inequality
Carbon, Emissions & Energy	Carbon, Emissions, Energy Efficiency, Renewable Energy, Fuel Efficiency, Green building, Climate transition, Decarbonisation, Fleet Efficiency, Stranded asset, Global Climate
General Sustainability	Environmental, Governance, ESG, Sustainability performance, Greenwash
Global Goals & Agreements	SDG, Paris Accord, Cop 21, Paris Agreement
Corporate Social Impact	Charity, Corporate Responsibility, Social Responsib*, Protests, Corporate Culture, Philanthropy, Social Impact, Corporate Citizenship, Volunteering, Stakeholder+engagement
Plastic	Plastic
Sustainability Reporting & Labels	Sustainability report, CDP, Leed, Dow Jones Sustainability Index, TCFD, SASB, Integrated report, GRI
Health & Safety	Incident rate, Safety Performance, Safety culture, Employee Safety, Fatalities, Injury
ESG Regulation	Green deal, EU Taxonomy, EU ETS
Governance	Bribery, Whistleblower
Data privacy	Data security, Data breach, Data privacy
Sourcing & Supply Chain	Conflict free, Reusable+materials, Resource efficiency, Responsible sourcing, Sustainable sourcing, Material efficiency, Conflict Minerals, Fair trade
Waste & Recycling	Recycl*, Circular economy, Zero Waste
Sustainable Investment	Green bond, Sustainable Invest*, Impact Investing, Sustainable Finance
Product Safety	Product recall, Product Safety
2020 Employee topics	Keywords
Employee related	Employee, Employee+Protect, Employee+Safety, Working+From+Home, Employee+Compensation, Employee+Benefit, Employee+Engagement
2020 Covid-19 keywords	Keywords
Covid-19 related	Coronavirus, Covid, Corona+Virus

* Represents a wild card query, + Represents two words present in a comment

Source: Goldman Sachs Global Investment Research



GS Data Works leverages alternative data sources and advanced analysis techniques to create unique data-driven insights across equity, credit and macro research. For this report, the Data Works team analyzed tens of thousands the GS SUSTAIN team corporate quarterly earnings' transcript data that served as the basis for our research.

Links to performance: does increased ESG discussion translate into real outcomes?

Our momentum framework tracks the change in the latest available data point over the average of the prior two years. See [Momentum & Materiality — Building blocks for ESG integration](#)

The majority (80-90%) of each regions' Top 10 have carbon emission reduction targets, signaling the discussion is tied to the business strategy for these companies and not mere greenwash.

The majority (80-90%) of all Top 10 employee-related commenters have diversity & inclusion targets in place.

Using our [GS SUSTAIN ESG data framework](#), we consider whether the Top 10 companies by volumes of Carbon or Employee-related keywords discussed in 3Q19-2Q20 earnings call across each region ("Top 10") outperform on the relevant metrics versus regional peers with no discussion ([Exhibit 16](#)).

Carbon-related keywords

The Top 10 carbon-related commenters in Europe already outperform on GHG intensity, with US & Australia's Top 10 showing the most improvement. Less surprising given Europe's focus on carbon for many years, the European Top 10 already show, on average, better performance on GHG intensity than companies in the region with no comments (73rd percentile vs 51st percentile). In contrast, the Top 10 underperform across both the S&P (34th percentile vs 51st percentile) and ASX (46th percentile vs 53rd percentile). However, the increased attention is translating into better momentum in both the S&P (-14% reduction for Top 10 vs -13% reduction for nil commenters) and ASX (-17% reduction vs -15% reduction). We also find that top commenters have a significantly higher presence of carbon reduction targets (80%+ vs. 25-52% for nil commenters), which provide a forward look into momentum performance (*see [Momentum & Materiality — Building blocks for ESG integration](#)*)

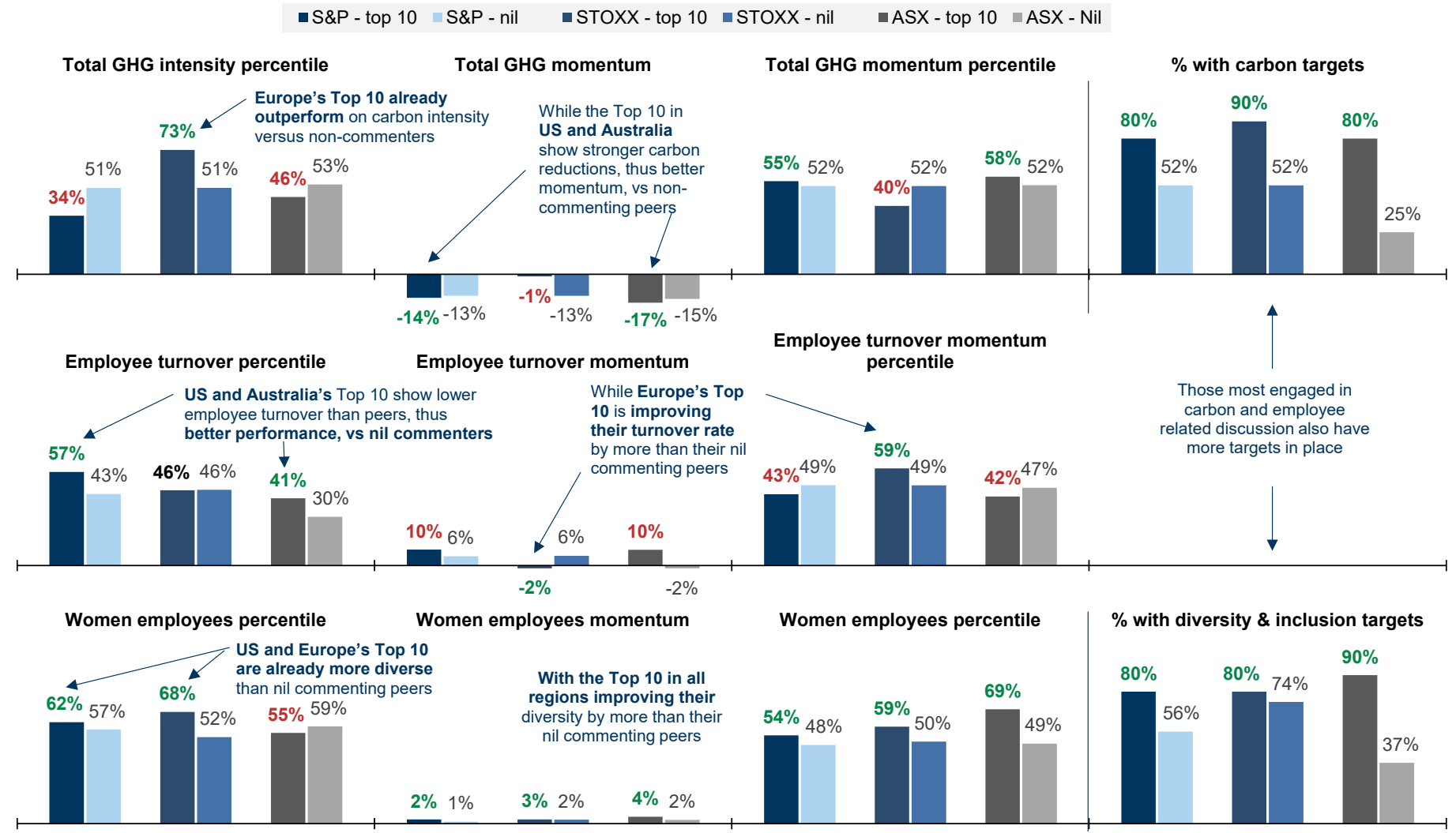
Employee-related keywords

In the US and Australia, Top 10 employee-related commenters have lower employee turnover, with Europe's Top 10 outperforming on momentum. Greater performance on employee turnover was observed by the Top 10 commenters in the S&P (57th percentile vs 43rd percentile for nil commenters) and ASX (41st percentile vs 30th percentile). The European Top 10 performed broadly in line with those companies with no employee-related discussion (46th percentile for Top 10 and nil commenters), but show substantially better improvement on reducing turnover (-2% reduction vs 6% increase).

The US and European Top 10 also outperform on women diversity, with all regions showing greater performance on momentum than regional companies with no employee-related comments. On our % of women employees metric, the Top 10 outperformed those with no comments in the S&P (62nd percentile vs 57th percentile) and the STOXX (68th percentile vs 52nd), while surprisingly the ASX Top 10 underperformed (55th percentile vs 59th percentile). However, all regions' Top 10 outperformed on momentum versus those companies with no comments. Top commenters also have more 'diversity and inclusion' (80-90%) targets than no commenters (37-74%).

Exhibit 16: Companies most engaged in carbon- and employee-related discussions tend to show positive links to performance

Average GS SUSTAIN metric performance of companies with the Top 10 most comments on carbon- and employee-related topics versus companies with no comments over the period 3Q19 to 2Q20



Source: Refinitiv, Bloomberg, Goldman Sachs Global Investment Research

Percentile performance is ranked relative to GS SUSTAIN sector peers in the MSCI ACWI. For more information on our methodology, see *PM's Guide to the ESG Revolution 2* and *Momentum & Materiality — Building blocks for ESG integration*.

Topics in focus: which ESG topics are most discussed?

The top 5 most discussed ESG keywords in the **S&P 500** across 1Q20 and 2Q20 were **'Water'**, **'Environmental'**, **'ESG'**, **'Carbon'** and **'Diversity & Inclusion'** ([Exhibit 17](#)). This differs slightly from **STOXX 600** where the most discussed keywords were **'Carbon'**, **'Water'**, **'Emissions'**, **'Environmental'** and **'ESG'**. In **ASX 200**, the most discussed keywords for 1H20 were **'Water'**, **'Recycle'**, **'Carbon'**, **'Environmental'** and **'Emissions'**.

'Carbon' stands out as the keyword discussed more in Europe than in the US and Australia. While the discussions are largely similar in all three regions, 'Carbon'-related discussions made up 11% of the unique ESG comments in Europe across 1Q20 and 2Q20, compared to 7% for both the US and Australia. In 2Q20, 24% of European companies also mentioned 'Carbon' at least once during their calls vs 13% and 18% for the US and Australia. However, on average, US companies mentioned 'Carbon' 2.6 times during 2Q20 vs. 3.1 and 2.7 for European and Australian companies.

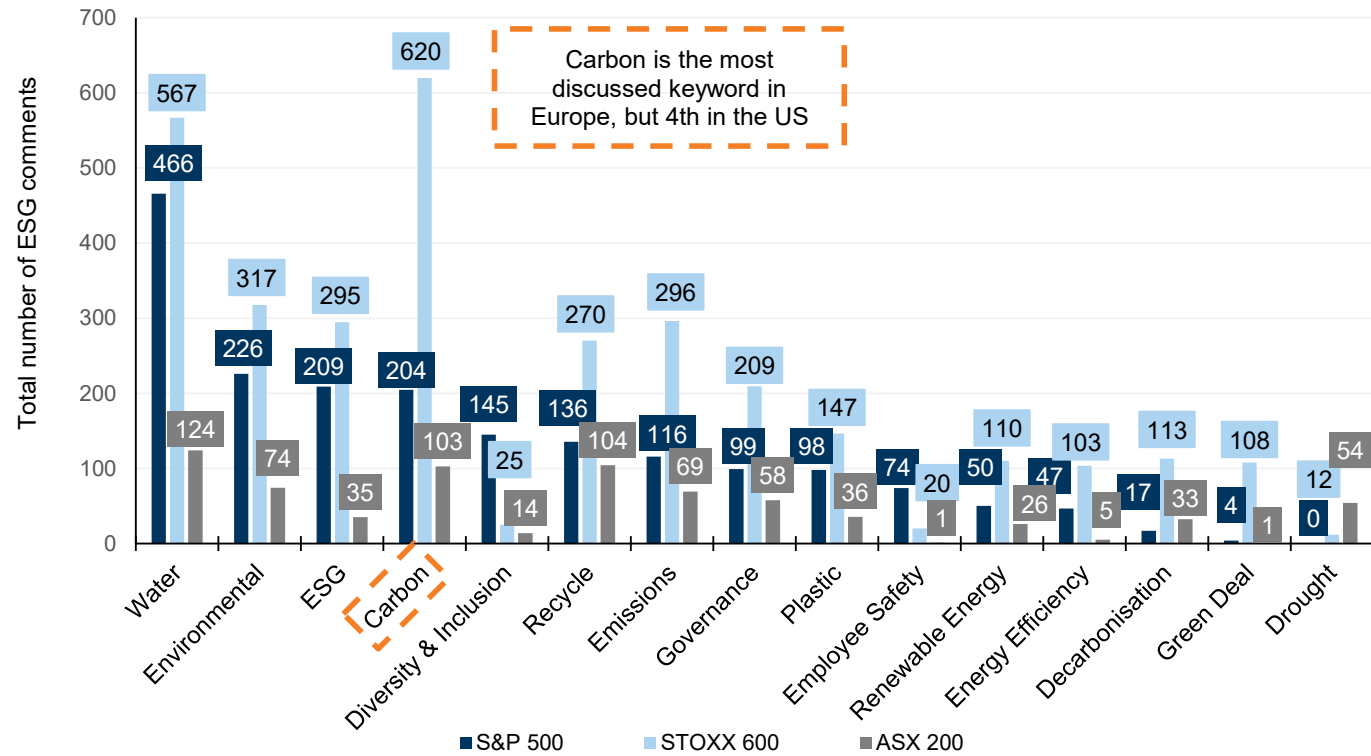
Keyword category trends vary by region:

In Europe, 'Water & Drought'-related keywords were most common in earnings calls until 2019, after which the focus shifted towards more **'Carbon, Emissions & Energy'**-related discussion (34% of total comments across 3Q19 to 2Q20) ([Exhibit 19](#)). The **'Carbon, Emissions & Energy'** category was also the fastest growing over the past year (96% yoy in 2Q20).

In the US, 'Water & Drought' was the most discussed group of keywords in earlier periods, with the focus shifting towards more **'General Sustainability'** (23% of total comments across 3Q19 to 2Q20) and **'Carbon, Emissions & Energy'** (23% of total comments from 3Q19 to 2Q20)-related discussion over the past year ([Exhibit 18](#)). **The topic 'Human Capital Management' saw the most notable growth over the past year (+446% yoy in 2Q20).** In 1H20 earnings calls, **'Diversity & Inclusion'** ranked among the top 10 most discussed keywords in 9 out of the 11 GLCS sectors (top 5 in 7 out of the 11 sectors), and became the first and second most discussed keyword in Information Technology and Communication Services, where ESG discussions experienced the greatest growth.

In Australia, 'Water & Drought' has consistently been the most discussed topic since 2015 (23% of total comments across 2H19 to 1H20, although **'Carbon, Emissions & Energy'** discussions have recently accelerated (24% of total comments 2H19 to 1H20) ([Exhibit 20](#)). In the past year, **'Sustainability Reporting & Labels'** topics experienced the most growth (+101% yoy).

Exhibit 17: The most discussed themes vary by region, with the US and Australia most focused on Water and Europe most focused on Carbon
 Top 10 most discussed unique keywords for the S&P 500, STOXX 600 and ASX 200 companies, across 1Q20-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 18: 'Water & Drought' has been the most discussed topic in the US this year...

Total number of unique ESG keywords grouped by topic for S&P 500 companies, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
General Sustainability	167	157	162	166	176	211	232	223	170	185	162	240	189	185	231	251	264	277	303	501	192	344
Carbon, Emissions & Energy	170	154	163	171	153	149	186	185	151	174	180	216	211	157	188	189	248	257	346	495	130	347
Water & Drought	298	255	249	220	256	313	314	314	262	246	310	335	279	283	275	238	307	272	300	320	234	232
Corporate Social Impact	17	19	23	25	23	21	25	24	21	25	19	38	29	33	28	45	34	55	40	71	59	76
Health & Safety	63	38	41	46	50	31	51	64	58	50	38	63	49	36	35	66	28	37	46	94	78	91
Waste & Recycling	79	96	95	100	81	84	55	89	91	88	101	119	141	147	106	128	142	131	179	197	60	88
Plastic	35	26	32	30	17	19	17	30	30	29	34	27	38	49	48	53	60	74	99	75	52	46
Human Capital Management	14	15	21	21	14	11	20	21	17	23	15	42	24	31	30	37	16	34	32	59	47	184
Global Goals & Agreements	17	5	10	4	0	4	6	5	8	5	9	6	5	4	15	13	13	11	10	4	11	
Sustainability Reporting & Labels	4	0	7	5	4	5	3	6	7	3	8	10	5	12	14	22	20	27	40	70	14	42
Sustainable Investment	2	1	0	0	4	2	2	4	2	1	0	6	5	1	4	7	10	12	13	26	13	14
Data privacy	9	7	13	5	4	5	2	10	6	10	24	24	49	33	29	20	7	14	15	20	8	5
Sourcing & Supply Chain	4	1	1	4	2	9	8	7	3	2	5	4	6	6	4	2	2	4	3	4	4	6
Product Safety	4	2	2	6	3	6	11	13	17	10	2	9	8	4	6	4	3	6	4	3	1	0
Governance	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	2	0	0
ESG Regulation	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
Total	885	777	839	802	787	869	933	994	843	852	887	1141	1039	983	983	1079	1154	1215	1432	1948	896	1487

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 19: ...while in Europe, 'Carbon, Emissions & Energy' has been the most discussed since 2019

Total number of unique ESG keywords grouped by topic for STOXX 600 companies, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Carbon, Emissions & Energy	159	241	202	376	202	171	190	246	178	168	209	372	195	272	269	569	371	426	580	1370	438	833
General Sustainability	159	200	202	269	187	198	209	264	181	216	219	392	191	268	182	377	205	346	337	783	311	521
Water & Drought	372	353	452	375	436	339	464	365	326	307	316	321	309	323	371	410	365	298	323	465	272	308
Waste & Recycling	218	152	138	200	120	113	86	205	126	125	100	188	129	160	117	217	170	177	221	364	138	209
Corporate Social Impact	18	35	18	53	32	21	35	41	36	25	32	55	20	29	26	63	39	45	54	100	91	73
Sourcing & Supply Chain	37	8	14	26	22	12	20	15	8	14	16	9	24	24	30	9	21	11	15	17	45	10
Plastic	30	59	61	91	69	95	67	142	54	107	86	113	91	129	115	163	137	117	162	185	44	103
Health & Safety	27	78	20	90	9	53	12	57	28	61	9	58	10	43	16	52	14	49	14	71	38	64
Sustainable Investment	9	4	0	2	7	2	6	9	12	6	18	17	7	12	9	8	21	35	37	55	37	58
Sustainability Reporting & Labels	17	17	42	43	44	14	51	31	41	23	56	35	47	23	49	51	32	31	62	112	25	49
ESG Regulation	7	4	3	2	2	0	4	2	0	3	3	0	3	0	4	1	0	1	7	45	22	89
Global Goals & Agreements	0	2	0	0	2	2	2	11	2	3	5	18	2	12	7	23	25	36	35	81	20	40
Human Capital Management	25	9	10	13	3	8	21	16	27	11	17	21	19	19	19	45	14	27	20	68	19	44
Data privacy	12	2	6	4	0	8	7	12	2	8	6	11	16	4	0	4	0	2	6	10	2	0
Governance	0	5	7	5	0	0	0	8	5	5	4	1	2	1	4	1	0	1	2	2	0	0
Product Safety	2	0	0	2	2	0	0	5	0	1	2	4	0	6	2	7	2	0	2	0	0	2
Total	1074	1169	1175	1558	1087	1036	1172	1429	1026	1084	1098	1615	1066	1325	1220	2000	1416	1603	1875	3687	1501	2403

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 20: Similarly to the US, 'Water & Drought' has consistently been the most in focus for Australia

Total number of unique ESG keywords grouped by topic for ASX 200 companies, 1H15-1H20

	1H 2015	2H 2015	1H 2016	2H 2016	1H 2017	2H 2017	1H 2018	2H 2018	1H 2019	2H 2019	1H 2020
Carbon, Emissions & Energy	109	49	57	181	75	62	92	88	146	254	237
Water & Drought	165	159	156	141	123	124	202	178	211	304	178
General Sustainability	70	60	62	76	88	86	141	124	148	202	173
Waste & Recycling	115	96	148	121	96	65	101	92	195	128	114
Health & Safety	130	105	89	86	88	109	99	72	103	103	100
Sustainability Reporting & Labels	3	8	19	15	12	23	14	14	22	41	45
Plastic	4	39	41	39	25	26	52	45	72	34	36
Corporate Social Impact	5	7	6	13	16	14	22	30	19	33	27
Human Capital Management	3	7	22	2	18	10	11	10	26	15	34
Sourcing & Supply Chain	0	0	4	0	0	2	3	2	5	6	3
Global Goals & Agreements	0	0	5	0	2	0	3	2	4	4	7
Sustainable Investment	0	5	0	0	1	0	0	4	1	2	0
Governance	0	4	0	0	0	2	0	0	0	1	0
Product Safety	0	0	0	0	0	0	0	0	1	0	1
Data privacy	0	0	0	0	5	4	2	2	9	0	6
ESG Regulation	0	0	0	0	0	0	0	0	0	0	1
Total	606	539	609	676	556	526	742	661	962	1124	961

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

The rise of S in ESG in the age of COVID-19

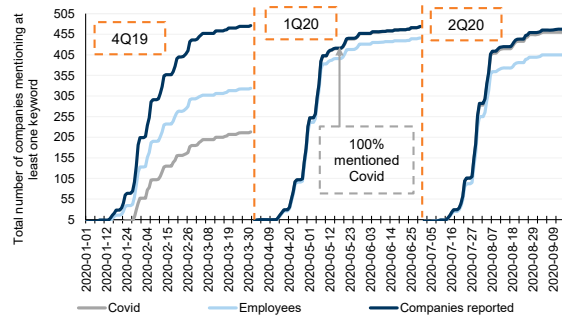
Covid-19 elevated 'Employee'-related discussions... Employee and Covid-related topics peaked in 1Q20 earnings calls, with 94% of S&P constituents mentioning 'Employee' and 100% discussing 'Covid', versus 68% and 48% respectively in the previous quarter. ([Exhibit 21](#)). Of STOXX companies, 88% mentioned 'Employee' and 100% discussed 'Covid' in 1Q20, versus 58% and 21% in 4Q19 ([Exhibit 22](#)). In the ASX, 71% of constituents mentioned 'Employee' and 97% discussed 'Covid' in 1H20, versus 48% and 57% in 2H19 ([Exhibit 23](#)).

...growing over 2x in Europe and the US over the past year. Volumes of 'Employee'-related comments in the S&P grew +274% yoy from 2Q19 to 2Q20 ([Exhibit 24](#)). Among all keywords, 'Employee+Protect' saw the greatest growth, with 2Q20 volume over 15x the 2Q19 volume. Similarly, in the STOXX, volumes of 'Employee'-related comments grew +216% from 2Q19 to 2Q20 ([Exhibit 25](#)), with 'Employee+Safety' observing the most growth, over 20x the 2Q19 volume. In the ASX, volumes of 'Employee'-related comments grew +131% yoy in 1H20 from 1H19 ([Exhibit 26](#)), with 'Employee+Protect' increasing the most to 10x the 1H19 volume.

The employee-related analysis in this section was run separately from the broader list of ESG keywords analysed in other sections of this report.

