S&P Dow Jones Indices

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Corporate Carbon Disclosure in Trucost, part of S&P Dow Jones Indices Europe, the Middle East, and **Africa**

More EMEA firms quantify supply chain risks, set science-based targets, and implement internal carbon pricing.

EXECUTIVE SUMMARY

Trucost, part of S&P Dow Jones Indices, assessed the trends in corporate disclosure of carbon emissions to see how companies are managing risks in three important areas: quantifying supply chain carbon emissions, setting meaningful emission reduction targets, and pricing carbon to understand the current and anticipated financial implications of impending regulatory and policy measures. The headline findings include the following.

- In 2017, Europe, the Middle East, and Africa (EMEA) businesses continued to expand their carbon reporting. However, this reporting varied greatly in terms of depth and breadth.
- Many corporations, particularly in the health care and financials sectors, do not fully track the carbon sources that are most material to their business activities.
- EMEA companies surpass global companies in setting science-based targets that will cut emissions in line with international efforts to limit global warming to 2 degrees Celsius.
- Nearly 40% of EMEA companies currently have or plan to set an internal price on carbon to help understand the risks and opportunities of the transition to a low-carbon economy.

INTRODUCTION

Trucost analyzed environmental data submitted by companies to the CDP annual climate change questionnaire. Trucost compared data for 2017 with previous years to identify trends in carbon management and reporting. focusing on companies in the EMEA region. The analysis covered emissions from company operations and use of electricity (scopes 1 and 2,

respectively), as well as value chain emissions (scope 3), as classified in the Greenhouse Gas (GHG) Protocol.¹

INSIGHTS

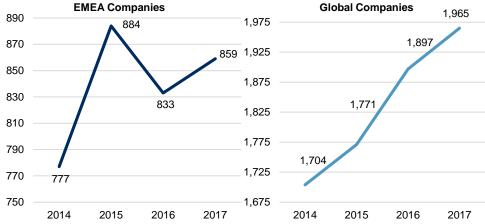
Carbon Disclosure Continues to Grow

The number of companies completing the CDP climate change questionnaire continues to increase.

The number of companies completing the CDP climate change questionnaire continues to increase. For 2017, over 1,900 global companies responded to the CDP's data request. However, a huge gap persists: CDP responders represented a small fraction of all publicly listed companies—just 4% of global corporations and 9% of EMEA corporations.

In 2017, EMEA companies accounted for 859 CDP responses—over 40% of global reporting. As reflected in Exhibit 1, disclosure among EMEA businesses has changed over time, increasing from 777 companies in 2014.

Exhibit 1: Growing Number of Companies Disclosing Their Carbon Emissions



Source: Trucost. Data as of June 2017. Charts are provided for illustrative purposes.

Some Sectors Underreport Carbon Emissions

Companies disclosing emissions represent a diverse set of industries and sectors. The sectors accounting for the greatest percentages of responders were industrials (22% of EMEA respondents), financials (19%), and consumer discretionary (16%).

However, Trucost's analysis suggests there are significant gaps in emissions disclosures. Across sectors, companies underreport their carbon emissions by 7%, on average, based on Trucost's calculations. Exhibit 2 compares the extent of disclosed emissions with expected emissions by sampling company data within two typical EMEA sectors. Among companies in the health care and financials sectors, expected emissions

¹ GHG Protocol Corporate Accounting and Reporting Standard is available at http://www.ghgprotocol.org/corporate-standard.

significantly surpassed disclosed emissions—both for total quantities and many individual scopes—with scope 3 emissions being of notable concern. This points to the need for improved measurement and reporting of GHG emissions.

9,000,000 Scope 1 ■ Scope 2 ■ Scope 3 8,000,000 7.000.000 Carbon Emissions (tCO2e) 6,000,000 5,000,000 4,000,000 3,000,000 2,000,000 1,000,000 Disclosed Disclosed Expected Expected Emissions **Emissions Emissions Emissions Health Care Financials**

Exhibit 2: EMEA Sectors' Disclosed Carbon Emissions Relative to Expected Emissions

Source: Trucost. Data as of June 2017. Chart is provided for illustrative purposes.

More Companies Disclose Supply Chain Emissions From Purchased Goods and Services

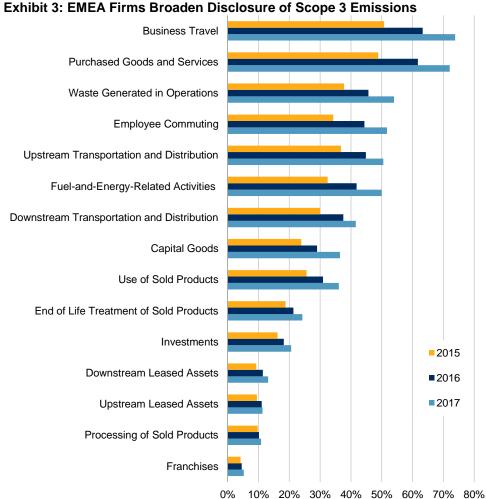
Businesses are increasingly reporting on supply chain (scope 3) emissions to quantify and manage their most material value chain impacts. Exhibit 3 captures the variety of scope 3 categories disclosed by EMEA companies as percentages of the region's CDP responders, as well as the change in prevalence among categories over time.

The exhibit shows that nearly 75% of EMEA firms identified business travel as a material source of carbon emissions, up from previous years. However, categories such as purchased goods and services, employee commuting, and waste generated in operations have clearly grown in importance since 2015. Overall, companies' reporting of scope 3 emission sources has become more important over the past few years.

These findings underscore shifting trends in corporate disclosure, likely due to perceptions of changing stakeholder concerns, as well as enhanced data gathering capabilities for previously underreported categories. Trucost

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recommends that companies consider measuring and disclosing all relevant scope 3 categories, which we define as being 1% or more of emissions per category.



EMEA companies surpassed global companies in engaging their supply chains and customers to address scope 3 emissions.

EMEA Firms Lead in Supply Chain and