Exhibit 21: An increase in Covid-19 discussions correlated with an increase in Employee-related comments for the S&P

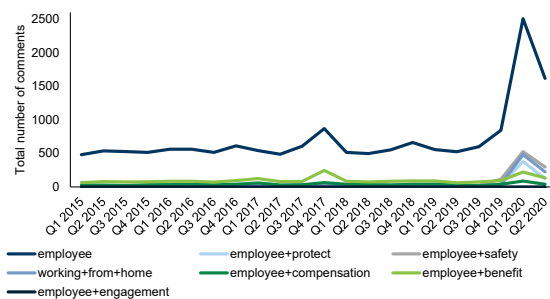
Cumulative number of S&P 500 companies mentioning Employee-related and Covid-19 related comments by date, 2020 YTD



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 24: In the S&P, all Employee-related discussions more than doubled from 2019 to 2020

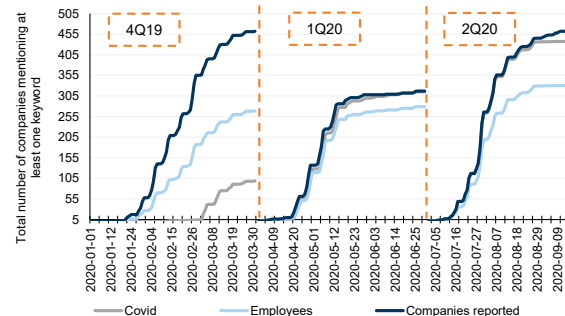
Total number of employee related comments for S&P 500 companies by keyword, 1Q15-2020



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 22: ...with similar trends seen for the STOXX

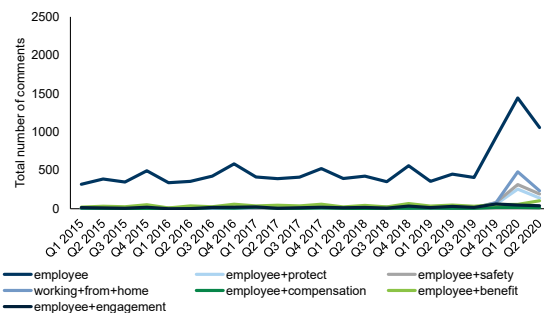
Cumulative number of STOXX 600 companies mentioning Employee-related and Covid-19 related comments by date, 2020 YTD



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 25: While in STOXX most topics also spiked from relatively low levels while some remained low

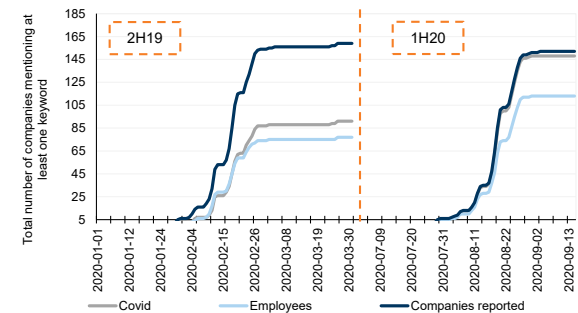
Total number of employee-related comments for S&P 500 companies by keyword, 1Q15-2020



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 23: ...as well as the ASX

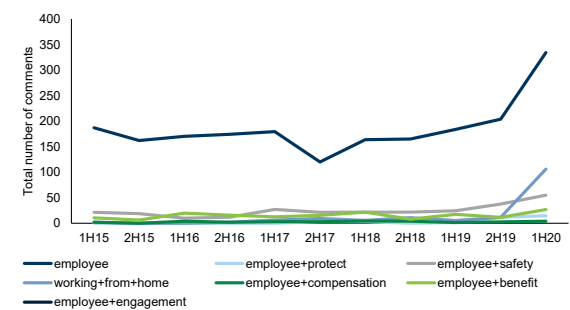
Cumulative number of ASX 200 companies mentioning Employee-related and Covid-19 related comments by date for 2H19 and 1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 26: In ASX, Employee discussions were already growing before Covid-19, but gained momentum in 1H20

Total number of Employee-related comments for ASX 200 companies by keyword, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Appendix - sector findings

Below we highlight, by sector, the trends we have observed since 2015 across the US, Europe and Australia, including notable ESG discussions from recent transcripts touching on climate change pledges, ESG questions from investors and ESG discussions within Covid-19.

Utilities

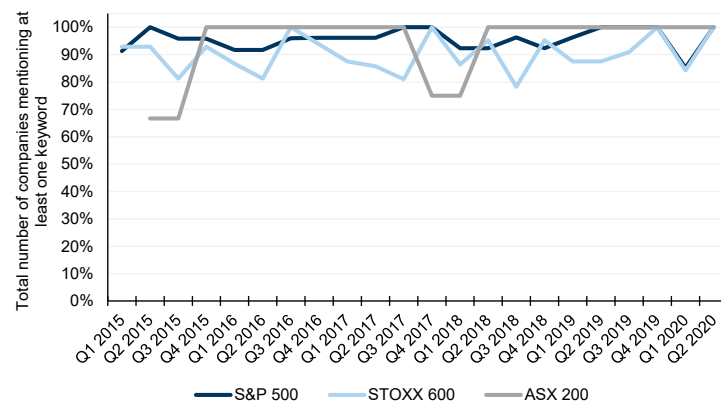
100% of Utilities companies discussed ESG in the latest period. Across all regions, 100% of Utilities companies mentioned at least one ESG keyword in 2Q20 ([Exhibit 27](#)). On average, each S&P Utilities company made 8 comments (vs 3.7 in the broader index), each STOXX Utilities company made 10 comments (vs 4.9 in the broader index) and each ASX Utilities company made 19 comments (vs 5.5 in the broader index). In the US and Australia, Utilities companies mention more comments than any other sector, with European comments second only to Energy.

‘Carbon, Emissions & Energy’ is the most discussed topic by Utilities companies. The top five most discussed keywords across 1Q20 and 2Q20 were ([Exhibit 28](#)): [S&P 500](#) - Carbon, Water, Emissions, Energy Efficiency and Renewable Energy; [STOXX 600](#) - Water, Carbon, Recycle, Decarbonisation and Emissions; [ASX 200](#) - Renewable Energy, Carbon, Emissions, Environmental and Decarbonisation.

Stronger growth in Utilities ESG comments than the broader indices in recent quarters. Growth in Utilities’ ESG-related discussions has accelerated in recent years, despite the declines in 1Q20 largely due to the pandemic. Total ESG comments by Utilities in 2Q20 grew +12% yoy in the US (vs. +18% for the broader index), +60% yoy in Europe (vs. +48% yoy for the broader index) and +159% yoy in Australia (vs. -4% yoy for the broader index) ([Exhibit 29](#), [Exhibit 30](#), [Exhibit 31](#)).

Exhibit 27: 100% of Utilities in all regions discussed ESG in 2020

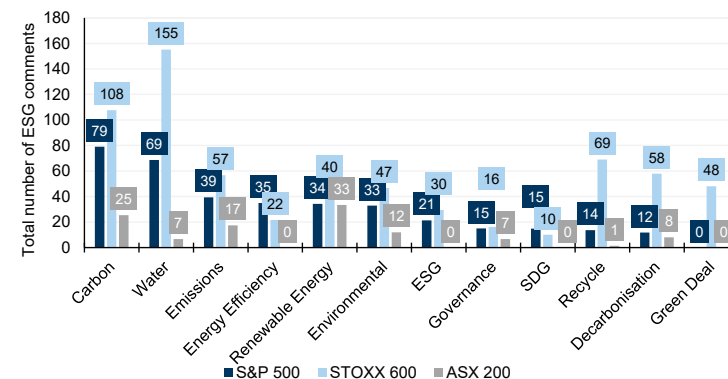
% of Utilities companies mentioning ESG keywords in the S&P 500 and STOXX 600 (1Q15-2Q20) and ASX 200 (1H15-1H20)



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 28: ‘Carbon’ most discussed in the US, ‘Water’ in Europe and ‘Renewable Energy’ in Australia

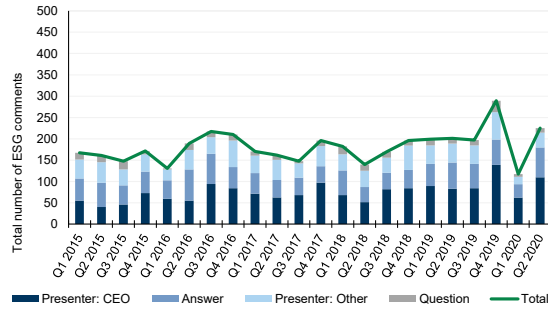
Top 10 most discussed keywords by S&P 500, STOXX 600 and ASX 200 Utilities, 1Q20-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 29: ESG discussions on the rise in the US since 2019, despite a dip in 1Q20 as Covid unfolded...

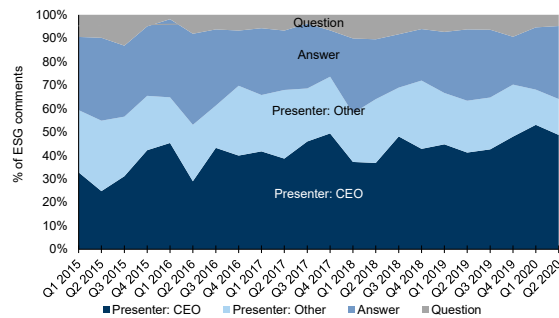
Total number of ESG comments for S&P 500 Utilities companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 32: The CEO has led most of the discussion across S&P Utilities...

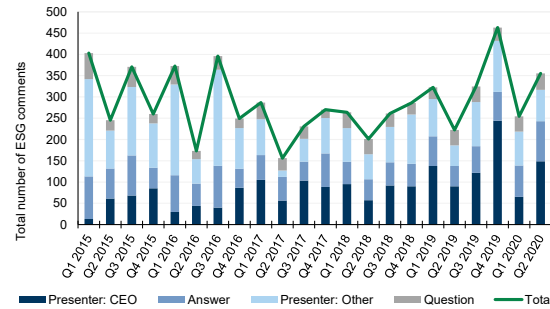
% of total ESG comments for S&P 500 Utilities companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 30: ...a similar trend across Europe, despite more volatility...

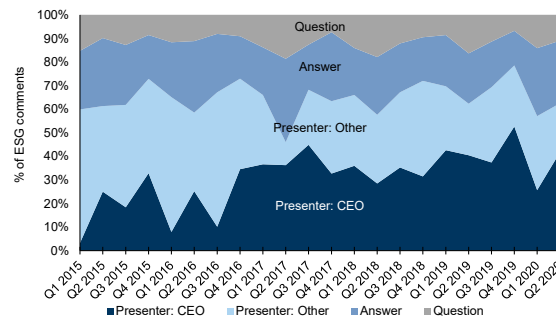
Total number of ESG comments for STOXX 600 Utilities companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 33: ..as well as in the STOXX, albeit with some volatility between quarters...

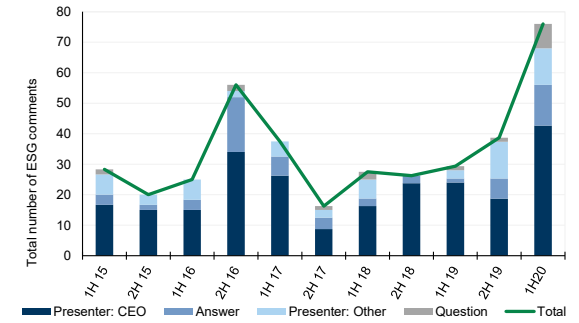
% of total ESG comments for STOXX 600 Utilities companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 31: ...while volumes peaked in Australia in 1H20

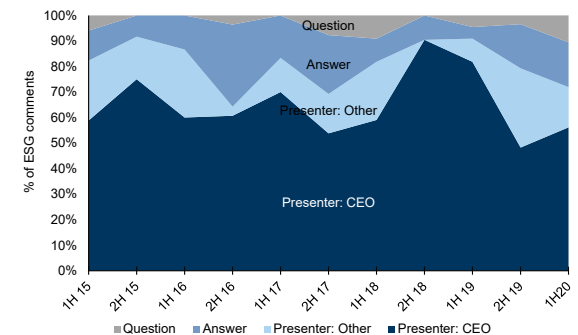
Total number of ESG comments for ASX 200 Utilities companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 34: ...and similarly for Australia

% of total ESG comments for ASX 200 Utilities companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 35: In the US, 'Carbon, Emissions & Energy' has consistently been the most discussed ESG topic...

Total number of unique ESG comments per keyword for S&P 500 Utilities companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Carbon, Emissions & Energy	80	93	85	100	81	81	94	111	76	87	68	100	109	74	88	96	114	120	132	233	51	149
Water & Drought	21	10	8	13	5	56	67	60	46	47	48	62	55	51	55	44	41	32	47	50	33	36
General Sustainability	38	54	41	56	40	49	52	42	48	36	33	45	36	33	42	53	53	46	35	89	23	47
Waste & Recycling	4	2	6	7	4	7	2	8	6	1	2	4	2	2	5	4	3	5	4	6	8	5
Health & Safety	23	7	5	6	11	4	8	10	15	9	6	18	10	7	5	15	3	4	2	8	7	5
Sustainability Reporting & Labels	0	0	0	1	0	1	0	2	3	1	2	2	4	2	3	2	2	4	8	22	7	9
Global Goals & Agreements	17	5	10	2	0	4	6	4	8	5	8	6	6	1	3	14	12	13	11	8	4	11
Corporate Social Impact	3	2	4	1	6	2	4	6	4	4	1	12	4	8	8	10	8	11	7	22	3	14
Human Capital Management	1	2	1	2	0	1	0	1	0	2	1	1	0	0	0	1	2	4	0	4	2	15
Sustainable Investment	0	0	0	0	1	1	1	1	0	0	0	0	0	0	1	0	2	5	1	0	1	0
Product Safety	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plastic	1	1	1	4	4	2	4	1	1	1	1	0	0	0	1	0	1	0	1	0	0	0
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Governance	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Data privacy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	190	178	161	193	151	208	239	247	209	194	172	252	226	178	212	239	243	246	249	443	140	291

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 36: ...while in Europe, 'Carbon, Emissions & Energy' overtook 'Water & Drought' to become the most discussed since 2018

Total number of unique ESG comments per keyword for STOXX 600 Utilities companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Carbon, Emissions & Energy	74	110	49	117	49	65	54	90	49	59	52	132	87	104	101	126	138	131	136	291	96	190
Water & Drought	206	97	237	80	265	77	270	86	178	77	144	75	145	73	119	97	133	50	131	111	85	75
General Sustainability	43	22	33	41	21	16	36	28	19	12	14	45	22	21	25	46	26	23	40	82	41	52
Waste & Recycling	100	35	62	33	40	23	30	51	53	15	22	37	34	21	35	57	46	20	49	65	38	43
ESG Regulation	7	4	3	0	2	0	4	2	0	1	3	0	3	0	4	1	0	1	1	27	13	36
Sustainable Investment	0	2	0	0	2	0	2	0	0	0	0	3	7	1	3	3	9	14	12	12	13	22
Corporate Social Impact	2	2	0	6	3	4	10	2	11	1	4	5	3	4	5	6	3	1	4	9	10	9
Sustainability Reporting & Labels	2	0	2	6	0	2	8	4	0	1	4	5	3	1	3	4	1	1	4	13	5	4
Global Goals & Agreements	0	0	0	2	2	0	2	9	0	3	0	12	0	3	1	7	4	14	12	17	5	6
Health & Safety	2	4	8	6	7	5	6	6	6	1	4	1	3	0	5	0	5	0	5	1	3	3
Human Capital Management	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3	1	3	0	4	3	3	0
Plastic	0	0	0	7	2	0	2	2	6	7	4	11	5	1	6	10	34	11	26	25	3	13
Product Safety	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sourcing & Supply Chain	0	0	0	2	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Governance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Data privacy	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Total	436	275	393	299	392	194	424	281	321	180	254	332	306	232	309	359	400	266	425	656	315	453

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 37: In Australia, 'Carbon, Emissions, & Energy' is most in focus

Total number of unique ESG comments per keyword for ASX 200 Utilities companies by topic, 1H15-1H20

	1H 2015	2H 2015	1H 2016	2H 2016	1H 2017	2H 2017	1H 2018	2H 2018	1H 2019	2H 2019	1H 2020
Carbon, Emissions & Energy	20	13	8	46	21	11	21	14	16	24	53
General Sustainability	3	2	8	4	8	3	8	6	4	8	11
Water & Drought	0	2	3	8	3	1	1	5	4	5	7
Global Goals & Agreements	0	0	0	0	0	1	0	1	0	3	0
Sustainability Reporting & Labels	0	0	3	0	0	0	1	0	4	3	7
Health & Safety	7	3	5	4	8	3	5	5	4	1	9
Corporate Social Impact	0	0	0	0	1	0	0	1	0	1	5
Waste & Recycling	2	0	0	0	0	0	0	0	0	0	1
Human Capital Management	2	2	3	0	0	0	0	3	0	0	1
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0
Product Safety	0	0	0	0	0	0	0	0	0	0	0
Plastic	0	0	0	0	0	0	0	0	0	0	0
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0
Data privacy	0	0	0	0	0	0	0	0	0	0	0
Total	33	22	32	62	41	19	36	35	32	45	95

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Notable Utilities ESG discussions from recent earnings

Carbon, Emissions, & Energy

- On **WEC Energy's** earnings call 2020-08-04, the executive chairman stated that the company had **achieved its 2030 carbon emission reduction target a decade early**. The firm also announced 2 new **targets to reduce carbon emissions by 70%** below 2005 levels by 2030 and **reach carbon neutrality for the generation fleet by 2050**.
- On **ORSTED's** earnings call 2020-01-30, the CEO highlighted the group's initiatives towards reaching **carbon neutrality by 2025**, including a **20GW on- and offshore renewable capacity build-out**, a **phase out of coal by 2023** and a commitment to **100% EVs by 2025**. The company also stated it will **engage with suppliers to decarbonise** its procurement of **components and vessel services related to offshore wind**.
- On **The Southern Company's** earnings call 2020-02-20, the CEO noted a **22% decrease in coal-powered production in 2019**, reducing the contribution of coal profits to only 14% of total revenues. **Since 2007, the company has reduced emissions by 44%**, showing progress towards its **50% reduction target by 2030**. The firm will continue to expand its renewable footprint across its portfolio, and expects to have **over 15,000 MW of renewables by 2022** across state-regulated utilities.
- On **National Grid's** earnings call 2019-11-14, the CEO reiterated the firm's commitment to support the UK's 2050 net zero target and **announced £2bn investment in new interconnector capacity**, which facilitates excess renewable energy sharing across countries. **By 2024, the company will have 7.8GW of interconnector capacity** equivalent to powering 8 million homes across the UK.

Water

- On **AWK's** earnings call 2020-05-07, the CEO noted the basis for the group's earnings growth continues to be the capex made to provide clean, safe and reliable services. The firm has **committed \$20-22bn over the next 10 years** to ensure service quality and reliability, and **expand water and wastewater solutions across the country**.
- On **SUEZ's** earnings call 2020-02-26, the CEO highlighted the **importance of wastewater maintenance and water reuse solutions**, as water scarcity is threatening 2 billion people by 2030.

Industrials

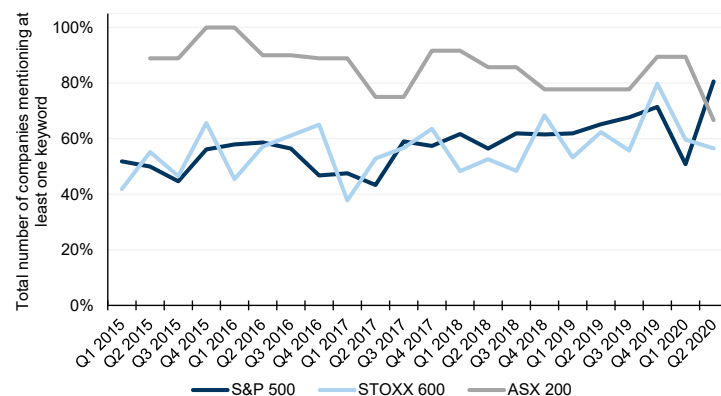
A growing number of US Industrials are discussing ESG, with slight declines across Europe and Australia. 81% of Industrials in the S&P discussed ESG in 2Q20 earnings calls (vs 65% for the broader index), compared to 57% of Industrials in the STOXX (vs 66% for the broader index), and 67% of Industrials in the ASX in 1H20 calls (vs 72% for the broader index) (Exhibit 38).

‘Water’ and ‘Environmental’ are the most discussed keywords among all regions. The top five most discussed keywords across 1Q20 and 2Q20 were (Exhibit 39): S&P 500 - Water, Environmental, Fuel Efficiency, Recycle and Diversity & Inclusion; STOXX 600 - Water, Carbon, Environmental, Emissions and ESG; ASX 200 - Environmental, Recycle, Water, Plastic and Emissions.

The growth in ESG discussion lags the broader indices across all 3 regions. Total ESG comments by Industrials in 2Q20 grew 12% yoy in the US (vs. +18% for the broader index), +1% yoy in Europe (vs. +48% yoy for the broader index) and declined -25% yoy in 1H20 in Australia (vs. -4% yoy for the broader index) (Exhibit 40, Exhibit 41, Exhibit 42). Notably, however, US Industrials have since recovered from the decline in 1Q20, with European and Australian companies still far below 4Q19 levels in 2Q20.

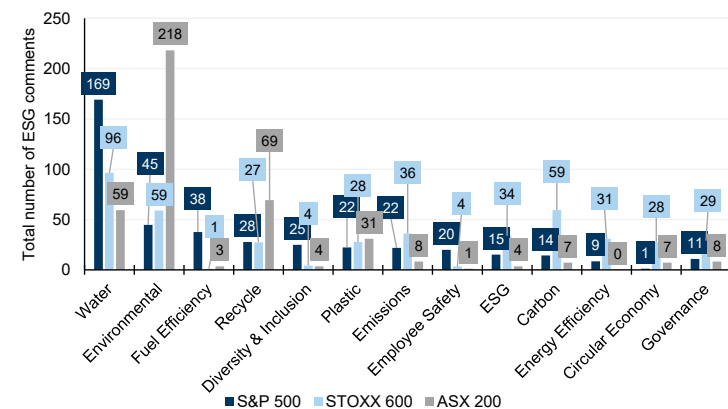
Exhibit 38: ASX Industrials historically more engaged, with S&P and STOXX recently catching up

% of Industrials companies mentioning ESG keywords in the S&P 500 and STOXX 600 (1Q15-2Q20), and ASX 200 (1H15-1H20)



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

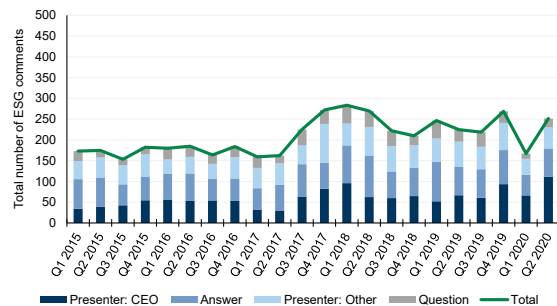
Exhibit 39: ‘Water’ most discussed in the US and Europe, and ‘Environmental’ in Australia
Top 10 most discussed keywords by S&P 500, STOXX 600, and ASX 200 Industrials, 1Q20-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 40: Flat growth from US Industrials since peaking in 2018, but strong recovery from 1Q20...

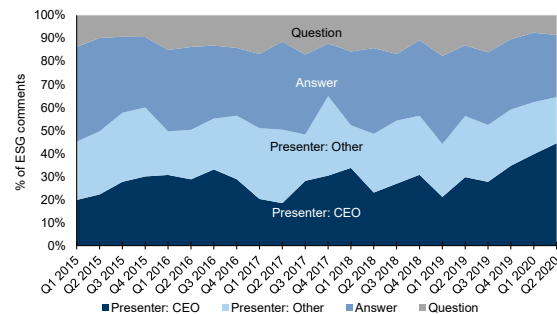
Total number of ESG comments for S&P 500 Industrials companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 43: The CEO is taking a larger share of the conversation in the US...

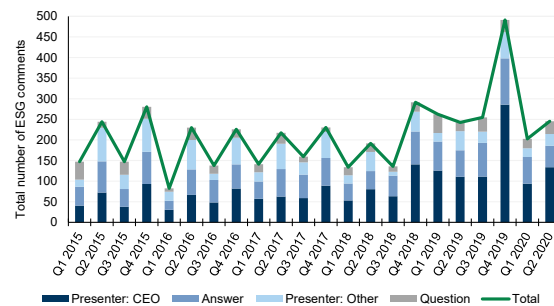
% of total ESG comments for S&P 500 Industrials companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 41: ...while volumes peaked more recently for European Industrials in 4Q19...

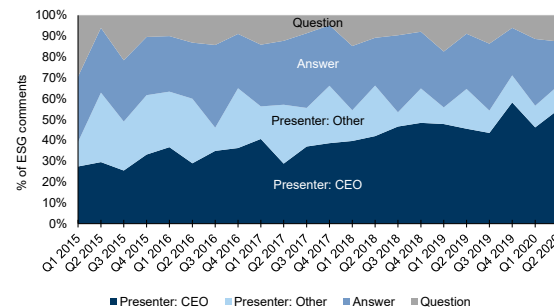
Total number of ESG comments for STOXX 600 Industrials companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 44: ...with strong growth also for European CEOs...

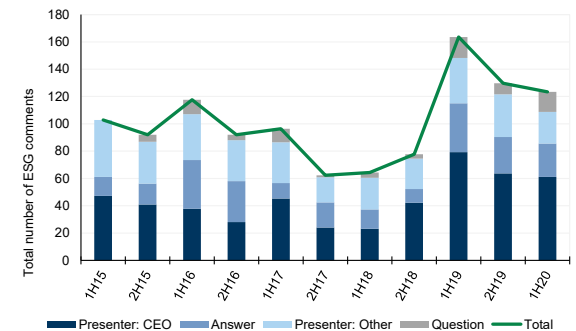
% of total ESG comments for STOXX 600 Industrials companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 42: ...and for Australia, peaking in 1H19 and remaining the most resilient region with respect to the Covid declines

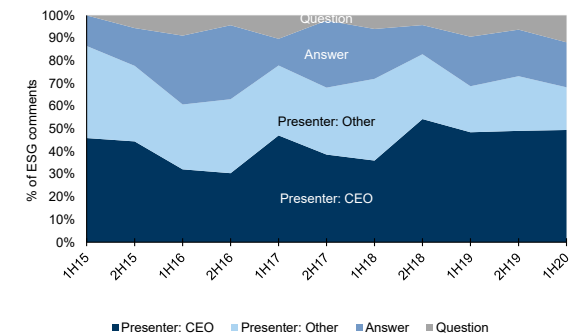
Total number of ESG comments for ASX 200 Industrials companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 45: ...and a strong contribution from ASX CEOs

% of total ESG comments for ASX 200 Industrials companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 46: In the US, 'Water & Drought' has consistently been the most discussed topic

Total number of unique ESG comments per keyword for S&P 500 Industrials companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Water & Drought	68	61	51	68	73	71	64	62	56	59	121	135	95	98	88	75	111	87	82	87	79	90
Carbon, Emissions & Energy	24	27	29	36	27	35	34	25	25	28	27	29	39	27	28	33	38	52	57	52	30	59
Health & Safety	9	8	6	8	16	13	8	12	11	9	5	10	8	10	9	14	3	6	4	13	19	20
General Sustainability	23	13	25	23	33	22	29	46	23	29	16	37	25	16	19	36	34	39	44	68	17	54
Plastic	12	13	9	7	7	6	6	14	11	14	15	8	20	9	9	8	6	7	5	11	15	8
Waste & Recycling	44	56	37	44	27	36	23	24	37	31	33	30	71	75	46	41	52	37	31	46	13	16
Corporate Social Impact	0	1	0	5	1	5	2	2	2	3	2	5	5	3	1	4	8	2	7	8	1	6
Human Capital Management	4	3	4	0	2	2	7	5	1	6	2	11	8	12	12	9	2	9	3	14	6	31
Sustainability Reporting & Labels	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	1	2	1	3	0	6
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Product Safety	0	0	0	0	0	0	0	5	1	1	0	6	0	0	0	1	0	0	2	0	0	0
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Sourcing & Supply Chain	0	0	0	1	0	0	1	1	0	0	1	1	1	0	0	1	0	0	0	1	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Governance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0
Data privacy	1	0	0	1	2	1	0	0	0	0	9	18	35	27	18	4	1	7	2	4	0	2
Total	184	182	160	194	189	192	174	196	167	179	232	290	306	278	232	228	257	249	239	311	179	298

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 47: In Europe 'Carbon, Emissions & Energy' has been the most discussed since 2019

Total number of unique ESG comments per keyword for STOXX 600 Industrials companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Carbon, Emissions & Energy	20	61	32	53	39	49	33	50	35	37	49	56	26	45	35	76	53	78	98	223	76	94
Water & Drought	40	91	49	106	6	74	35	81	51	76	49	72	51	49	41	84	89	64	51	79	57	43
General Sustainability	43	43	49	64	33	81	52	60	44	79	35	72	24	53	32	84	53	70	53	149	54	69
Waste & Recycling	17	24	12	9	3	10	9	7	4	11	10	15	22	29	6	16	46	45	51	52	23	32
Sustainable Investment	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	8	5
Plastic	9	20	3	24	0	10	0	20	2	12	8	11	4	10	9	23	29	21	36	32	8	20
ESG Regulation	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	6	14
Health & Safety	0	7	0	9	0	3	0	1	4	7	2	13	2	1	7	6	4	3	0	11	4	6
Corporate Social Impact	0	6	3	7	8	5	0	9	2	1	6	2	0	2	0	6	2	9	0	31	4	9
Human Capital Management	12	7	6	7	0	5	2	4	9	0	4	7	8	10	2	19	0	5	0	12	4	7
Global Goals & Agreements	0	0	0	2	0	0	0	0	0	0	0	0	0	2	2	1	8	2	0	13	4	7
Sustainability Reporting & Labels	0	4	0	4	3	2	2	1	0	3	6	1	6	4	7	8	13	5	7	15	2	5
Product Safety	0	0	0	0	0	0	0	3	0	1	0	2	0	1	0	4	0	0	2	0	0	0
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	1	0	0	0	0
Governance	0	0	0	4	0	0	0	0	0	1	4	1	2	0	4	1	0	1	2	2	0	0
Data privacy	12	2	6	0	0	3	7	3	0	4	6	4	0	1	0	1	0	1	2	7	0	0
Total	161	265	159	290	91	241	140	240	152	232	179	258	144	208	145	332	297	306	304	634	249	310

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 48: In Australia, both 'Water & Drought' and 'Waste & Recycling' are most in focus

Total number of unique ESG comments per keyword for ASX 200 Industrials companies by topic, 1H15-1H20

	1H 2015	2H 2015	1H 2016	2H 2016	1H 2017	2H 2017	1H 2018	2H 2018	1H 2019	2H 2019	1H 2020
Water & Drought	33	23	19	22	14	16	26	23	36	34	33
Waste & Recycling	8	10	46	20	35	17	15	13	50	31	45
General Sustainability	11	15	11	16	18	9	4	13	27	21	13
Health & Safety	31	20	25	14	13	9	12	14	23	21	20
Plastic	0	3	2	0	6	0	5	2	3	16	15
Carbon, Emissions & Energy	28	13	23	12	16	13	12	8	27	15	7
Corporate Social Impact	3	3	0	6	3	1	3	11	4	7	2
Sustainability Reporting & Labels	3	5	2	4	4	7	0	3	8	1	10
Human Capital Management	0	0	4	0	3	1	3	1	4	1	4
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	1	1	1
Global Goals & Agreements	0	0	0	0	0	0	0	0	3	0	1
Sustainable Investment	0	5	0	0	0	0	0	1	0	0	0
Product Safety	0	0	0	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0
Data privacy	0	0	0	0	0	0	0	0	0	0	0
Total	117	102	132	98	112	72	78	91	204	148	182

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Notable Industrials ESG discussions from recent earnings

General Sustainability

- On **Carrier's** earnings call 2020-07-30, the CEO highlighted the **recent publication of the company's first ESG report**, stressing that **ESG is core to the business** and that the firm takes pride in being a leader.
- On **Delta Air Lines'** earnings call 2020-01-14, the CEO reaffirmed the **company's commitment and focus on ESG goals and requirements**. The company acknowledged that its **historically older fleet has opened an opportunity to make faster progress relative to peers with upgrades**. Specifically, the company is **adding 80 new planes to its fleet which are 25% more fuel-efficient than those retired**. Also highlighted was the commitment to **voluntarily cap the group's carbon footprint at 2012 levels**.
- On **Rockwell's** earnings call 2020-01-29, the CEO stressed the **focus on product efficiency**, highlighting the group's **power control offering**, variable speed drives, which **dramatically reduces the amount of energy** required to run industrial processes. The newly introduced eco industrial segment specifically targets energy efficiency/reduction in the **renewables, water and waste water treatment, and mass transit industries**. Additionally, the company provides technology and services aimed at **automating safety, which will continue to be a focus** for the company.
- On **Georg Fischer's** earnings call 2020-02-26, the CEO noted **12% yearly growth in the group's cooling segment**, supported by the **new COOL-FIT 4.0 system which saves customers up to 30% of the energy used** for the cooling application. For example, the system can help reduce the energy consumed by data centers (responsible for 3% of global electricity consumption), of which 40% of the total energy is used for cooling. Also highlighted was the 4% **growth in its business supplying skids for water rehabilitation**, with more than 200 million sales. **Tackling water scarcity by providing further solutions will remain a focus**.

Carbon, Emissions & Energy

- On **Eaton's** earnings call 2020-07-29, the CEO highlighted the company's sustainability focus on **capitalizing electrification secular growth trends** across its businesses and in the energy transition. The company has **reduced emissions by 16% since 2015** and is **on track to deliver its 2025 targets**. Additionally, the company has committed to **science-based targets of reducing GHG emissions by 50% from 2018 levels** and reaching **carbon-neutrality by 2030**. The speaker noted that this will be achieved via carbon offsets, a complete switch to renewable electricity and energy storage solutions delivery.
- On **Southwest Airlines'** earnings call 2020-01-23, the CEO highlighted the firm's **focus on sustainability, particularly on conservation and fuel economy**. The **MAX planes consume 15% less gas than other models**, with the CEO stressing the importance of getting the airplane back in service. Additionally, the company notes that **air traffic control systems can be modernised** and there **needs to be a commercially viable alternative fuel** of adequate supply and reasonable pricing **within the next 10 years**, as there is only so much that can be offset before

there just needs to be less carbon emitted.

- On **PACCAR's** earnings call 2019-07-23, the CEO noted the company's focus on investing in future growth, with **up to \$725mn capex and up to \$340mn in R&D** this year on **enhancing aerodynamic truck models, integrated powertrains, zero emissions electric and hydrogen fuel cell technologies**, advancing driver assistance systems and truck connectivity. The company is enhancing manufacturing and distribution facilities, with a new robotic CAB build cell added recently to a truck factory and the new construction of a paint facility to lower operating costs and increase capacity and quality.

Human Capital - Engagement and Safety

- On **Meggitt's** earnings call 2020-02-25, the CEO noted an **8% increase in employee engagement over the last 2 years, reaching the global high-performance norm level, which is based on data of employees who work at very high-performing global companies.**
- On **Republic Services's** earnings call 2020-02-13, the CEO highlighted a 100bps **improvement in the company's overall employee engagement score to 86%**, which the firm claims is well above national norms and high for the industry. **Driver turnover was also reduced 100bps** versus the prior year. The company views its **people as the most critical component to successfully executing its strategy**, noting that the **business units with higher employee engagement have fewer safety incidents, better customer service and better financial performance.**

Financials

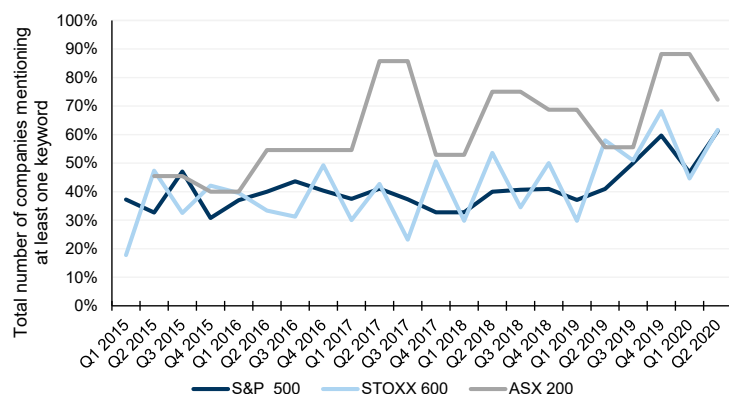
A greater proportion of ASX Financials engage in discussion than in the S&P and STOXX. 72% of Financials in the ASX discussed ESG keywords in 2Q20 (vs. 72% for the broader index), compared with only 61% of Financials in the S&P (vs. 65% for the broader index) and 62% of Financials in the STOXX (vs. 66% for the broader index) ([Exhibit 49](#)).

'ESG' the hottest keyword mentioned in the US and Europe, with 'Governance' most common in Australia. The top five most discussed keywords across 1Q20 and 2Q20 are ([Exhibit 50](#)): [S&P 500](#) - ESG, Governance, Environmental, Diversity & Inclusion and Sustainable Investing; [STOXX 600](#) - ESG, Governance, Water, Environmental and Carbon; [ASX 200](#) - Governance, ESG, Water, Environmental, Sustainable Investing and Recycle.

ESG discussions by Financials companies trending upwards overall and show greater growth than the broader index. Volumes of ESG comments from Financials companies have grown consistently between 2015 and 2020 in all three regions, despite the declines seen in 1Q20. Total ESG comments by Financials in 2Q20 grew +26% yoy in the US (vs. +18% yoy for the broader index), +20% yoy in Europe (vs. +48% yoy for the broader index) and +6% yoy in Australia (vs. -4% yoy for the broader index) ([Exhibit 51](#), [Exhibit 52](#), [Exhibit 53](#)).

Exhibit 49: Increasing proportion of Financials discussing ESG in all regions

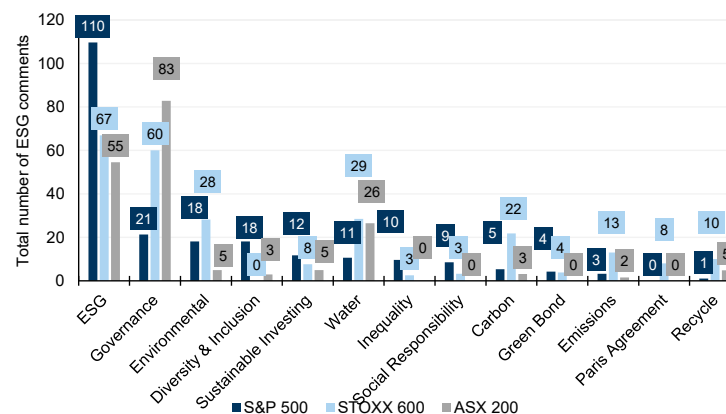
% of Financials companies mentioning ESG keywords in the S&P 500 and STOXX 600 (1Q15-2Q20) and ASX 200 (1H15-1H20)



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 50: 'ESG' most discussed in the US and Europe, and 'Governance' in Australia

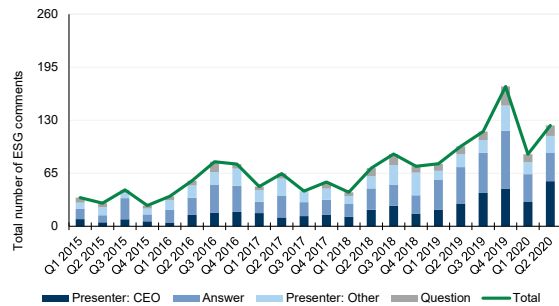
Top 10 most discussed keywords by S&P 500, STOXX 600 and ASX 200 Financials, 1Q20-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 51: ESG discussions on the rise in the US since 2015, despite a dip in 1Q20 as Covid unfolded...

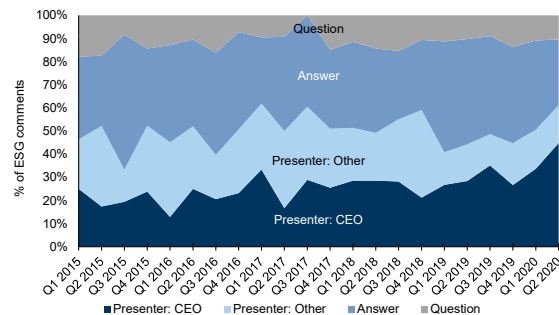
Total number of ESG comments for S&P 500 Financials companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 54: Discussions during the company's presentations are the major source of discussion today across S&P Financials...

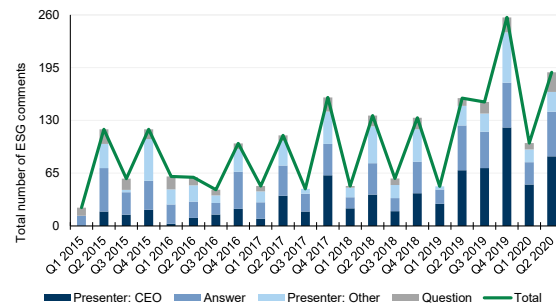
% of total ESG comments for S&P 500 Financials companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 52: ...a similar trend across Europe, despite more volatility...

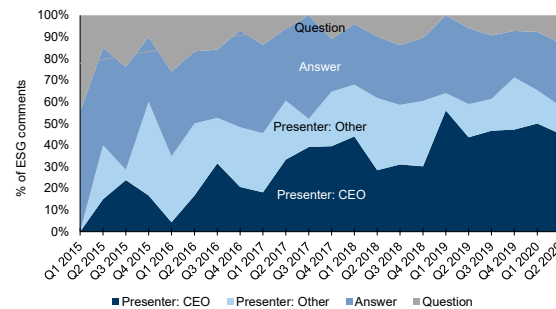
Total number of ESG comments for STOXX 600 Financials companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 55: ...as well as in the STOXX...

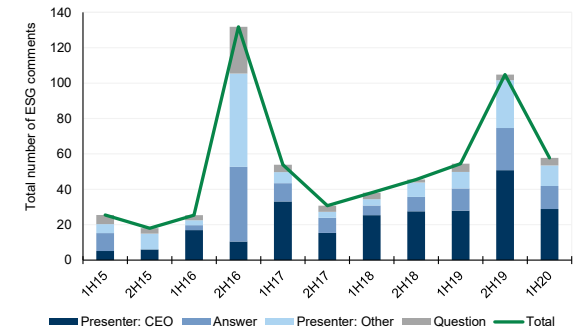
% of total ESG comments for STOXX 600 Financials companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 53: ...while volumes peaked in Australia in 2H16 and 2H19

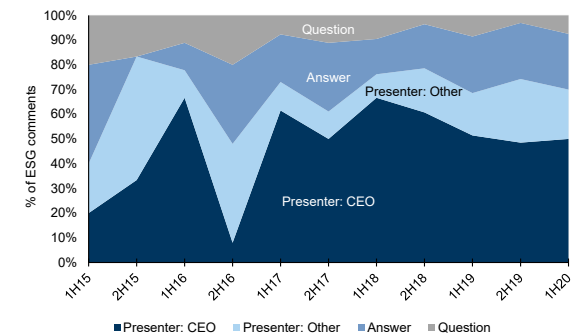
Total number of ESG comments for ASX 200 Financials companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 56: ...and similarly in the ASX

% of total ESG comments for ASX 200 Financials companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 57: In the US, 'General Sustainability' has consistently been the most discussed topic...

Total number of unique ESG comments per keyword for S&P 500 Financials companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
General Sustainability	19	16	25	7	14	38	50	35	19	36	25	28	24	42	59	50	65	80	73	126	63	86
Sustainable Investment	1	0	0	0	1	1	1	3	2	0	0	2	4	1	3	1	3	3	9	16	10	6
Water & Drought	3	4	10	7	8	8	6	8	6	6	3	5	6	12	14	3	4	11	6	7	6	4
Corporate Social Impact	1	1	1	0	0	0	2	2	2	2	0	7	1	1	3	4	3	6	2	4	6	12
Health & Safety	6	4	5	4	11	2	17	25	16	16	6	7	5	6	5	7	2	6	12	16	5	3
Carbon, Emissions & Energy	0	0	1	2	0	0	3	7	3	1	9	8	1	6	5	1	2	8	15	12	4	6
Plastic	1	0	0	2	1	2	0	0	2	0	1	0	0	7	1	0	1	3	1	3	1	0
Waste & Recycling	0	4	1	1	1	6	3	3	1	0	1	1	0	5	2	4	1	3	3	6	0	1
Human Capital Management	3	1	1	1	1	0	1	2	2	2	0	1	4	1	1	4	3	4	5	7	0	30
Sustainability Reporting & Labels	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	7	5	11	0	0
Product Safety	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Data privacy	1	0	0	0	0	0	0	1	0	2	3	0	2	1	1	2	0	1	1	2	0	0
Total	36	31	44	25	38	58	85	87	55	66	50	60	46	84	94	78	88	133	134	212	96	292

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 58: ...as well as in Europe...

Total number of unique ESG comments per keyword for STOXX 600 Financials companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
General Sustainability	5	44	31	20	27	22	19	37	11	41	20	92	16	48	10	57	21	85	77	152	45	110
Water & Drought	13	20	14	32	11	8	9	14	0	29	6	25	10	21	10	8	0	28	8	21	16	13
Corporate Social Impact	0	4	0	6	0	3	2	12	0	1	2	21	2	9	6	11	4	12	8	18	14	9
Health & Safety	3	36	3	46	0	17	2	21	13	28	2	8	0	21	2	15	2	7	6	16	8	15
Carbon, Emissions & Energy	0	2	3	4	8	2	2	2	0	6	2	4	2	5	0	15	10	17	22	61	6	43
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	6	0	8	6	9	6	9
Waste & Recycling	3	10	6	8	8	3	12	5	9	6	10	9	2	12	16	14	4	11	10	7	4	6
Sustainability Reporting & Labels	0	0	3	2	0	3	5	2	7	6	6	8	12	8	6	7	2	3	12	13	4	3
Sustainable Investment	0	0	0	2	5	0	0	5	4	3	8	4	6	8	6	4	8	20	24	33	2	15
Plastic	0	0	0	0	3	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	3
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2	0
Human Capital Management	0	2	0	2	0	0	0	4	2	0	2	3	2	4	2	1	2	3	4	11	0	9
Product Safety	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
Governance	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Data privacy	0	0	0	0	0	3	0	4	2	0	0	3	0	1	0	0	0	0	0	0	0	0
Total	23	119	58	121	61	58	52	102	47	120	57	175	51	143	59	139	53	194	181	343	108	237

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 59: ...and in Australia

Total number of unique ESG comments per keyword for ASX 200 Financials companies by topic, 1H15-1H20

	1H 2015	2H 2015	1H 2016	2H 2016	1H 2017	2H 2017	1H 2018	2H 2018	1H 2019	2H 2019	1H 2020
General Sustainability	13	9	6	16	15	5	18	28	26	60	35
Water & Drought	8	0	3	21	6	7	5	8	19	37	12
Corporate Social Impact	0	3	6	5	4	2	2	2	2	5	1
Carbon, Emissions & Energy	0	0	0	50	8	5	7	2	0	3	0
Health & Safety	3	0	0	3	2	0	0	2	0	3	3
Sustainability Reporting & Labels	0	0	0	5	2	0	2	2	0	2	0
Sustainable Investment	0	0	0	0	0	0	0	2	0	2	0
Global Goals & Agreements	0	0	0	0	0	0	2	0	0	0	0
Waste & Recycling	3	3	3	3	8	3	4	0	3	0	1
Human Capital Management	0	3	0	0	6	7	2	0	3	0	7
Product Safety	0	0	0	0	0	0	0	0	0	0	0
Plastic	0	0	0	8	0	0	0	0	0	0	0
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	2	0	0	0	0	0	0
Data privacy	0	0	0	0	0	0	0	2	2	0	0
Total	25	18	25	145	64	32	42	46	54	114	59

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Notable Financials ESG discussions from recent earnings

General Sustainability

- On **Moody's** earnings call 2019-10-30, the president of Moody's Investors Service discussed **growth in the labelling of sustainability-linked bonds and loans**, driven by **investor demand for ESG-compliant securities, market focus on climate risk and issuers wanting to demonstrate their own sustainability credentials**. With the acquisition of Vigeo Eiris, Moody's believes it is well-placed to be a leader in the space.
- On **S&P Global's** earnings call 2019-10-29, the CEO observed that **the growing focus on the energy transition and climate change is creating increased demand** for a combination of ESG products, such as the **0.5% IMO sulphur product** which is moving to the CME and ICE exchanges as futures. The company is **focused on trying to identify what the next biggest trends** are going to be impacting financial and market decisions **and how S&P can create product and services addressing these trends**.
- On **BlackRock's** earnings call 2020-01-15, the CEO highlighted that **sustainability has reached an inflection point**, with **more clients focused on the ESG factors of their portfolios** due to alignment with values, but increasingly because of the **financial risk and returns implications due to sustainability and climate change**. The letter sent to all CEOs reiterated the view that we are entering a new era of finance, where the **investment risk associated with climate change would drive significant reallocation of capital, and that corporates, investors and regulators need to be better prepared**.
- On **Intermediate Capital's** earnings call 2020-06-04, the CEO noted that **ESG was a key focus for the group's Capital Markets Day**, a theme of importance **reminded by the crisis. ESG is a fundamental trend and an integral part of its strategy and investment approach**. The firm is committed to **continue building on its solid ESG reputation** within its industry. Recent business strategies have had an ESG component, including an exclusive **current renewables energy transaction** and **recently commissioned climate change study** aiming to help portfolio companies and the firm **assess and take into account climate change risk**, applying it **throughout their investment decision-making and portfolio management processes**.
- On **MSCI's** earnings call 2020-07-28, the chairman and CEO highlighted **strong performance from the ESG franchise**, reaching a runrate of \$174mn and the **highest ever ESG research quarterly subscription sales. AUM in equity ESG and climate change ETFs linked to MSCI indices grew to \$55bn, an almost two-fold increase** in the last year. The group has observed **increased investor adoption of its ESG and climate change tools** to build resilient portfolios, believing that its **long-held belief in sustainable investing being critical to the long-term investment process** has helped it capitalise on being an early mover to now being a leader in the space.

Energy

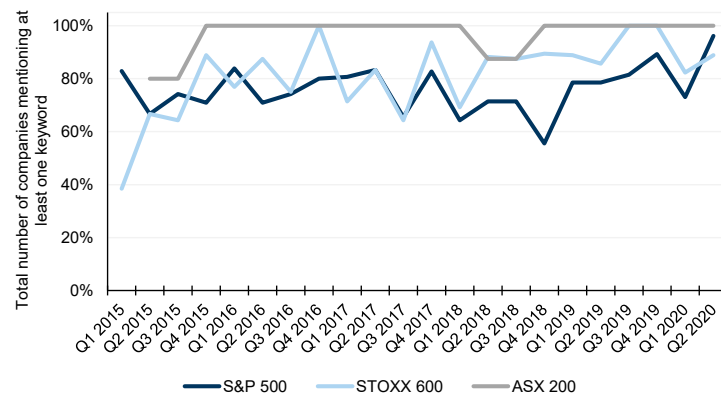
The majority of the Energy sector is discussing ESG across all regions... The proportion of Energy companies engaged in ESG conversation in 2Q20 was 96% in the US (vs 65% for the broader index), 89% in Europe (vs 66% for the broader index) and 100% in the ASX (vs 72% for the broader index) ([Exhibit 60](#)). On average, each S&P Energy company made 4.6 comments (vs 3.7 in the broader index), each STOXX Energy company made 13.1 comments (vs 4.9 in the broader index) and each ASX 200 Energy company made 7.1 comments (vs 5.5 in the broader index).

...with discussions most focused on 'Carbon'. The top five most discussed keywords across 1Q20 and 2Q20 are ([Exhibit 61](#)): [S&P 500](#) - Carbon, Water, Emissions, Environmental and ESG; [STOXX 600](#) - Carbon, Emissions, Water, Environmental and ESG; [ASX 200](#) - Carbon, Emissions, Water, Environmental and Safety Performance.

Energy companies have shown superior growth in volumes relative to the broader indices for all three regions. Total ESG comments by Energy companies in 2Q20 grew +41% yoy in the US (vs. +18% yoy for the broader index), +100% yoy in Europe (vs. +48% yoy for the broader index) and +62% yoy in Australia (vs. -4% yoy for the broader index) ([Exhibit 62](#), [Exhibit 63](#), [Exhibit 64](#)).

Exhibit 60: Around 90% of Energy in all regions discussed ESG in 2Q20

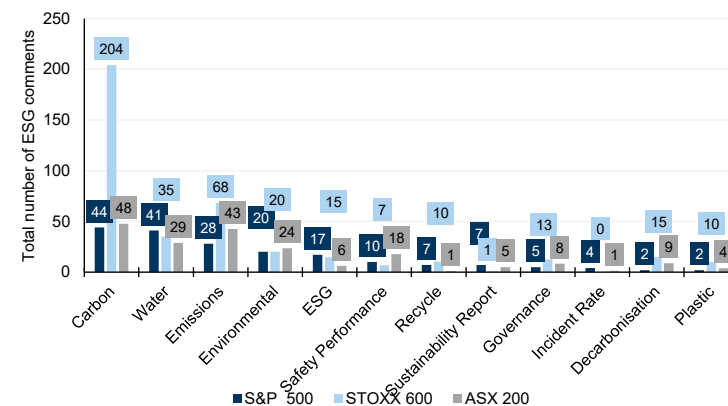
% of Energy companies mentioning ESG keywords in the S&P 500 and STOXX 600 (1Q15-2Q20) and ASX 200 (1H15-1H20)



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

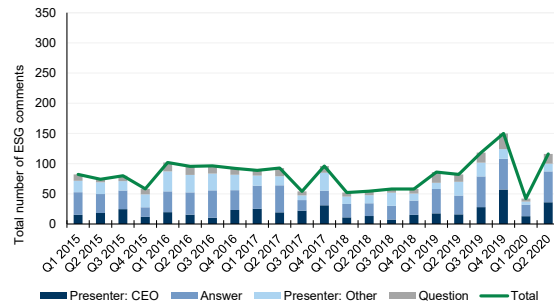
Exhibit 61: 'Carbon' most discussed across all regions, most notably in Europe

Top 10 most discussed keywords by S&P 500, STOXX 600 and ASX 200 Energy, 1Q20-2Q20



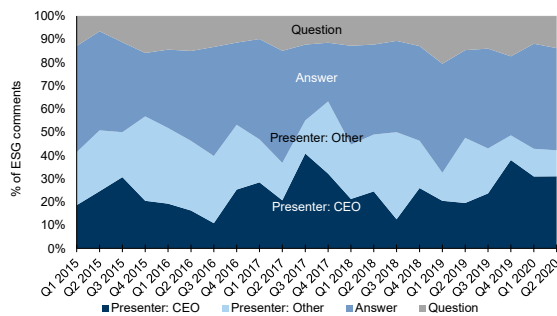
Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 62: ESG discussions in the US accelerated in 2019...
Total number of ESG comments for S&P 500 Energy companies by speaker, 1Q15-2Q20



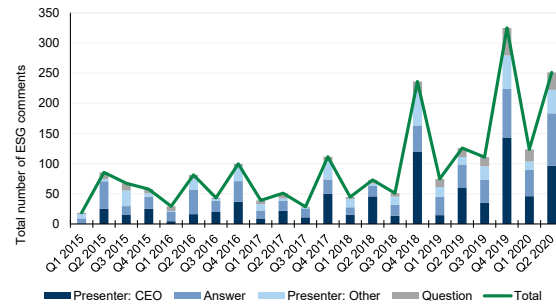
Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 65: Q&A has led most of the discussion across S&P Energy...
% of total ESG comments for S&P 500 Energy companies by speaker, 1Q15-2Q20



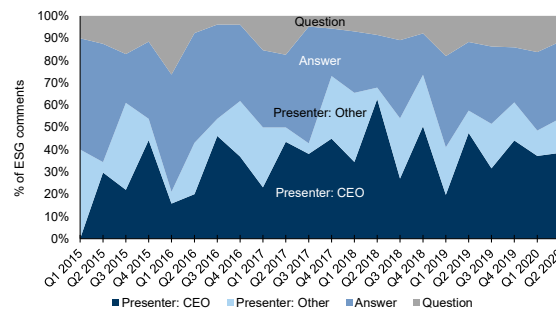
Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 63: ...while in Europe ESG discussions show a positive trend with spikes around yearly FY/E calls...
Total number of ESG comments for STOXX 600 Energy companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

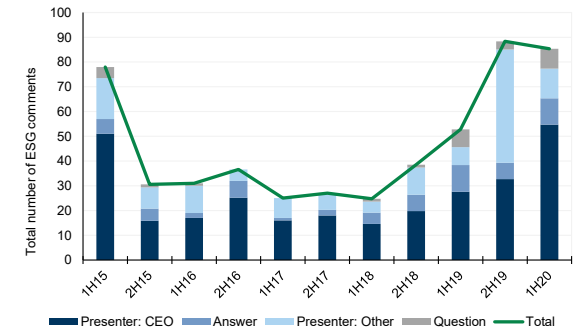
Exhibit 66: ...in the STOXX, the share of discussion in the CEO presentation rises over time
% of total ESG comments for STOXX 600 Energy companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

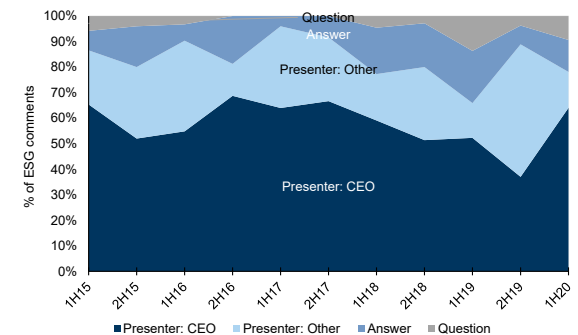
Exhibit 64: ...while volumes in Australia accelerated in 2H19

Total number of ESG comments for ASX 200 Energy companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 67: Across ASX Energy, the CEO has led most of the discussion
% of total ESG comments for ASX 200 Energy companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 68: In the US, 'Water & Drought' is the most discussed topic...

Total number of unique ESG comments per keyword for S&P 500 Energy companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Water & Drought	55	55	50	28	71	66	65	61	58	59	29	43	37	34	38	28	46	40	43	34	16	25
Carbon, Emissions & Energy	14	4	10	4	2	4	3	1	0	10	6	17	8	4	10	12	27	30	54	64	11	67
General Sustainability	11	10	9	9	13	17	16	15	20	16	12	32	8	13	11	14	16	14	32	74	9	33
Health & Safety	1	7	10	12	2	1	3	4	4	4	1	8	2	1	0	3	2	0	6	19	4	11
Waste & Recycling	5	2	5	8	10	10	10	12	9	21	6	7	8	8	5	8	5	9	2	9	3	5
Corporate Social Impact	0	0	0	0	1	0	1	1	0	0	2	1	0	3	2	2	0	0	1	3	1	1
Plastic	1	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	1	0	0	1	1
Human Capital Management	0	0	0	0	2	0	0	1	0	0	0	3	0	0	1	0	0	0	0	0	0	0
Sustainability Reporting & Labels	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sustainable Investment	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	5	6	12	0	8
Product Safety	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sourcing & Supply Chain	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Data privacy	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Total	88	78	86	61	104	97	100	95	93	110	58	113	62	66	70	73	98	99	144	215	45	152

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 69: ...while in Europe, 'Carbon, Emissions & Energy' is the most discussed

Total number of unique ESG comments per keyword for STOXX 600 Energy... companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Carbon, Emissions & Energy	4	20	15	12	11	9	8	24	17	12	12	76	20	35	28	204	46	81	92	296	107	201
General Sustainability	0	5	21	12	0	6	5	13	2	4	8	26	3	21	4	31	11	23	9	38	15	33
Water & Drought	11	49	26	21	15	58	28	43	20	26	14	20	14	17	19	16	22	26	15	30	12	23
Waste & Recycling	0	7	0	3	3	8	0	8	2	2	0	1	8	4	4	10	0	4	4	20	5	13
Health & Safety	4	8	3	9	0	1	3	11	0	6	1	9	0	2	0	10	1	6	0	11	5	8
Plastic	2	0	0	1	0	0	0	0	0	1	0	8	0	1	3	8	0	1	8	11	4	7
Global Goals & Agreements	0	0	0	1	0	0	0	0	0	0	0	5	0	2	0	3	1	10	4	22	2	3
Corporate Social Impact	0	0	0	0	0	0	0	0	0	1	0	5	0	0	0	2	0	0	0	0	1	1
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	7	
Human Capital Management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	
Sustainability Reporting & Labels	0	0	0	0	2	0	0	0	0	3	0	1	5	0	0	5	0	0	1	5	0	2
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Product Safety	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Governance	0	3	3	1	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Data privacy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	20	92	69	61	31	81	45	101	39	59	35	153	49	83	58	291	84	152	133	436	152	304

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 70: ..as well as in Australia

Total number of unique ESG comments per keyword for ASX 200 Energy companies by topic, 1H15-1H20

	1H 2015	2H 2015	1H 2016	2H 2016	1H 2017	2H 2017	1H 2018	2H 2018	1H 2019	2H 2019	1H 2020
Carbon, Emissions & Energy	36	5	11	13	8	8	5	13	10	46	61
Water & Drought	14	1	4	9	1	2	7	8	13	26	15
General Sustainability	5	0	2	7	9	6	9	10	17	21	20
Health & Safety	29	15	15	14	11	17	9	15	14	17	16
Sustainability Reporting & Labels	0	0	0	0	1	1	3	1	1	4	5
Corporate Social Impact	0	0	2	0	1	1	2	3	1	4	4
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	3	5
Human Capital Management	0	0	0	0	0	0	0	0	0	3	0
Waste & Recycling	0	1	0	0	0	0	1	0	2	2	4
Plastic	0	0	0	0	0	0	0	0	0	1	3
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0
Product Safety	0	0	0	0	0	0	0	0	0	0	0
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0
Data privacy	0	0	0	0	0	0	0	0	0	0	0
Total	83	32	34	41	32	35	36	48	60	129	135

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Notable Energy ESG discussions from recent earnings

Carbon, Emissions & Energy

- On **National Oilwell Varco's** earnings call 2020-02-07, the CFO noted a focus on leveraging the company's core competencies to **help develop solutions that minimise its customers' environmental footprint while improving operational efficiencies**. For example, the company's new **PowerBlade system reduces the carbon footprint and cost of fuel for drilling contractors by recycling energy the system captures back into the rig**. They estimate this could **reduce diesel consumption by 771,000 gallons per year, saving \$1.75mn, reduce NOx emissions by 110 tons per year and reduce CO2 emissions by 6,200 tons per year**.
- On **Worley's** earnings call 2020-02-23, the CEO highlighted the shift in power investment towards renewables and all other low-carbon technologies as the world continues to electrify. With the **decline in coal-fired plants and slowdown in new gas-fired plants**, the firm observe **high demand growth in offshore wind technology, which requires significant investment in enhancing power networks** to cope with changing loads and supply patterns. Notably, the speaker says a **50% increase by 2040, or \$3.2tn annually, in global investment into the energy mix is required if the Paris-aligned targets** are to be achieved.

General Sustainability

- On **Valero Energy's** earnings call 2020-01-30, the CEO noted the **continued focus on the group's renewable fuels business**, with a **new renewable diesel plant** as part of its Diamond Green Diesel joint venture (pending approval) expected to **increase renewable fuels production capacity to over 1.1 billion gallons annually** or over 70,000 barrels per day when operations commence in 2024. The firm expects **2020 capex to be c.\$2.5bn**, consistent with average spend over the last 6 years, with **c.\$1bn allocated** for high-return growth projects that are focused on market expansion and margin improvement, and for **maintaining safe, reliable and environmentally responsible operations**. The company has a **favourable outlook on refining margins with the IMO 2020 low sulfur fuel oil regulation**, with Valero seeing itself as well positioned to take advantage of discounted high sulfur crude and fuel oils as feedstocks. The **diesel segment also continues to generate strong results due to higher renewable fuels demand**.
- On **Neste's** earnings call 2020-04-24, the CEO highlighted the **ongoing commitment from its customers to reduce their carbon footprint**. Key initiatives were discussed, including a **new sales agreement on sustainable aviation fuel with Finnair and JetBlue**, the Mahoney Environmental acquisition that supports **building a global waste and residue feedstock platform** to meet the world's growing demand for renewable products, the strategic cooperation with Borealis for **production of renewable polypropylene**, and joint investments with Mirova in **recycling technologies to accelerate the developments of chemical recycling and foster the transition to a circular economy for plastics**. The company has also taken a minority stake in Sunfire, which has **patented technology to allow production of renewable hydrogen and direct conversion of water and CO2 into raw materials for petrochemical products**.

- On Oil Search's earnings call 2020-02-25, an MD and director acknowledged the **strategic review will reevaluate the company's long-term vision, including how to proactively manage risk to deliver PNG assets in a sustainable, environmentally responsible and profitable way through project execution.** The firm will consider how the company is positioned among the global energy business and **how the company can evolve with technological changes and ESG considerations.**

Materials

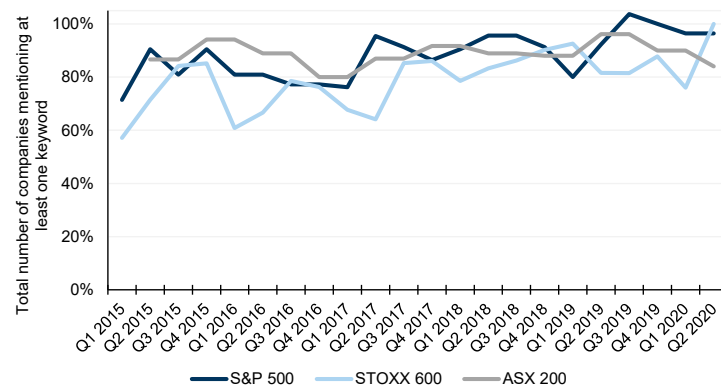
Over 95% of Materials companies in the US and Europe discussed ESG in 2020. 96% of Materials companies in the S&P (vs 65% for the broader index) and 100% of Materials in the STOXX (vs 66% for the broader index) discussed ESG keywords in 2020, while 84% of Materials were engaged in the ASX (vs 72% for the broader index) ([Exhibit 71](#)).

‘Carbon’ more in focus across Europe and Australia than with their US peers. The most discussed keywords across 1Q20 and 2Q20 were ([Exhibit 72](#)): [S&P 500](#) - Plastic, Recycle, Water, Carbon and Environmental; [STOXX 600](#) - Carbon, Recycle, Water, Emissions and Plastic; [ASX 200](#) - Carbon, Environmental, Recycle, Emissions and Water.

Steady growth in the prevalence of ESG discussion over the years. Across all three regions, growth in total comments was notable in earlier years, but has slowed relative to the broader indices in recent quarters, likely due to the already higher engagement relative to other sectors. In the US, total ESG comments by Materials in 2Q20 grew +14% yoy (vs. +18% yoy for the broader index), in Europe +49% yoy (vs. +48% yoy for the broader index) and in Australia declined -29% yoy (vs. -4% yoy for the broader index) ([Exhibit 73](#), [Exhibit 74](#), [Exhibit 75](#)).

Exhibit 71: Over 95% of Materials in the US and Europe discussed ESG in 2020

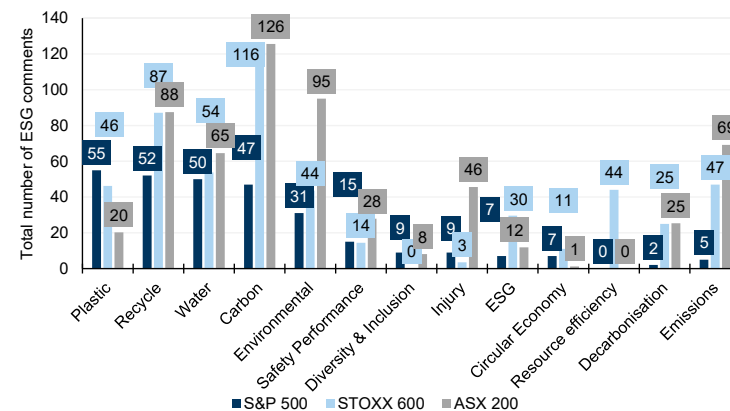
% of Materials companies mentioning ESG keywords in the S&P 500 and STOXX 600 (1Q15-2Q20) and ASX 200 (1H15-1H20)



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 72: ‘Plastic’ most discussed in the US, and ‘Carbon’ in Europe and Australia

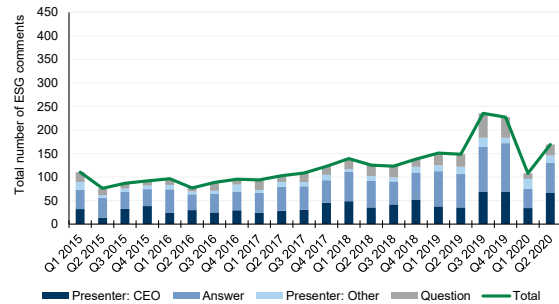
Top 10 most discussed keywords by S&P 500, STOXX 600 and ASX 200 Materials, 1Q20-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 73: ESG discussions in the US grew consistently and spiked in 2019...

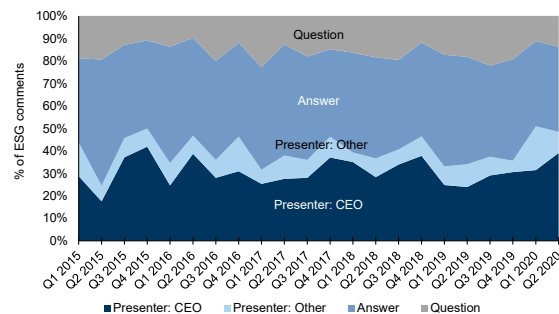
Total number of ESG comments for S&P 500 Materials companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 76: Q&A and management presentations took up a similar share of ESG discussions across S&P Materials...

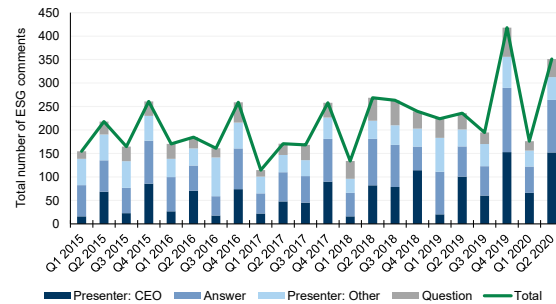
% of total ESG comments for S&P 500 Materials companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 74: ...a similar trend across Europe...

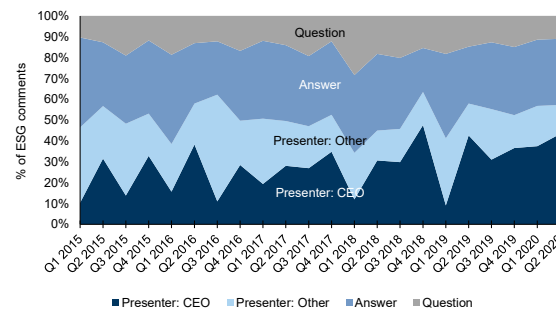
Total number of ESG comments for STOXX 600 Materials companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 77: ...as well as in the STOXX

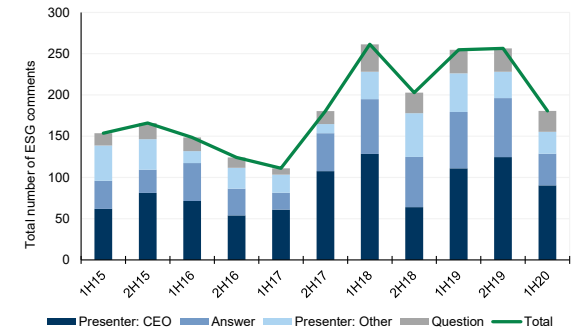
% of total ESG comments for STOXX 600 Materials companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 75: ...while Australian volumes grew substantially in 2018 but declined in 1H20

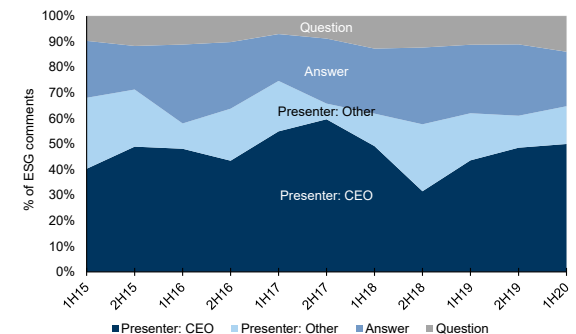
Total number of ESG comments for ASX 200 Materials companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 78: In Australia, the CEO presentation leads discussion

% of total ESG comments for ASX 200 Materials companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 79: In the US, 'Water & Drought' is the most discussed ESG topic...

Total number of unique ESG comments per keyword for S&P 500 Materials companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Water & Drought	36	29	31	30	26	27	39	35	20	24	24	26	26	22	23	27	32	37	48	56	31	19
Plastic	17	8	16	7	4	2	5	2	5	5	7	5	12	20	28	38	41	53	68	43	22	33
General Sustainability	14	8	10	20	21	16	12	24	11	30	27	33	43	34	38	21	23	20	31	35	19	26
Waste & Recycling	0	1	7	11	23	10	2	7	15	14	14	17	24	22	18	27	34	31	92	61	17	42
Carbon, Emissions & Energy	23	17	12	12	19	12	24	22	24	25	32	31	37	22	21	26	32	19	45	63	15	41
Health & Safety	15	12	11	12	7	9	8	11	7	9	14	13	15	10	9	20	10	12	15	23	9	26
Human Capital Management	4	3	1	1	0	2	1	1	4	6	4	5	1	5	1	3	1	0	1	1	3	11
Sourcing & Supply Chain	0	0	0	0	0	1	0	0	1	2	3	1	2	2	1	0	2	0	1	2	3	3
Corporate Social Impact	1	0	2	2	4	0	0	0	1	0	2	2	1	0	0	0	0	1	2	2	2	1
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
Sustainability Reporting & Labels	1	0	1	2	0	2	0	2	0	2	0	1	5	1	2	2	3	1	0	5	4	0
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Product Safety	0	0	1	0	1	0	0	0	7	2	0	0	0	1	1	0	0	1	0	1	0	0
Global Goals & Agreements	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Data privacy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	117	79	94	100	107	80	93	105	98	117	128	141	163	141	142	166	183	176	311	291	122	210

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 80: ...while in Europe, it is 'Carbon, Emissions & Energy'...

Total number of unique ESG comments per keyword for STOXX 600 Materials companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Carbon, Emissions & Energy	8	24	54	16	49	19	35	33	31	16	26	47	8	30	37	41	48	46	70	204	52	163
Waste & Recycling	43	61	11	110	17	47	20	91	29	59	42	74	30	54	16	60	31	55	43	90	26	73
General Sustainability	19	41	17	49	19	19	10	22	10	16	60	78	32	64	37	39	28	48	34	70	30	65
Water & Drought	24	53	26	33	32	47	33	30	17	35	11	33	12	58	101	70	52	50	17	63	20	35
Plastic	16	20	28	22	34	33	49	51	21	31	34	38	32	51	53	43	48	50	42	45	2	44
Sourcing & Supply Chain	37	6	14	24	19	9	18	13	5	13	16	5	24	23	24	6	19	6	15	10	42	3
Corporate Social Impact	0	10	6	0	0	0	2	4	2	1	2	3	0	3	4	3	2	3	0	5	8	1
Health & Safety	11	24	6	20	2	19	0	19	2	16	0	17	2	13	0	16	0	28	0	27	6	24
Human Capital Management	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2	0	0	2	2	2
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	0	0	1	2	0	4	1	4	0	0	4	2	3
Sustainability Reporting & Labels	3	0	6	2	0	0	16	0	0	0	0	3	0	3	5	1	0	6	8	5	0	10
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
Product Safety	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	0	21
Governance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Data privacy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	160	238	168	277	175	192	183	265	116	188	191	298	142	298	280	280	233	295	230	531	190	450

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 81: ...as well as in Australia

Total number of unique ESG comments per keyword for ASX 200 Materials companies by topic, 1H15-1H20

	1H 2015	2H 2015	1H 2016	2H 2016	1H 2017	2H 2017	1H 2018	2H 2018	1H 2019	2H 2019	1H 2020
Carbon, Emissions & Energy	21	12	13	20	19	17	36	36	70	125	78
Water & Drought	28	16	17	20	25	32	64	34	54	57	15
Waste & Recycling	41	46	37	20	11	24	40	53	74	43	25
Health & Safety	41	49	33	43	38	65	53	23	46	53	36
General Sustainability	23	25	20	13	16	46	66	45	44	38	47
Sustainability Reporting & Labels	0	0	0	0	0	11	3	3	6	14	4
Plastic	4	34	37	22	14	19	30	33	30	10	10
Human Capital Management	0	0	2	0	3	0	0	0	6	4	7
Sourcing & Supply Chain	0	0	0	0	2	2	3	2	3	2	1
Corporate Social Impact	0	2	0	0	0	3	4	8	1	1	1
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	0	0
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0
Product Safety	0	0	0	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	2	0	0	0	0	0	0
Data privacy	0	0	0	0	0	0	0	0	0	0	0
Total	162	184	158	137	128	219	300	237	333	347	226

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Notable Materials ESG discussions from recent earnings

Plastic

- On **Eastman Chemical Company's** earnings call 2020-08-04, the CEO highlighted the group's **carbon renewal technology which repurposes its gas fire to reforming waste plastic, using the gas fire instead of coal to completely clean up the waste plastic to its molecular elements and rebuild acetyls and cellulosic products**. Using this technology, the new **Naia product already has 50% bio content from sustainably grown forest, with the other half soon to be based on recycled plastic** - making them as biodegradable as microfibers in the ocean. The company has had significant interest already from a number of customers, including H&M which has included the technology in their conscious collection.
- On **Sealed Air's** earnings call 2020-08-06, the CEO, president and director emphasized **sustainability as core to the group's corporate strategy**. The firm's **commitment to meeting the 2025 sustainability pledge and drive a circular economy for plastics** was reinforced, with initiatives including collaborating with industry pioneers, R&D of advanced technologies and implementation of new solutions. **Most recently, the firm made a \$2.5mn equity investment in Plastic Energy Global and entered an agreement on joint R&D to further the recyclability of plastic waste.**

Carbon, Emissions & Energy

- On **Air Products and Chemicals'** earnings call 2020-07-23, the Chairman, President and CEO stated they were **very enthusiastic about carbon capture and had numerous projects in development**. The speaker commented that **carbon capture and hydrocarbons will be a huge business**, and that the company has **projects in the works that may result in real commercial proposals in the next 2-3 years**.
- On **Glencore's** earnings call 2020-02-18, the CEO discussed the group's **commitment to a low-carbon economy**, including the 2019 **capex spent on energy transition materials such as copper, cobalt and nickel**. For example, the Katenga asset will this year produce 30-32,000 tonnes of cobalt, and the company will increase nickel production in Canada which is used in battery production.
- On **Fletcher Building's** earnings call, the CEO noted the **increasing consumer appetite to opt for lower carbon options**, given that **cement manufacturing contributes around 8% of the world's carbon emissions**. The speaker discussed some of the company's low-carbon initiatives and advantages, including its **competitively priced cement with a 20% lower embedded carbon than imports**, the **Tyre Derived Fuel project** which achieves more efficiencies in its cost base and **consumes up to 50% of New Zealand's waste tyres**, and working on introducing pozzolans as a cement substitute.

Health Care

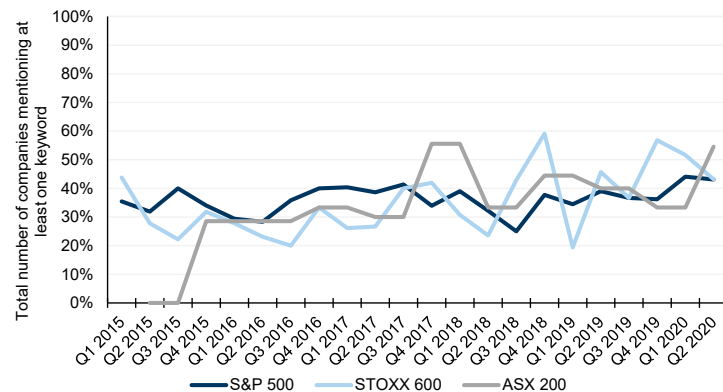
ESG-related discussions are relatively scarce within Health Care... Across all regions, the number of Health Care companies discussing ESG is underweight the broader benchmarks. In 2Q20, the proportion was 43% in the US (vs 65% for the broader index), 43% in Europe (vs 66% for the broader index) and 55% in Australia (vs 72% for the broader index) (Exhibit 82).

...with the most discussed topics differing between region. The most discussed topics in across 1Q20 and 2Q20 were (Exhibit 83): S&P 500 - Water, Environmental, Employee Safety, Plastic and Diversity & Inclusion. STOXX 600 - Water, Environmental, Carbon, Emissions and Injury; ASX 200 - Governance, Water, Environmental, Social Responsibility and ESG.

Comment volume has continued to decline, before any impact from the pandemic in 1Q20. While we have seen a gradual decline in volumes over the past 5 years in the US, total comments made by Health Care companies in Europe and Australia peaked in 2018 and have rapidly declined since. In 2Q20, US volumes by Health Care declined -11% yoy (vs. +18% yoy for the broader index), Europe grew +1% yoy (vs. +48% yoy for the broader index) and in Australia declined -33% yoy (vs. -4% yoy for the broader index) (Exhibit 84, Exhibit 85, Exhibit 86).

Exhibit 82: ESG discussion is less of a priority for Health Care companies

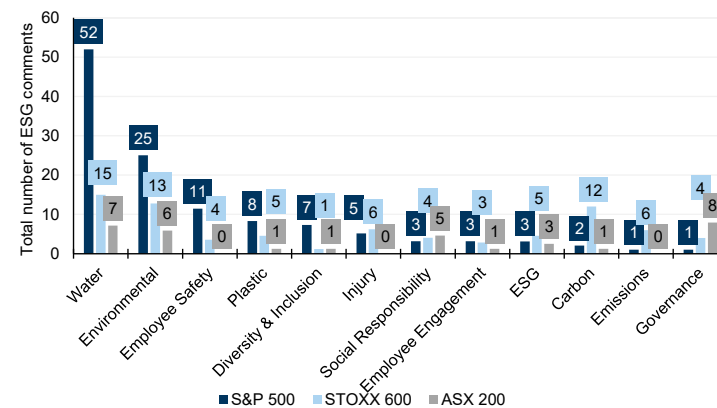
% of Health Care companies mentioning ESG keywords in the S&P 500 and STOXX 600 (1Q15-2Q20) and ASX 200 (1H15-1H20)



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 83: 'Water' most discussed in the US and Europe, and 'Governance' in Australia

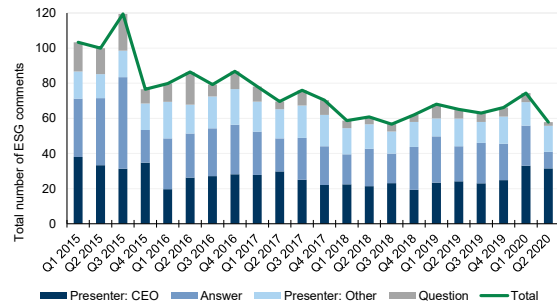
Top 10 most discussed keywords by S&P 500, STOXX 600 and ASX 200 Health Care, 1Q20-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 84: ESG volumes have been declining in the US

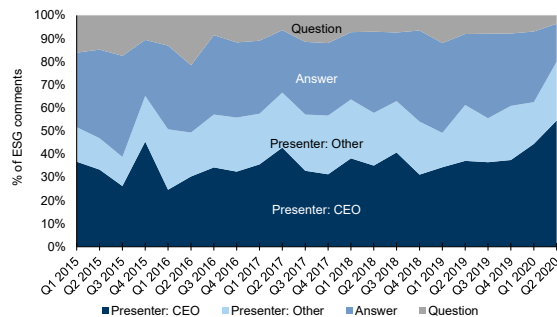
Total number of ESG comments for S&P 500 Health Care companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 87: Management presentations led the majority of ESG discussions in the latest quarter across S&P Health Care

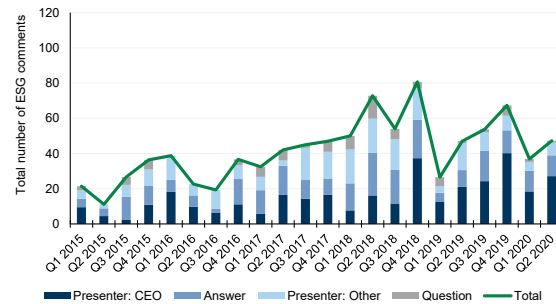
% of total ESG comments for S&P 500 Health Care companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 85: European volumes saw moderate growth, albeit volatile

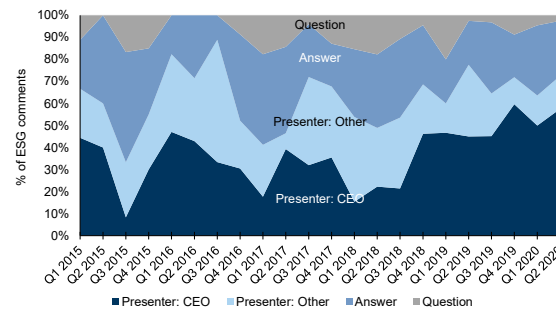
Total number of ESG comments for STOXX 600 Health Care companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 88: ..while presentations saw growing share of ESG discussions in Europe

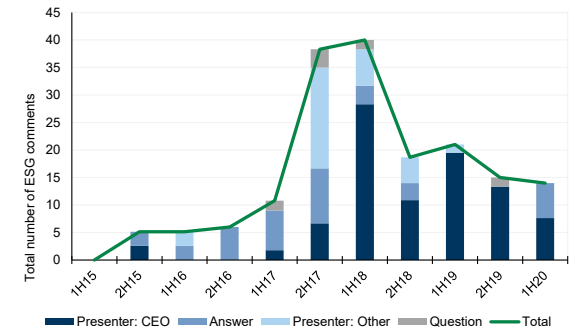
% of total ESG comments for STOXX 600 Health Care companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 86: In Australia volumes peaked in 2018 but fell in recent quarters

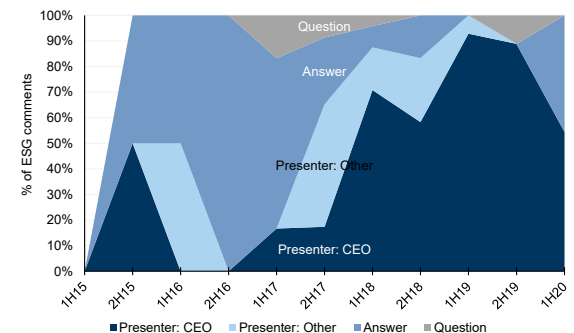
Total number of ESG comments for ASX 200 Health Care companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 89: In Australia, the majority of ESG comments came from CEO presentations

% of total ESG comments for ASX 200 Health Care companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 90: In the US, 'Water & Drought' is the most discussed topic...

Total number of unique ESG comments per keyword for S&P 500 Health Care companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Water & Drought	58	53	57	31	34	30	26	36	26	25	38	32	25	31	27	25	37	24	32	30	34	18
General Sustainability	33	42	48	27	42	46	45	38	32	28	24	26	15	18	15	21	18	30	21	24	16	14
Health & Safety	5	0	3	2	1	1	0	0	1	2	3	4	1	4	5	5	3	2	4	12	5	5
Corporate Social Impact	8	12	7	6	10	7	6	7	10	5	5	6	5	4	5	5	5	3	3	7	8	1
Plastic	0	0	0	2	0	1	1	5	6	6	7	7	3	2	3	1	4	0	1	3	7	1
Carbon, Emissions & Energy	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	2	3	7	3	1
Human Capital Management	0	1	1	5	0	2	1	2	2	0	1	2	2	3	1	2	0	2	0	2	2	11
Waste & Recycling	1	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0
Sustainability Reporting & Labels	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	1	2	1	2	1	1	2
Product Safety	4	1	1	2	1	2	1	1	5	3	2	0	2	1	2	3	0	2	2	1	1	0
Data privacy	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	1	2	1	0
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0
Sourcing & Supply Chain	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	109	107	124	79	84	93	83	89	80	75	80	77	59	66	57	64	72	70	67	78	86	60

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 91: ...while it is 'General Sustainability' in Europe...

Total number of unique ESG comments per keyword for STOXX 600 Health Care companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
General Sustainability	2	4	2	4	0	5	4	10	6	9	4	9	4	8	15	29	5	21	16	40	8	13
Water & Drought	7	2	4	5	9	8	0	10	2	6	11	12	15	34	10	22	5	12	16	13	8	8
Carbon, Emissions & Energy	0	0	0	0	0	0	0	0	0	0	2	0	0	5	0	1	0	4	0	21	5	14
Plastic	0	0	20	24	27	10	13	16	23	17	23	18	27	21	17	14	11	8	16	0	3	1
Health & Safety	5	0	0	0	0	0	0	0	0	2	0	6	4	5	2	4	0	2	0	4	7	5
Corporate Social Impact	2	2	0	0	0	0	0	0	0	3	0	0	0	2	4	2	2	2	5	5	5	2
Waste & Recycling	0	0	0	2	0	0	2	3	0	5	0	3	0	0	0	4	0	0	0	2	2	1
Human Capital Management	2	0	0	0	0	0	0	0	0	2	0	2	0	0	2	4	0	0	2	1	2	2
Sustainability Reporting & Labels	0	2	0	0	2	0	0	0	0	0	7	0	0	0	2	5	0	2	3	5	2	4
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Product Safety	2	0	0	2	0	0	0	0	0	2	2	0	2	2	0	0	2	0	0	0	0	0
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	2	0	4
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Governance	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Data privacy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
Total	19	7	24	33	39	18	15	29	27	33	47	42	46	68	39	55	21	31	43	53	34	44

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 92: ...as well as in Australia

Total number of unique ESG comments per keyword for ASX 200 Health Care companies by topic, 1H15-1H20

	1H 2015	2H 2015	1H 2016	2H 2016	1H 2017	2H 2017	1H 2018	2H 2018	1H 2019	2H 2019	1H 2020
General Sustainability	0	0	0	0	0	2	13	6	9	10	6
Corporate Social Impact	0	0	0	0	0	2	5	0	0	5	3
Water & Drought	0	3	0	0	4	25	25	8	8	3	4
Waste & Recycling	0	0	0	0	0	0	2	2	2	3	0
Carbon, Emissions & Energy	0	0	0	0	0	0	2	2	2	0	1
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	0	0
Sustainability Reporting & Labels	0	0	0	0	0	2	0	0	2	0	1
Health & Safety	0	0	3	0	0	2	3	2	3	0	0
Human Capital Management	0	3	0	0	0	0	0	2	3	0	3
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0
Product Safety	0	0	0	0	0	0	0	0	0	0	0
Plastic	0	0	3	6	4	7	0	0	0	0	1
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	2	2	0	0	0
Data privacy	0	0	0	0	0	0	0	0	0	0	0
Total	0	5	5	6	11	38	52	22	27	22	19

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Notable Health Care ESG discussions from recent earnings

General Sustainability

- On **Eli Lilly and Company's** earnings call 2020-01-30, the CEO discussed how Insulin Lispro helped nearly 79,000 US patients during December, complementing existing offerings from its Diabetes Solution Centre which helps 20,000 patients per month to better afford their insulin. **The company commits over \$5bn pa in long-term R&D and is committed to continuing pursuing sustainable business, social and environmental practices.**
- On **Novartis'** earnings call 2020-01-29, the CEO showcased the **Novartis in Society Report, which details the group's key ESG metrics** increasingly needed by investors and ratings agencies. Recent commitments were flagged, including **reducing the launch time lag for innovative medicines to less than 3 months for low- and middle-income countries** vs the US and Europe, committing to **carbon neutrality by 2025** and **tackling Scope 3 emissions**, and **delivering on the UN Equal Pay for Equal Work and Gender Equity goals.**
- On **AstraZeneca's** earnings call 2020-02-14, the CEO announced that the **firm had reduced carbon emissions from operations by almost a third and water consumption by almost a fifth**, but acknowledged that more progress is needed and that efforts would be increased.
- On **Estia Health's** earnings call 2020-02-24, the CEO highlighted initiatives including the completion of the current phase of the group's **solar and LED lighting program that would enable 63 homes to be retrofitted with energy-efficient systems**, a new program to **replace inefficient water heating and gas dryers**, and a partnership with a third party for electricity usage monitoring. Further, the company **completed an environmental and social risk baseline assessment**, and has **commenced a climate change resilience assessment** for its assets.

Real Estate

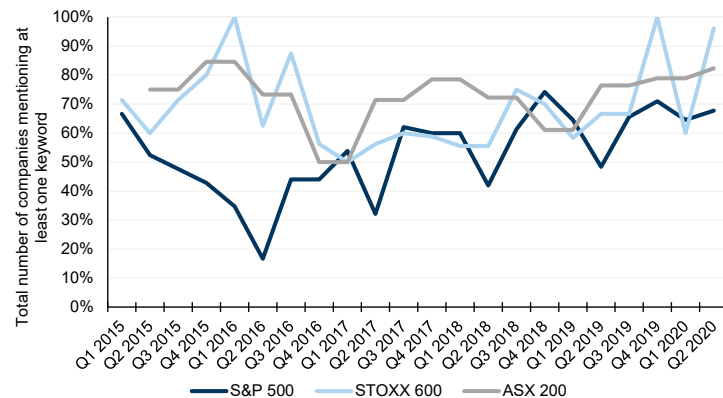
ESG has become a greater priority for European Real Estate than elsewhere. Mostly all (96%) of European Real Estate companies discussed ESG in 2Q20 earnings calls (vs 66% for the broader index), compared to only 68% of US Real Estate (vs 65% for the broader index), and 82% of Australian Real Estate (vs 72% for the broader index) ([Exhibit 93](#)).

Environmental themes most in focus across each region. The most discussed topics across 1Q20 and 2Q20 ([Exhibit 94](#)) were: S&P 500 - Recycle, Water, Corporate Responsibility, Governance and ESG; STOXX 600 - ESG, Carbon, Energy Efficiency, Water and Environmental; ASX 200 - Recycle, Carbon, Water, Governance and Emissions.

Accelerated volumes across Europe and Australia from 2019, with the US focus clearly cyclical based on reporting quarter. Total ESG comments from Real Estate in 2Q20 grew +5% yoy in the US (vs +18% yoy for the broader index), +138% yoy in Europe (vs +48% yoy for the broader index) and +3% yoy in Australia (vs. -4% yoy for the broader index) ([Exhibit 95](#), [Exhibit 96](#), [Exhibit 97](#)).

Exhibit 93: 96% of Real Estate in Europe discussed ESG in 2020

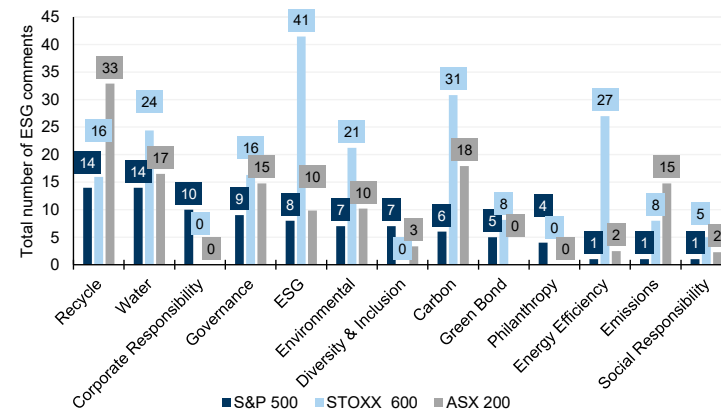
% of Real Estate companies mentioning ESG keywords in the S&P 500 and STOXX 600 (1Q15-2Q20) and ASX 200 (1H15-1H20)



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 94: 'Recycle' most discussed in the US and Australia, and 'ESG' in Europe

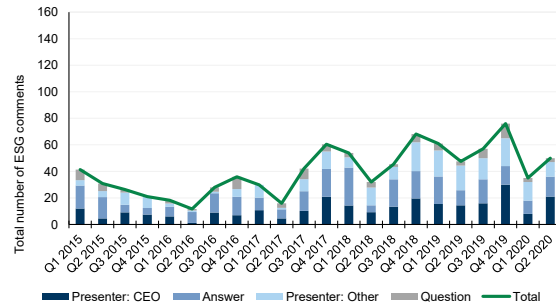
Top 10 most discussed keywords by S&P 500, STOXX 600 and ASX 200 Real Estate, 1Q20-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 95: ESG discussion has seen an upward trend since in the US since 2016

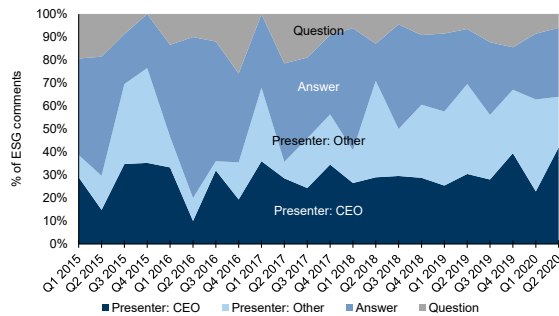
Total number of ESG comments for S&P 500 Real Estate companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 98: Management presentations led most of the discussions across S&P Real Estate...

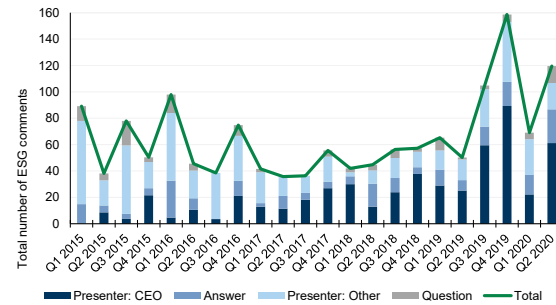
% of total ESG comments for S&P 500 Real Estate companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 96: In Europe, growth was slow until it accelerated in 2019

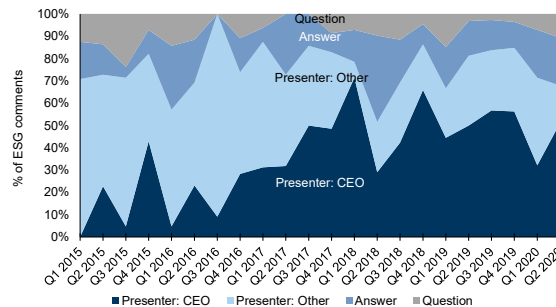
Total number of ESG comments for STOXX 600 Real Estate companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 99: ...similarly for STOXX Real Estate...

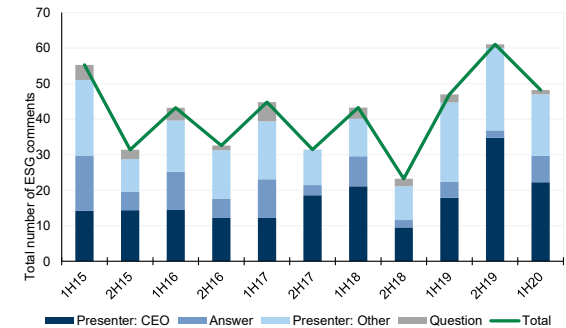
% of total ESG comments for STOXX 600 Real Estate companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 97: In Australia, volumes accelerated in 2019, but fell in recent quarters as Covid unfolded

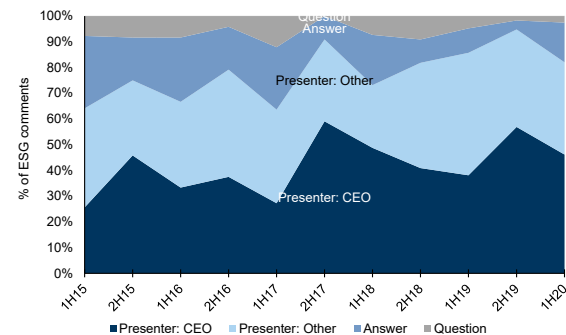
Total number of ESG comments for ASX 200 Real Estate companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 100: ...and even more notably in the ASX

% of total ESG comments for ASX 200 Real Estate companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 101: In the US, 'Waste & Recycling' is the most discussed topic...

Total number of unique ESG comments per keyword for S&P 500 Real Estate companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Waste & Recycling	23	24	19	16	13	7	8	24	10	9	26	44	30	21	21	28	25	23	24	31	8	6
Corporate Social Impact	0	0	1	1	0	0	0	0	0	0	1	2	1	3	2	7	2	8	3	5	8	9
General Sustainability	4	0	2	0	2	4	12	5	6	3	10	11	17	5	15	19	12	14	23	27	6	18
Water & Drought	12	6	3	1	2	1	7	3	13	0	3	6	6	1	2	6	6	2	5	3	5	9
Carbon, Emissions & Energy	1	1	1	0	0	0	4	0	2	3	1	2	2	3	3	8	19	5	8	21	3	7
Health & Safety	0	0	0	1	0	0	0	0	1	1	2	1	0	0	0	0	0	1	0	0	3	2
Human Capital Management	0	0	0	0	0	0	0	1	1	1	0	3	1	0	1	6	2	2	1	9	2	10
Data privacy	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	2	1
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5	3	2	3	8	1	4
Sustainability Reporting & Labels	1	0	1	0	0	0	0	0	0	2	0	0	0	1	5	4	4	1	2	8	0	2
Product Safety	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plastic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sourcing & Supply Chain	1	0	0	1	0	0	0	2	0	0	0	0	0	1	1	0	0	0	0	0	0	1
ESG Regulation	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	43	32	29	21	18	12	31	36	33	18	47	69	57	36	51	84	74	59	71	112	38	69

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 102: ...while in Europe 'Carbon, Emissions & Energy' has recently taken over...

Total number of unique ESG comments per keyword for STOXX 600 Real Estate companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Carbon, Emissions & Energy	0	0	0	5	0	7	4	10	5	3	0	6	3	6	13	13	7	17	40	62	25	47
General Sustainability	4	16	4	7	5	9	4	21	3	3	0	5	15	12	4	14	15	14	17	75	32	47
Water & Drought	26	0	30	2	42	5	21	2	10	7	21	6	18	4	15	3	27	8	28	11	17	9
Waste & Recycling	56	10	37	31	47	16	11	28	16	13	3	27	9	23	22	27	12	14	14	28	7	10
Sustainability Reporting & Labels	4	9	7	7	5	7	0	18	5	7	8	6	3	1	9	7	2	6	3	13	7	6
Corporate Social Impact	0	2	0	2	0	4	0	2	0	0	0	5	0	4	0	5	5	6	9	7	5	14
Sustainable Investment	0	2	0	0	0	2	4	3	5	3	8	6	0	1	0	0	0	0	0	4	5	6
Health & Safety	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Human Capital Management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3	0	0
Product Safety	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plastic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Global Goals & Agreements	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	1
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
ESG Regulation	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	1
Governance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Data privacy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Total	89	38	78	49	98	44	39	73	39	34	39	56	45	46	52	56	60	50	71	146	74	100

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 103: ...as well as in Australia

Total number of unique ESG comments per keyword for ASX 200 Real Estate companies by topic, 1H15-1H20

	1H 2015	2H 2015	1H 2016	2H 2016	1H 2017	2H 2017	1H 2018	2H 2018	1H 2019	2H 2019	1H 2020
Carbon, Emissions & Energy	1	0	4	1	4	3	8	3	9	22	19
General Sustainability	0	0	4	3	11	6	8	4	9	20	15
Waste & Recycling	43	24	32	23	22	13	25	15	26	18	16
Water & Drought	4	0	1	3	7	6	2	2	3	16	5
Sustainability Reporting & Labels	0	4	5	0	1	1	0	0	3	6	6
Corporate Social Impact	0	0	0	0	3	3	2	0	1	3	4
Human Capital Management	1	1	0	0	1	0	0	2	2	3	2
Health & Safety	3	3	1	3	3	1	3	0	0	1	4
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	0	0
Sustainable Investment	3	0	0	0	0	0	0	0	0	0	0
Product Safety	0	0	0	0	0	0	0	0	0	0	0
Plastic	0	0	0	0	0	0	0	0	0	0	0
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0
Data privacy	0	0	0	0	0	0	0	0	0	0	0
Total	55	31	47	33	52	33	50	26	54	89	70

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Notable Real Estate discussions from recent earnings

Waste & Recycling

- On **Charter Hall Retail Real Estate Investment Trust's** earnings call 2019-08-15, the CEO of Retail, Fund Manager and ED noted that the **firm had implemented waste management programs to double landfill diversion rates across the portfolio**, and additionally **recycled 90 million containers through an ongoing recycling partnership with TOMRA**. The company is also committed to **engaging with the communities** within which it operates.

Carbon, Emissions & Energy

- On **British Land Company's** earnings call 2020-05-27, the CFO reiterated the group's key **commitment to reach net zero carbon by 2030**, which includes initiatives such as **ensuring all future developments are net zero**, that **all developments have 50% less embodied carbon**, and **by reducing operational carbon by a further 75%**. The company's **approach is based on the reuse, recycle, and resource sustainably**, with offsets only being used as a last resort.
- On **Vornado Realty Trust's** earnings call 2020-02-19, the President noted the company's **priority to reduce its carbon footprint and mitigate its contribution to climate change**. Over the past 10 years, the company has **reduced same-store energy consumption by 25%**, aiming for further progress through **continued energy retrofits, smart building technology and tenant engagement**. **Renewable energy is also in focus as the company transitions towards carbon neutrality**. Recent achievements were used to evidence the company's position against recently introduced climate laws, such as being Energy Star Partner of the Year for the seventh time and a NAREIT Leader in the Light Award recipient for the tenth year in a row. The speaker also states the firm is a top performer among global real estate sustainability benchmark respondents and has been **cited as the industry model for its audited ESG reports by the SEC**.

General Sustainability

- On **LEG Immobilien's** earnings call 2020-05-11, the CEO discussed the firm's **commitment to all aspects of ESG and target setting**. Notably, the company is **continuing to modernize 3% of its portfolio to improve energy efficiency**, and is working to **adopt new ESG reporting standards, such as TCFD and SASB**.
- On **Dexus's** earnings call 2020-02-05, the CEO discussed how the **Australian bushfire events put in focus the impact that the environment can have on communities, and that the firm remains focused on enhancing property resilience to mitigate environment- and climate-related impacts**. In the company's journey towards net zero emissions, its off-site renewable energy supply agreement has commenced across NSW, and the presenter notes that the firm achieved excellent results across leading global ESG benchmarks.
- On **Charter Hall Group's** earnings call 2020-02-19, the CIO highlighted that the company already has the **largest Green Star rated portfolio in**

the country, but is continuing to look for further opportunities to improve. The company now **has net zero targets for all assets within operational control by 2030** and is focused on working with tenants and contracts to further help reduce emissions. The company is putting **climate change adoption plans in place across its portfolio** and will **continue rolling out solar with 6.9MW of solar PV**, up 1.7MW in the latest period, **generating enough power for 314 homes across its assets**.

Consumer Staples

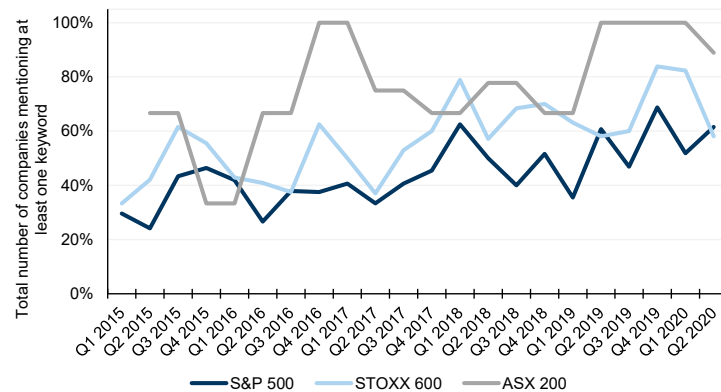
Australian Consumer Staples companies more engaged than their US and European peers. 89% of Australian Consumer Staples companies discussed ESG in 2Q20 (vs 72% for the broader index), compared with 62% of US Consumer Staples (vs 65% for the broader index) and 58% of European Consumer Staples (vs 66% for the broader index) ([Exhibit 104](#)).

‘Water’ mostly in focus across all regions. The most discussed keywords across 1Q20 and 2Q20 were ([Exhibit 105](#)): [S&P 500](#) - Water, Diversity & Inclusion, ESG, Employee Safety and Environmental; [STOXX 600](#) - Water, ESG, Carbon, Plastic and Environmental; [ASX 200](#) - Water, Environmental, Recycle, Carbon and Plastic.

Accelerating volumes in Europe and Australia were halted by the pandemic, while growth has remained constant in the US. Total ESG comments by Consumer Staples in 2Q20 grew +21% yoy in the US (vs +18% yoy for the broader index), +35% yoy in Europe (vs +48% yoy for the broader index) and declined -14% yoy in Australia (vs. -4% yoy for the broader index) ([Exhibit 106](#), [Exhibit 107](#), [Exhibit 108](#)).

Exhibit 104: 89% of Consumer Staples in the ASX 200 discussed ESG in 2Q20

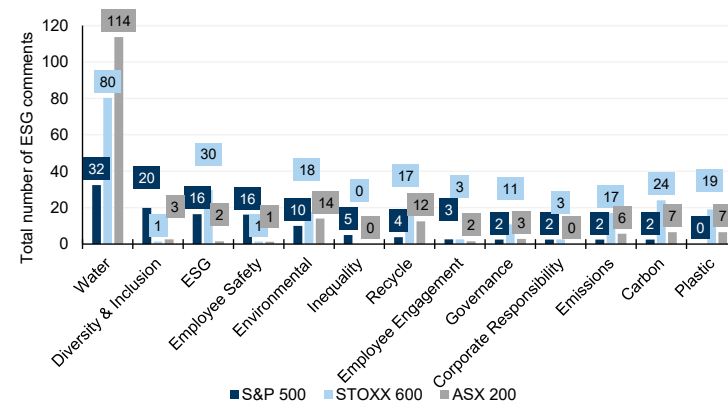
% of Consumer Staples companies mentioning ESG keywords in the S&P 500 and STOXX 600 (1Q15-2Q20) and ASX 200 (1H15-1H20)



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 105: ‘Water’ most discussed in all regions

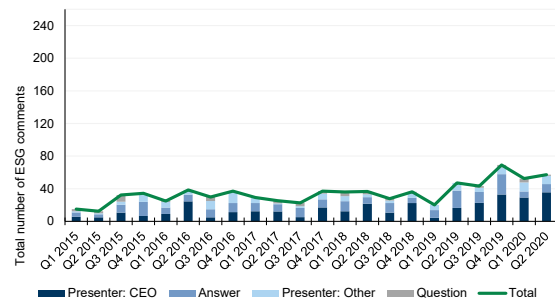
Top 10 most discussed keywords by S&P 500, STOXX 600 and ASX 200 Consumer Staples, 1Q20-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 106: ESG discussions have been growing in the US from a lower base

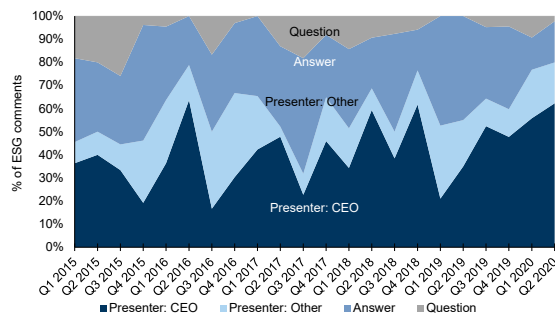
Total number of ESG comments for S&P 500 Consumer Staples companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 109: CEO presentations are the major source of ESG discussions across S&P Consumer Staples...

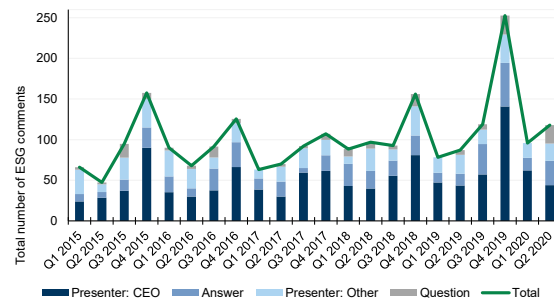
% of total ESG comments for S&P 500 Consumer Staples companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 107: Discussions spiked in 2019 in Europe

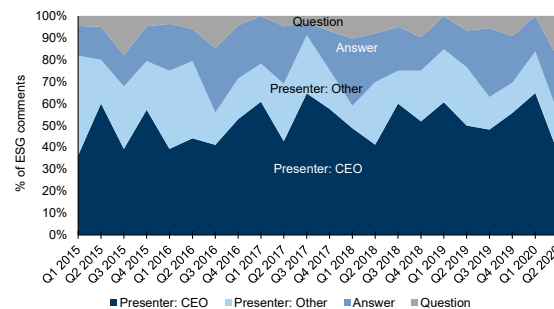
Total number of ESG comments for STOXX 600 Consumer Staples companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 110: ...similarly in Europe...

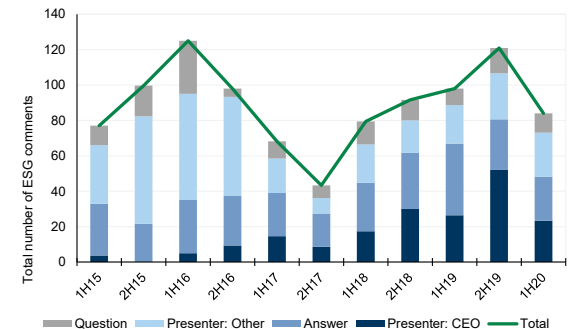
% of total ESG comments for STOXX 600 Consumer Staples companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 108: In Australia, volumes accelerated in 2018 but declined recently due to Covid

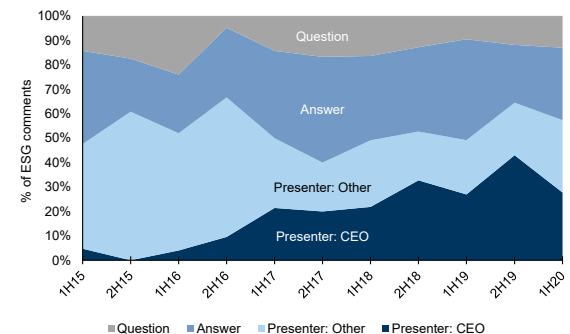
Total number of ESG comments for ASX 200 Consumer Staples companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 111: ...while in Australia the share of CEO presentations grew from a lower base

% of total ESG comments for ASX 200 Consumer Staples companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 112: In the US, 'Water & Drought' is the most discussed topic...

Total number of unique ESG comments per keyword for S&P 500 Consumer Staples companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Water & Drought	7	5	8	13	12	20	17	19	15	12	14	14	17	14	17	16	12	24	21	31	16	17
Human Capital Management	1	1	1	1	3	0	0	0	0	0	3	3	2	1	1	2	0	0	2	2	15	14
General Sustainability	3	1	7	8	1	7	4	9	6	0	1	8	4	7	3	7	4	6	7	7	9	20
Health & Safety	1	0	0	0	0	0	1	1	1	1	0	2	1	1	0	0	0	0	2	4	9	9
Corporate Social Impact	0	0	0	0	0	1	0	1	0	1	1	1	1	2	2	5	1	5	0	3	5	4
Carbon, Emissions & Energy	3	2	10	5	6	5	1	6	6	8	2	4	3	2	0	2	0	4	2	10	2	3
Sustainability Reporting & Labels	0	0	4	0	0	4	0	0	0	0	0	0	0	2	1	2	0	0	3	1	1	3
Waste & Recycling	0	1	7	1	0	2	1	1	3	0	1	7	0	8	3	7	7	13	9	23	1	5
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
Product Safety	0	0	0	3	1	4	5	2	2	3	0	1	6	2	3	0	1	1	0	1	0	0
Plastic	0	0	0	4	0	1	0	2	2	1	1	7	2	5	0	3	3	7	8	14	0	0
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sourcing & Supply Chain	0	1	0	0	1	2	1	0	1	0	0	1	1	0	0	1	0	0	1	1	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Data privacy	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	16	12	37	36	25	46	31	42	36	26	24	48	37	45	31	48	29	59	56	99	57	74

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 113: ...as well as in the STOXX...

Total number of unique ESG comments per keyword for STOXX 600 Consumer Staples companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Water & Drought	33	33	58	88	35	46	51	79	22	38	27	66	25	54	25	87	9	49	37	102	21	60
Carbon, Emissions & Energy	12	0	14	38	35	6	27	11	22	3	43	22	32	14	28	32	43	16	46	70	28	16
General Sustainability	9	2	14	18	3	2	0	23	14	5	11	13	9	17	16	17	14	13	20	35	31	31
Waste & Recycling	0	5	3	3	0	2	0	9	6	8	5	10	20	9	14	17	12	13	22	65	13	6
Plastic	0	0	3	5	0	4	0	4	0	3	11	7	18	5	14	14	12	17	15	55	10	9
Corporate Social Impact	3	5	3	10	13	2	8	0	3	7	8	4	5	0	5	9	2	4	7	10	5	4
Human Capital Management	0	0	0	0	3	0	0	0	3	7	8	1	2	0	2	3	2	1	2	4	3	1
Sustainability Reporting & Labels	9	2	3	18	3	0	5	0	8	2	11	4	7	2	7	8	5	3	9	17	3	6
Sourcing & Supply Chain	0	2	0	0	0	2	3	2	3	2	0	0	0	0	2	0	2	1	0	3	3	1
Health & Safety	0	0	0	0	0	8	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Product Safety	0	0	0	0	0	0	0	2	0	0	0	0	0	3	0	0	0	0	0	0	0	0
Global Goals & Agreements	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Governance	0	0	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Data privacy	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Total	21	17	30	55	23	20	16	43	36	33	54	44	61	35	60	72	54	55	84	195	67	64

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 114: ...and in the ASX

Total number of unique ESG comments per keyword for ASX 200 Consumer Staples companies by topic, 1H15-1H20

	1H 2015	2H 2015	1H 2016	2H 2016	1H 2017	2H 2017	1H 2018	2H 2018	1H 2019	2H 2019	1H 2020
Water & Drought	73	95	100	56	54	27	52	75	58	98	75
Carbon, Emissions & Energy	0	4	0	0	0	0	1	5	6	14	5
General Sustainability	4	0	10	14	8	6	6	8	8	9	9
Waste & Recycling	0	0	15	23	0	4	6	7	16	8	5
Plastic	0	0	0	0	0	0	0	10	19	7	0
Health & Safety	0	0	0	0	7	6	6	3	5	5	2
Global Goals & Agreements	0	0	0	0	0	0	0	2	2	4	0
Human Capital Management	0	0	0	0	0	0	0	2	0	3	2
Sustainability Reporting & Labels	0	0	10	9	3	1	1	2	0	1	3
Corporate Social Impact	0	0	0	0	0	0	1	2	9	1	2
Product Safety	0	0	0	0	0	0	0	0	0	1	0
Sourcing & Supply Chain	0	0	5	0	0	0	0	0	0	1	0
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0
Data privacy	0	0	0	0	0	0	0	0	0	0	0
Total	77	100	140	103	73	45	88	116	123	162	101

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Notable Consumer Staples ESG discussions from recent earnings

Water & Drought

- On **Church & Dwight Co.'s** earnings call 2020-01-31, the CEO outlined some of the company's ESG goals, including **a 25% reduction of water and wastewater by 2022, water recycling of 75% by the year of the year, and 100% carbon neutrality by 2025** through green electricity and reforestation. **Today, the company is 60% carbon-neutral, achieved partially through offsets.**
- On **Costa's** (Australian) earnings call 2020-02-26, the CEO highlighted the group's increasing focus on enhanced water collection and recycling initiatives, which included **recycling 200ML of drain water in its glasshouse tomato crops in 2019**, as well as the use of renewable energy with solar power at the Monarto mushroom facility.

Waste & Recycling

- On **Coca Cola's** earnings call 2020-01-30, the CEO discussed the company's progress on **sustainability initiatives, addressing water stewardship, sugar reduction, women's empowerment and climate**. In particular, **the World Without Waste initiative that aims to reduce packaging waste** was highlighted, with notable achievements including the availability of **bottles made with 100% recycled PET in 12 markets with more planned**, and that **Coca-Cola Sweden will be the first market globally to transition to 100% recycled PET for all plastic bottles made in the country - a fully circular economy.**
- On **Essity's** earnings call 2020-04-23, the CEO noted some of the firm's sustainability innovations, including its **feminine brands having all paper-based packaging based on recycled fibre and all plastic packing having at least 50% of plastic coming from either recycled fibre or plastic sourced from renewable sources**. In Tempo, the products are also now made from 100% paper packaging after the plastic usually at the opening of the facial boxes was replaced with paper.
- On **Coca Cola Amatil's** earnings call 2020-02-20, the Group MD and Executive Director announced that **7 out of 10 of the group's bottles in Australia were made from 100% recycled materials**, which has **more than doubled the company's use of recycled plastic and bottles**, and secured Coca-Cola's position as a market leader in recycled packaging. Further, the company said it was the **first in the broader Coca-Cola system to make 100% recycled bottles for carbonated beverages of or under 600ml on an ongoing basis** which is very much being driven by demand from consumers.

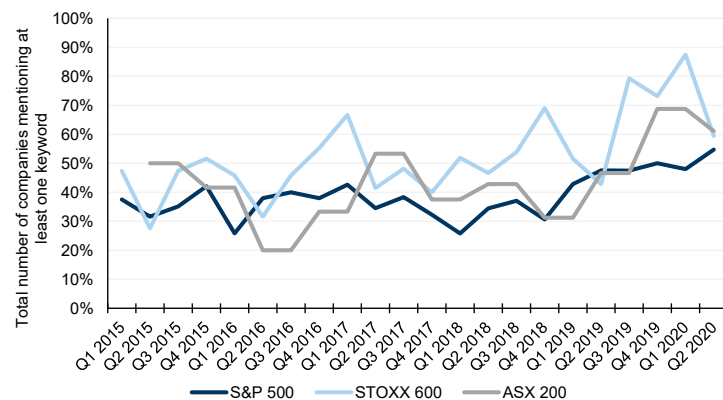
Consumer Discretionary

Consumer Discretionary companies are slightly less engaged on ESG discussion relative to the broader indices. 55% of the Consumer Discretionary companies in the US discussed ESG keywords in 2Q20 (vs. 65% for the broader index), compared with 59% of European Consumer Discretionary (vs. 66% for the broader index) and 61% of Australian Consumer Discretionary (vs. 72% for the broader index) ([Exhibit 115](#)).

‘Water’ mostly in focus across all regions. The most discussed keywords across 1Q20 and 2Q20 were ([Exhibit 116](#)): [S&P 500](#) - Water, Diversity & Inclusion, Environmental, Recycle and Employee Safety; [STOXX 600](#) - Water, Carbon, Environmental, Emissions and ESG; [ASX 200](#) - Water, Governance, Recycle, Emissions and Carbon.

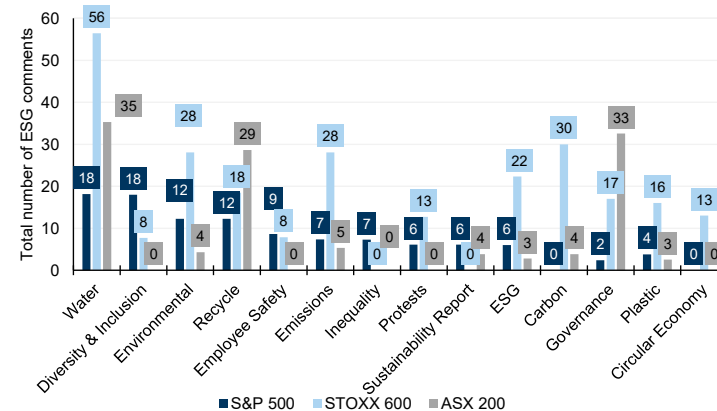
ESG has gained significant momentum in Europe and Australia since 2019. Volumes of ESG discussions in Europe and Australia increased significantly in the second half of 2019. In the US, total ESG comments by Consumer Discretionary in 2Q20 grew +13% yoy in the US (vs. +18% yoy for the broader index), +122% yoy in Europe (vs. +48% yoy for the broader index) and +2% yoy in Australia (vs. -4% yoy for the broader index) ([Exhibit 117](#), [Exhibit 118](#), [Exhibit 119](#))

Exhibit 115: ESG discussions in Consumer Discretionary on the rise, especially in Europe
% of Consumer Discretionary companies mentioning ESG keywords in the S&P 500 and STOXX 600 (1Q15-2Q20) and ASX 200 (1H15-1H20)



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

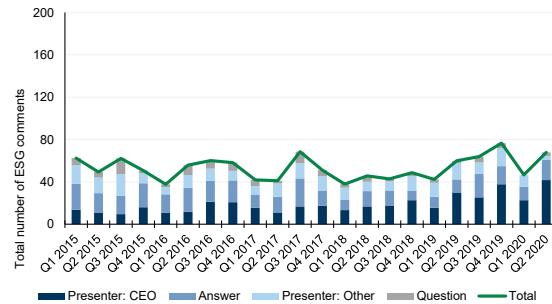
Exhibit 116: ‘Water’ most discussed across all 3 indexes
Top 10 most discussed keywords by S&P 500, STOXX 600 and ASX 200 Consumer Discretionary, 1Q20-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 117: ESG growth has been sluggish in the US...

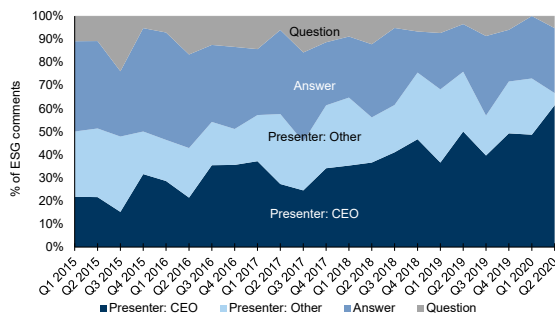
Total number of ESG comments for S&P 500 Consumer Discretionary companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 120: CEO presentations are increasingly leading ESG discussions in the US

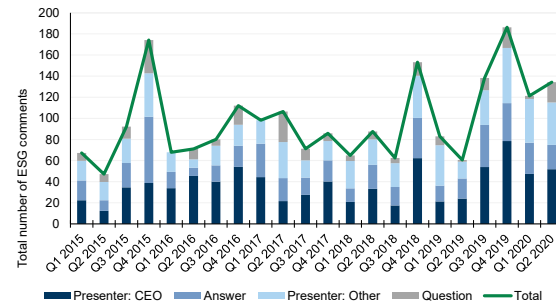
% of total ESG comments for S&P 500 Consumer Discretionary companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 118: ...while in Europe discussions accelerated in 3Q19, albeit volatile...

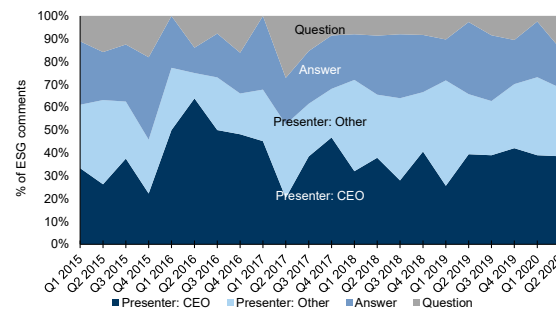
Total number of ESG comments for STOXX 600 Consumer Discretionary companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 121: In the STOXX, the share from CEO presentations has been fairly stable in recent quarters

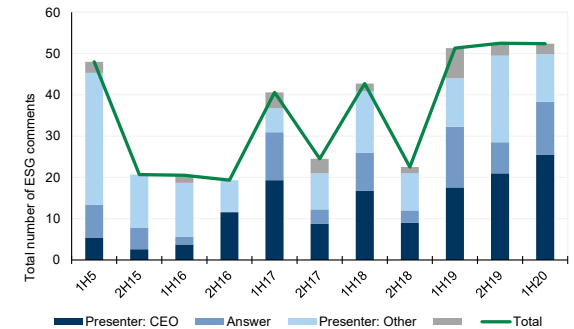
% of total ESG comments for STOXX 600 Consumer Discretionary companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 119: ...with Australia volumes staying at a high level since 2019

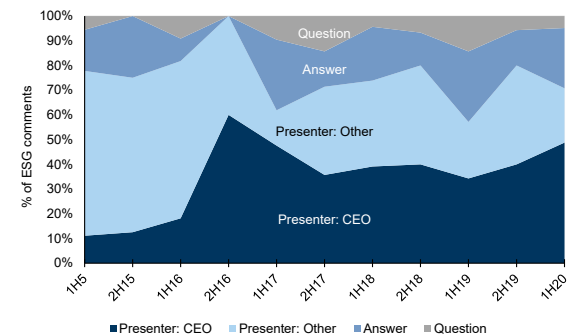
Total number of ESG comments for ASX 200 Consumer Discretionary companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 122: In Australia the majority of discussions come from management presentations

% of total ESG comments for ASX 200 Consumer Discretionary companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 123: In the S&P, 'Water & Drought' is the most discussed topic...

Total number of unique ESG comments per keyword for S&P 500 Consumer Discretionary companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Water & Drought	31	27	24	17	20	29	14	19	13	9	23	8	8	12	10	9	6	10	14	13	5	13
Carbon, Emissions & Energy	8	4	4	7	11	4	14	5	8	9	13	19	9	13	7	4	8	12	8	13	5	6
Waste & Recycling	3	5	9	8	1	7	5	10	8	10	18	9	6	8	4	9	10	8	10	14	6	6
General Sustainability	10	4	5	5	0	4	5	3	2	5	5	3	6	7	10	9	9	6	9	17	8	13
Human Capital Management	1	0	0	7	0	1	5	4	4	5	2	8	4	2	7	6	4	5	13	13	5	26
Corporate Social Impact	1	4	1	4	4	1	5	4	4	1	2	0	4	4	4	2	4	10	8	10	14	7
Data privacy	4	5	11	4	0	4	1	5	1	2	5	1	1	0	0	6	1	1	1	0	0	0
Health & Safety	1	0	0	0	1	1	4	0	0	0	1	0	3	0	1	2	2	4	3	5	6	6
Plastic	3	1	0	1	0	0	0	3	0	1	0	0	0	3	2	3	3	2	7	0	4	0
Sustainability Reporting & Labels	0	0	0	1	1	0	0	0	1	0	1	0	0	2	0	1	0	1	1	6	3	4
Sourcing & Supply Chain	1	0	0	1	0	4	5	3	0	0	0	1	0	0	1	0	0	4	0	0	0	1
Product Safety	0	0	0	1	0	0	5	5	1	0	0	2	0	0	0	0	2	2	0	0	0	0
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	64	51	62	57	39	56	63	61	43	42	71	52	41	54	47	52	51	68	74	89	55	82

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 124: ...while in the STOXX it is 'Carbon, Emissions & Energy'...

Total number of unique ESG comments per keyword for STOXX 600 Consumer Discretionary companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Carbon, Emissions & Energy	19	20	35	126	12	14	25	22	16	29	14	27	5	18	15	45	17	24	56	100	24	44
General Sustainability	22	7	19	17	6	10	31	10	29	20	27	22	23	12	10	21	11	14	26	44	24	44
Plastic	4	17	4	7	3	39	3	48	3	34	5	18	5	39	13	51	4	6	19	11	12	4
Water & Drought	7	5	4	7	12	12	0	16	16	9	8	5	5	9	18	19	19	3	9	28	30	27
Waste & Recycling	0	0	8	0	3	4	3	2	6	5	8	11	3	8	3	11	19	11	23	28	18	13
Corporate Social Impact	4	0	4	17	3	2	9	8	13	9	8	4	8	3	3	13	13	3	14	2	24	17
Sustainability Reporting & Labels	0	0	19	5	28	0	9	0	19	2	11	2	8	3	10	5	6	3	9	15	3	2
Human Capital Management	11	0	4	0	0	0	9	2	10	0	3	2	3	2	3	8	2	3	2	13	0	8
Health & Safety	4	0	0	0	0	0	0	0	3	2	0	2	0	0	0	0	2	0	2	2	6	2
Data privacy	0	0	0	2	0	0	0	6	0	0	0	0	13	2	0	0	0	0	0	0	0	0
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	6	0
Global Goals & Agreements	0	0	0	2	0	0	0	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	2	0	2	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Product Safety	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	71	50	96	184	68	81	89	116	114	110	88	93	73	95	75	172	96	70	162	245	145	163

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 125: ...with Australia most focused on 'Water & Drought'

Total number of unique ESG comments per keyword for ASX 200 Consumer Discretionary companies by topic, 1H15-1H20

	1H 2015	2H 2015	1H 2016	2H 2016	1H 2017	2H 2017	1H 2018	2H 2018	1H 2019	2H 2019	1H 2020
Water & Drought	3	3	7	4	10	7	17	12	16	27	14
Waste & Recycling	16	5	2	4	8	4	6	2	26	12	17
General Sustainability	11	3	0	2	4	2	4	0	0	11	5
Health & Safety	16	10	9	6	6	9	8	8	7	9	12
Carbon, Emissions & Energy	3	0	0	0	0	2	2	3	4	2	3
Corporate Social Impact	3	0	0	2	0	0	2	2	0	2	3
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	0	0
Sustainability Reporting & Labels	0	0	0	0	0	0	2	0	0	0	4
Human Capital Management	0	0	2	2	2	0	4	2	1	0	0
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0
Product Safety	0	0	0	0	10	0	0	0	0	0	1
Plastic	0	3	0	2	2	0	2	0	0	0	3
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0
Data privacy	0	0	0	0	0	2	0	0	0	0	0
Total	51	23	21	21	43	26	46	27	56	62	66

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Notable Consumer Discretionary ESG discussions from recent earnings

Waste & Recycling

- On **Ulta Beauty's** earnings call 2020-08-27, the CEO and director announced the firm's pledge to ensure **50% of all packaging sold either be made from recycled or bio-sourced materials, or be recyclable or refillable, by 2025**. The company will pilot a circular shopping experience with Loop in early 2021, a reusable packaging pioneer.
- On **Hennes & Mauritz's** earnings call 2020-01-30, the CEO noted that **sustainability initiatives are good for the company and are increasing in importance for both customers and employees**. The company aims to be a sustainability leader in the fashion industry with circular solutions, reduced energy use and more renewable energy. H&M has set a target of **100% recycled or sustainably sourced materials by 2030**, and continues to ensure good working conditions in the supply chain.

Carbon, Emissions & Energy

- On **Carnival's** earnings call 2019-12-20, the CEO highlighted sustainability achievements, including a **4% reduction in per unit fuel consumption in 2019 with another 4% reduction expected in 2020 to bring the cumulative reduction in fuel consumption per ALBD to 35%**. The company also joined the **Getting to Zero Coalition** which is an alliance of organisations across the maritime, energy, infrastructure and finance sectors that are **focused on accelerating the decarbonisation of international shipping**.
- On **Daimler's** earnings call 2020-04-29, the Chairman of the Management Board and CEO & Head of Mercedes-Benz Cars Division reinforced the **firm's commitment to investing in electrification, including hybrids, digitization and software architectures – all non-negotiable elements for the company's future**. Near-term low-carbon product launches were discussed, including both the latest generations of combustion engines with 48-volt systems and multiple plug-in hybrid.
- On **Wesfarmers'** earnings call 2019-08-27, the MD of Officeworks reiterated the firm's **commitment to responsible and sustainable business which supports communities**. A few accomplishments for the year were highlighted, **including a 7% reduction in carbon emissions and an improvement in operational waste recycling from 76% to 82%**.

Communication Services

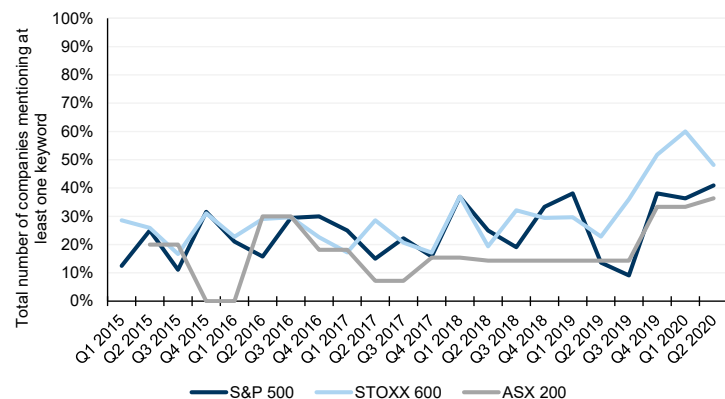
Communication Services companies less engaged than their broader indices. 41% of US Communication Services companies discussed ESG in 2Q20 (vs. 65% for the broader index), compared with 48% of European Communication Services (vs. 66% for the broader index) and 36% of Australian Communication Services (vs. 72% for the broader index) (Exhibit 126). Each company made, on average, 1.3 comments in the US (vs. 3.7 for the broader index), 1.6 comments in Europe (vs. 4.9 for the broader index) and 2.0 comments in Australia (vs. 5.5 for the broader index).

‘Governance’ the key topic in the US and Europe, while ‘Protests’ most common in Australia. The most discussed keywords across 1Q20 and 2Q20 were (Exhibit 127): S&P 500 - Governance, Diversity & Inclusion, Environmental, Charity and Protests; STOXX 600 - Governance, Emissions, Carbon, Environmental and Recycle; ASX 200 - Protests, Employee Engagement, Environmental and Social Responsibility.

Catching up - the sector saw high volume growth in 2020. The volume of ESG discussions has been rising rapidly in all three regions since 2019, despite 1Q20 declines due to the pandemic. Total ESG comments by Communication Services in 2Q20 grew +200% yoy in the US (vs. +18% yoy for the broader index), +94% yoy in Europe (vs. +48% yoy for the broader index) and +89% yoy in Australia (vs. -4% yoy for the broader index) (Exhibit 128, Exhibit 129, Exhibit 130)

Exhibit 126: ESG discussions are rising from a low level across regions

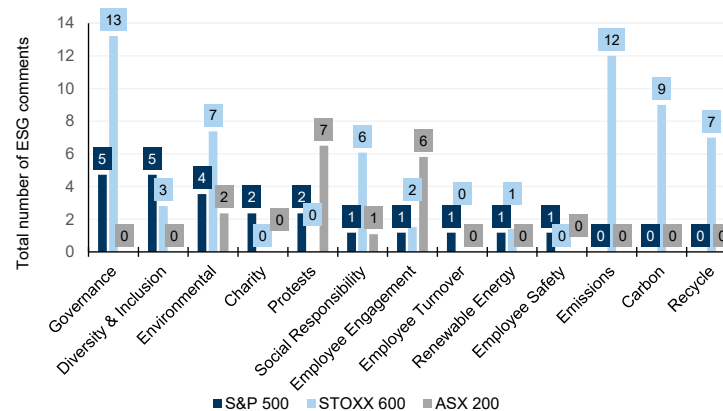
% of Communication Services companies mentioning ESG keywords in the S&P 500 and STOXX 600 (1Q15-2Q20), and ASX 200 (1H15-1H20)



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 127: ‘Governance’ most discussed in the US and Europe, ‘Protests’ in Australia

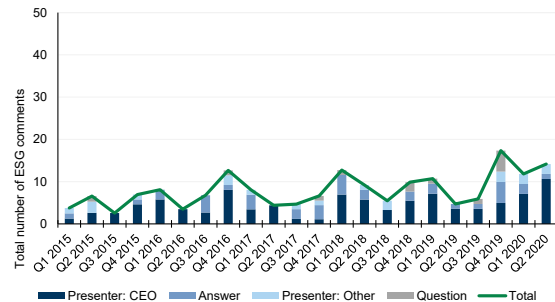
Top 10 most discussed keywords by S&P 500, STOXX 600, and ASX 200 Communication Services, 1Q20-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 128: ESG discussions on the rise from low levels in the US...

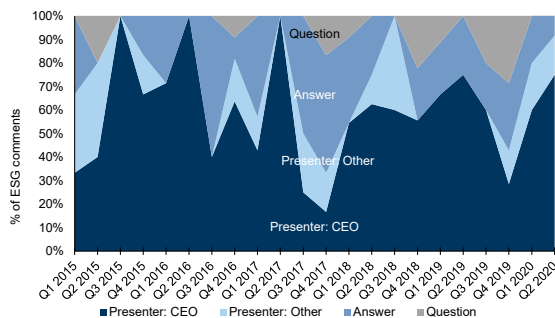
Total number of ESG comments for S&P 500 Communication Services companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 131: CEO presentations are the predominant source of ESG discussions in the US...

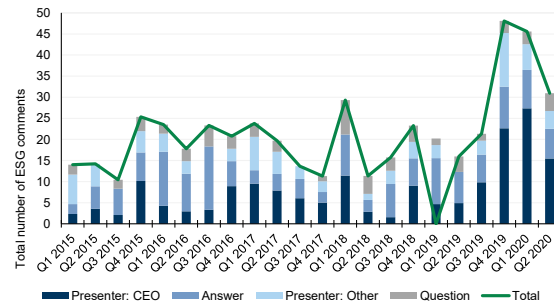
% of total ESG comments for S&P 500 Communication Services companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 129: ...while in Europe volumes spiked in 2019, despite a dip in 2020 due to Covid

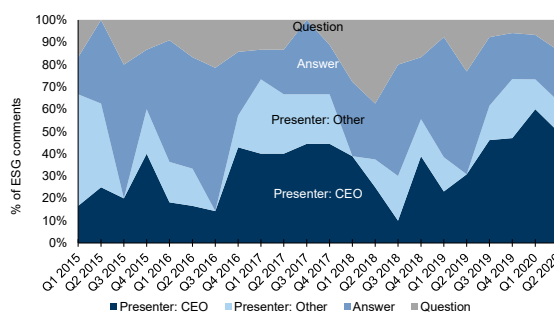
Total number of ESG comments for STOXX 600 Communication Services companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 132: ...while in the STOXX, share of CEO presentations grew from a lower base

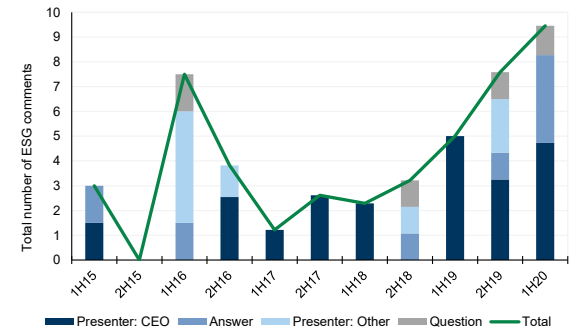
% of total ESG comments for STOXX 600 Communication Services companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 130: In Australia, ESG discussions grew consistently since 2017

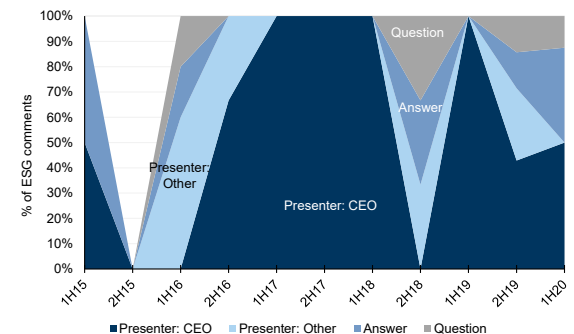
Total number of ESG comments for ASX 200 Communication Services companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 133: In ASX, CEO presentations led most of the discussions

% of total ESG comments for ASX 200 Communication Services companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 134: In the US, 'General Sustainability' is the most discussed topic in recent quarters...

Total number of unique ESG comments per keyword for S&P Communication Services companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
General Sustainability	0	4	0	2	1	1	0	0	0	0	1	4	1	2	1	4	2	4	0	5	4	5
Water & Drought	4	3	0	2	1	0	4	5	6	1	0	0	2	0	0	2	4	0	0	6	1	0
Human Capital Management	0	0	3	1	3	1	3	3	1	1	0	0	1	3	1	0	1	1	0	4	1	6
Carbon, Emissions & Energy	0	0	0	0	0	1	0	3	0	1	1	1	1	0	0	1	1	0	8	5	0	1
Data privacy	0	0	0	0	1	0	0	0	1	0	1	0	6	2	2	3	2	0	0	2	0	0
Corporate Social Impact	0	0	0	1	1	0	0	0	0	1	1	1	1	1	0	0	0	1	0	2	5	4
Sustainability Reporting & Labels	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Health & Safety	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
Plastic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Global Goals & Agreements	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Waste & Recycling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Product Safety	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	4	7	3	7	8	3	7	13	8	4	5	7	13	9	5	11	12	6	8	25	12	17

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 135: ...while 'General Sustainability' been consistently the most discussed in the STOXX

Total number of unique ESG comments per keyword for STOXX 600 Communication Services companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
General Sustainability	7	7	6	15	13	13	15	10	16	12	8	6	13	4	6	12	5	10	10	23	15	10
Carbon, Emissions & Energy	0	0	0	0	0	0	0	0	0	0	0	0	10	1	5	6	9	4	5	16	14	11
Corporate Social Impact	5	5	2	5	0	1	2	3	2	0	0	1	0	0	0	1	3	0	5	3	9	0
Waste & Recycling	0	0	0	2	0	1	0	1	0	1	0	0	0	0	2	0	0	1	0	4	3	6
Human Capital Management	0	0	0	0	0	1	0	0	2	0	0	0	0	1	0	0	0	2	4	3	4	4
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	3	3
Water & Drought	2	0	2	2	9	0	7	3	2	4	3	1	2	3	3	3	5	2	0	1	2	0
Global Goals & Agreements	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	2	1
Health & Safety	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Sustainability Reporting & Labels	0	0	2	0	0	0	2	3	0	0	3	1	5	0	0	0	0	0	2	6	0	4
Product Safety	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plastic	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	0
Sourcing & Supply Chain	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0
Data privacy	0	0	0	2	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0
Total	14	16	13	25	24	18	25	22	24	20	14	11	31	11	16	25	23	17	23	65	50	39

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 136: In Australia, 'Corporate Social Impact' is the most discussed topic

Total number of unique ESG comments per keyword for ASX 200 Communication Services companies by topic, 1H15-1H20

	1H 2015	2H 2015	1H 2016	2H 2016	1H 2017	2H 2017	1H 2018	2H 2018	1H 2019	2H 2019	1H 2020
Corporate Social Impact	0	0	2	0	0	0	0	0	0	3	2
Water & Drought	3	0	2	0	0	0	1	3	1	2	0
Sustainability Reporting & Labels	0	0	0	0	0	0	0	0	0	0	0
Human Capital Management	0	0	0	0	0	0	1	0	4	1	5
Carbon, Emissions & Energy	0	0	0	0	0	0	0	0	0	0	0
General Sustainability	0	0	2	3	0	3	0	0	1	0	2
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	0	0
Health & Safety	0	0	0	0	0	0	0	0	0	0	0
Waste & Recycling	0	0	3	1	0	0	0	0	0	0	0
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0
Product Safety	0	0	0	0	0	0	0	0	0	0	0
Plastic	0	0	0	0	0	0	0	0	0	0	0
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0
Data privacy	0	0	0	0	0	0	0	0	0	0	0
Total	3	0	8	4	1	3	2	3	7	8	9

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Notable Communication Services ESG discussions from recent earnings

General Sustainability

- On **Alphabet's** earnings call 2019-10-28, the CFO noted that **sustainability cuts across every element of the business, including in the technical infrastructure, in product development, with the group's facilities, and what the firm is doing with AI**. For example, the company is **applying machine learning to energy efficiency in its data centers**, which has helped to reduce energy consumption - a positive for both sustainability and efficiency. The company has **committed to offset 100% of electricity use with renewable**, and is making meaningful investments which is catalysing further investments in renewables.
- On **Telefonica's** earnings call 2020-02-20, the CEO highlighted that Telefonica was top of the list of the main ESG benchmarks; the firm was **first among peers on Sustainalytics, rated A by MSCI, and part of the Bloomberg Gender Diversity Index** for the third year in a row.

Human Capital Management

- On **Telecom Italia's** earnings call 2020-02-20, the CEO noted improvements made to the management remuneration scheme which is now fully aligned to shareholders' interest. **Key KPIs now included in management's variable compensation** include stock price performance, equity FCF and debt reduction, as well as **customer satisfaction index, employee satisfaction and other ESG pillars**.
- On **Chorus's** earnings call 2020-02-23, the CEO discussed how even during this period of change, the **engagement of the group's workforce, which is measured quarterly, has seen continued growth**. Notably, the company's latest Employee Engagement review reached a score of 8.1, and its Employee Net Promoter Score had significantly increased to 48.

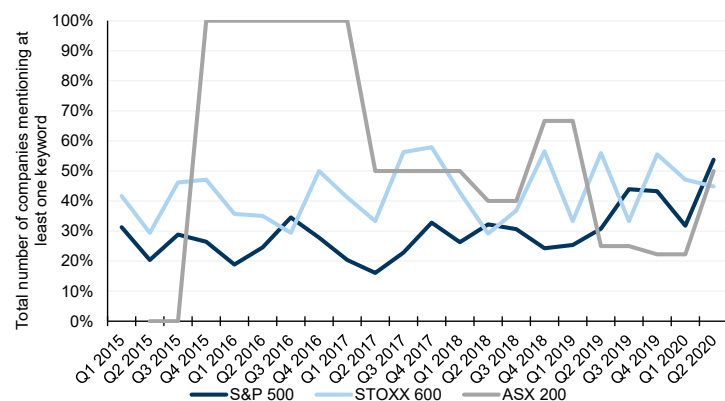
Information Technology

Around half of Information Technology companies are engaged across all regions, less than the broader indices. 54% of Information Technology companies discussed ESG in the US (vs. 65% for the broader index), compared with 45% of European Information Technology (vs. 66% for the broader index) and 50% of Australian Information Technology (vs. 72% for the broader index) (Exhibit 137).

The most discussed keywords vary by region across 1Q20 and 2Q20 (Exhibit 138): S&P 500 - Diversity & Inclusion, Environmental, Governance, Employee Engagement, and Water; STOXX 600 - Environmental, Water, ESG, Governance and Social Responsibility; ASX 200 - Environmental, Carbon, Diversity & Inclusion, Emissions and Governance.

Information Technology ESG volumes grow rapidly in 2020, outperforming the benchmark. ESG discussions have grown consistently in the US and Europe, while peaking in Australia to the highest level since 2017. Despite 1Q20 declines due to Covid-19, the US and European volumes have recovered to above 3Q19 level. Total ESG comments by Information Technology in 2Q20 grew by +66% yoy in the US (vs. +18% yoy for the broader index), +39% yoy in Europe (vs. +48% yoy for the broader index) and +98% yoy in Australia (vs. -4% yoy for the broader index) (Exhibit 139, Exhibit 140, Exhibit 141)

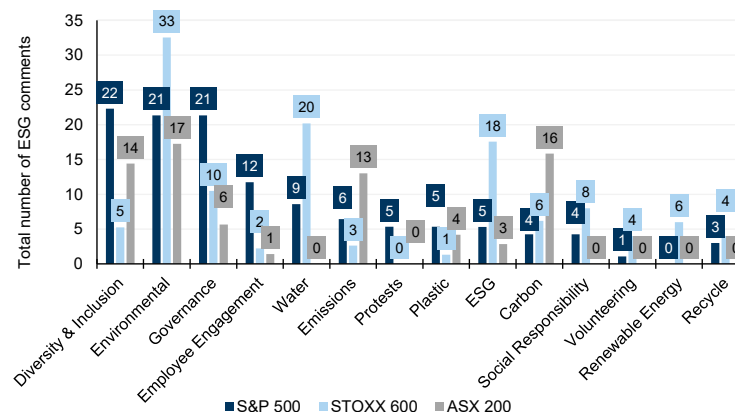
Exhibit 137: 45%-55% of Information Technology across three indices discussed ESG
% of Information Technology companies mentioning ESG keywords in the S&P 500 and STOXX 600 (1Q15-2Q20), and ASX 200 (1H15-1H20)



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 138: 'Diversity & Inclusion' most discussed in the US, and 'Environmental' in Europe and Australia

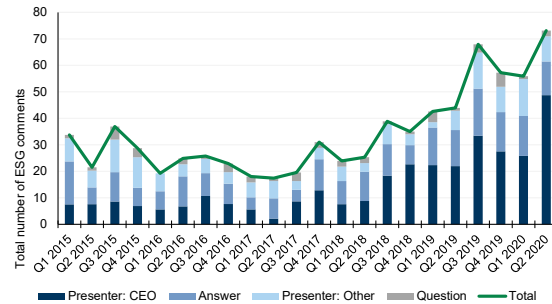
Top 10 most discussed keywords by S&P 500, STOXX 600, and ASX 200 Information Technology, 1Q20-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 139: ESG discussions have increased rapidly in the US, recovering to above pre-Covid level in 2020...

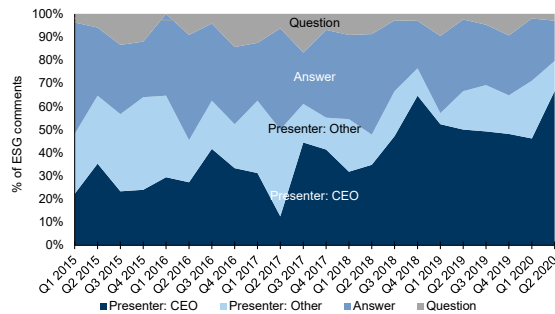
Total number of ESG comments for S&P 500 Information Technology companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 142: CEO presentation increasingly led the ESG discussion across S&P Information Technology...

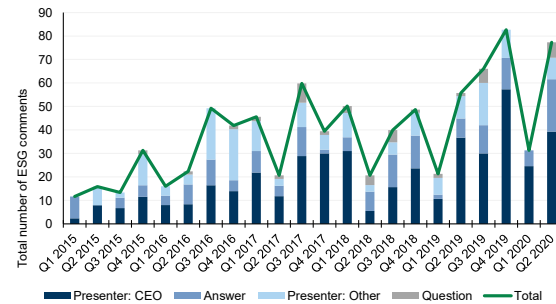
% of total ESG comments for S&P 500 Information Technology companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 140: ...a similar trend across Europe, albeit greater volatility...

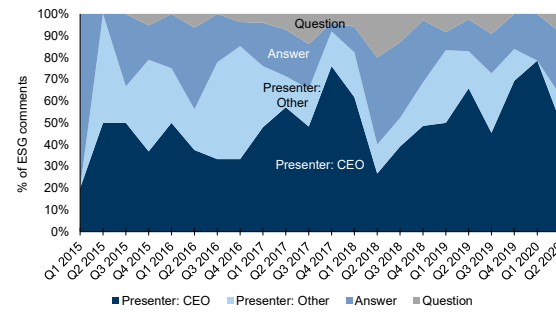
Total number of ESG comments for STOXX 600 Information Technology companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 143: ...a similar trend in the STOXX...

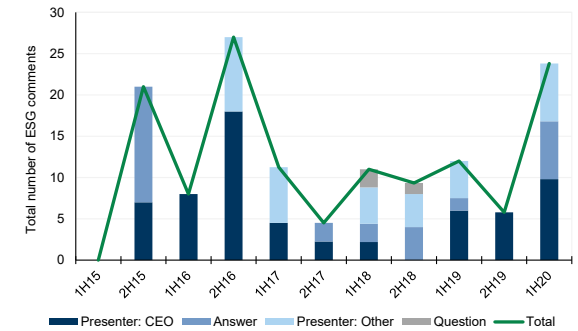
% of total ESG comments for STOXX 600 Information Technology companies by speaker, 1Q15-2Q20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 141: ...while in Australia, volumes spiked in 1H20

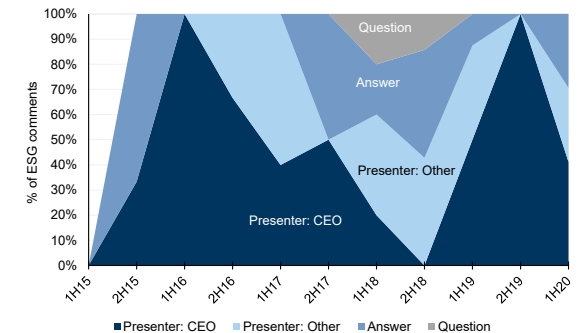
Total number of ESG comments for ASX 200 Information Technology companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 144: ...while in Australia sources of discussions vary over time

% of total ESG comments for ASX 200 Information Technology companies by speaker, 1H15-1H20



Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 145: In the US, 'General Sustainability' is the most discussed topic..

Total number of unique ESG comments per keyword for S&P 500 Information Technology companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
General Sustainability	14	5	10	9	8	8	6	5	3	3	8	7	12	7	17	18	20	18	27	29	20	28
Corporate Social Impact	3	1	1	3	0	1	3	1	0	1	0	2	3	1	1	4	2	5	6	8	6	10
Human Capital Management	0	3	2	2	1	0	2	0	2	0	1	4	0	2	3	3	0	5	6	2	11	31
Water & Drought	4	4	6	8	3	5	4	5	3	4	5	4	4	7	1	2	8	5	3	3	8	1
Carbon, Emissions & Energy	11	4	9	2	6	7	8	5	7	2	1	6	2	6	6	5	7	4	12	15	5	7
Data privacy	1	1	2	0	0	0	1	3	2	5	3	3	4	1	8	4	1	4	7	8	5	2
Plastic	0	3	5	2	1	3	1	3	0	1	1	0	1	2	2	0	0	0	7	1	2	3
Health & Safety	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2	1	3
Sustainable Investment	0	1	0	0	1	0	0	0	0	1	0	3	0	0	0	0	1	0	0	1	1	0
Sourcing & Supply Chain	1	0	0	0	0	1	1	0	1	0	0	0	1	1	1	0	0	0	1	0	1	0
Waste & Recycling	0	0	2	1	2	0	0	0	1	0	0	0	0	0	1	0	3	2	3	1	2	1
Sustainability Reporting & Labels	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	5	6	6	2	2	1
Product Safety	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	34	22	38	29	23	25	28	24	20	20	20	32	28	26	42	36	48	51	79	73	66	87

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 146: ...as well as in the STOXX...

Total number of unique ESG comments per keyword for STOXX 600 Information Technology companies by topic, 1Q15-2Q20

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
General Sustainability	5	8	7	23	10	15	33	29	29	15	33	28	30	8	23	28	16	26	36	28	16	47
Corporate Social Impact	2	0	0	0	4	0	2	2	4	0	2	5	3	1	0	4	4	4	2	11	7	5
Water & Drought	2	3	2	0	0	4	9	2	9	0	23	5	12	0	10	1	4	4	10	5	4	16
Carbon, Emissions & Energy	2	5	2	5	0	1	2	5	4	3	8	2	3	10	9	11	0	8	14	32	4	10
Human Capital Management	0	0	0	3	0	1	9	3	2	1	0	6	4	3	3	7	2	15	4	15	2	5
Data privacy	0	0	0	0	0	0	0	0	0	3	0	2	1	0	0	3	0	1	2	1	2	0
Waste & Recycling	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	1	0	1	4	3	0	5
Health & Safety	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sustainability Reporting & Labels	0	0	0	0	2	0	4	3	2	0	0	3	0	1	0	1	2	1	4	5	0	4
Sustainable Investment	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	0
Product Safety	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plastic	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	3	0	1
Global Goals & Agreements	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	2	0	4	5	0	3
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Governance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	12	16	13	31	16	22	58	45	55	22	66	51	55	23	47	58	28	63	80	109	36	104

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Exhibit 147: ...and in the ASX recently

Total number of unique ESG comments per keyword for ASX 200 Information Technology companies by topic, 1H15-1H20

	1H 2015	2H 2015	1H 2016	2H 2016	1H 2017	2H 2017	1H 2018	2H 2018	1H 2019	2H 2019	1H 2020
General Sustainability	0	7	0	0	0	2	4	3	3	4	8
Carbon, Emissions & Energy	0	0	0	0	0	0	0	4	0	1	3
Corporate Social Impact	0	0	0	0	0	0	0	1	0	1	0
Data privacy	0	0	0	0	5	2	2	0	8	0	6
Sustainability Reporting & Labels	0	0	0	0	0	0	0	0	0	0	4
Health & Safety	0	0	0	0	0	0	0	0	0	1	0
Water & Drought	0	7	0	0	0	0	2	1	0	0	0
Global Goals & Agreements	0	0	0	0	0	0	0	0	0	0	0
Waste & Recycling	0	7	8	27	7	0	2	1	0	0	0
Human Capital Management	0	0	0	0	0	0	0	2	0	0	3
Sustainable Investment	0	0	0	0	0	0	0	0	0	0	0
Product Safety	0	0	0	0	0	0	0	0	0	0	0
Plastic	0	0	0	0	0	0	0	0	0	0	4
Sourcing & Supply Chain	0	0	0	0	0	0	0	0	0	0	0
ESG Regulation	0	0	0	0	0	0	0	0	0	0	0
Governance	0	0	0	0	0	0	0	0	0	0	0
Total	0	21	8	27	11	5	11	11	12	9	28

Source: Refinitiv, data compiled by Goldman Sachs Global Investment Research

Notable Information Technology ESG discussions from recent earnings

Human Capital Management

- On **SAP's** earnings call, the Co-CEO highlighted the **performance on the group's employee engagement index, at 83%** for 2019 which the speaker claimed was above industry benchmarks, as well as its **high employee retention rate at 93%**. Also noted was positive feedback given on Glassdoor and the company's **achievements making the best employer list in 7 countries (#1 in Argentina and Brazil) and making the top of Forbes America's Best Employers for Diversity list, with roughly 34% women in the workforce and 27% women in leadership position.**
- On **Capita's** earnings call 2020-03-05, the CEO noted that the company **must invest in its people if it is to keep customers pleased.** Initiatives have included **guaranteeing the real living wage for UK staff** effective April 1, 2020, which would improve the salaries of c.6,000 colleagues, as well as **improved parental pay and life insurance packages.** The cost for these initiatives in 2020 is estimated to be c.£10mn, more than initially planned; however, the firm believes the **long-term benefit will be seen in further improvements in employee engagement, lower levels of voluntary departures and therefore lower recruitment costs, and reduces the cost of poor quality as more experienced staff are retained.**

General Sustainability

- On **Xero's** earnings call 2020-05-14, the CEO highlighted the **commitment to the group's people, diversity and inclusion, their community and the environment.** In response to COVID-19 increasing the community need for well-being and social support tools, the firm launched the Xero Assistance Programme in New Zealand in late 2019 and formed a partnership with Beyond Blue in Australia. Meanwhile, the CEO also announced the **firm's pledge to fully offset its carbon emissions each year starting from fiscal year 2019,** as well as the **funding of three internationally recognized environmental and conservation carbon offset projects.**

Carbon, Emissions & Energy

- On **Xerox's** earnings call 2020-04-28, the CEO discussed the group's newest cleantech innovation area, where the company is looking at **identifying technologies that reduce humankind negative environmental impacts on the world.** For example, one team is working on an early-stage technology aimed at improving building energy and HVAC efficiency, which the presenter noted would also help progress work the company is doing with the US Dept of Energy to **develop a solution to reduce air conditioner energy consumption by up to 80%, improving emissions and indoor air quality.**
- On **Spectris'** earnings call 2020-02-50, the CEO highlighted **emissions control as an area of particularly strong growth within Industrial Solutions.** The speaker discussed how, on top of power plants and hydrocarbon processing, **Midrex Technologies had helped to set up equipment for one of the world's most modern and efficient iron making facilities used in steelmaking.** Additionally, Servomex helped to **improve customer energy efficiency through sampling systems and monitoring controls, which lowers plant cost and reduces the**

carbon footprint.

- On **Analog Devices'** earnings call 2020-05-20, the CEO noted the sustainability benefits the company has observed over a short period, **including sizable reductions of carbon dioxide, nitrous oxide and carbon monoxide at ADI**. Also highlighted was the **recently published comprehensive CSR report**.
- On **Spectris'** earnings call 2020-02-20, the CEO commented on the **increasing scrutiny around environmental monitoring** in Energy & Utilities, and that as a key beneficiary, the firm **saw strong sales into hydrocarbon processing, the petrochemical sector, and BKV's wind industry**.

Disclosure Appendix

Reg AC

We, Evan Tylanda, CFA, Emma Jones, Sharmini Chetwode, Ph.D., Derek R. Bingham and Nihar Kantipudi, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

I, Dan Duggan, Ph.D., hereby certify that all of the views expressed in this report accurately reflect my personal views, which have not been influenced by considerations of the firm's business or client relationships.

Unless otherwise stated, the individuals listed on the cover page of this report are analysts in Goldman Sachs' Global Investment Research division.

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Growth is based on a stock's forward-looking sales growth, EBITDA growth and EPS growth (for financial stocks, only EPS and sales growth), with a higher percentile indicating a higher growth company. **Financial Returns** is based on a stock's forward-looking ROE, ROCE and CROCI (for financial stocks, only ROE), with a higher percentile indicating a company with higher financial returns. **Multiple** is based on a stock's forward-looking P/E, P/B, price/dividend (P/D), EV/EBITDA, EV/FCF and EV/Debt Adjusted Cash Flow (DACF) (for financial stocks, only P/E, P/B and P/D), with a higher percentile indicating a stock trading at a higher multiple. The **Integrated** percentile is calculated as the average of the Growth percentile, Financial Returns percentile and (100% - Multiple percentile).

Financial Returns and Multiple use the Goldman Sachs analyst forecasts at the fiscal year-end at least three quarters in the future. Growth uses inputs for the fiscal year at least seven quarters in the future compared with the year at least three quarters in the future (on a per-share basis for all metrics).

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Across our global coverage, we examine stocks using an M&A framework, considering both qualitative factors and quantitative factors (which may vary across sectors and regions) to incorporate the potential that certain companies could be acquired. We then assign a M&A rank as a means of scoring companies under our rated coverage from 1 to 3, with 1 representing high (30%-50%) probability of the company becoming an acquisition target, 2 representing medium (15%-30%) probability and 3 representing low (0%-15%) probability. For companies ranked 1 or 2, in line with our standard departmental guidelines we incorporate an M&A component into our target price. M&A rank of 3 is considered immaterial and therefore does not factor into our price target, and may or may not be discussed in research.

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Disclosures

Disclosure

Emma Jones is working with, and providing analytical support to, the COP 26 Private Finance Hub and FSB Task Force on Climate-related Financial Disclosures.

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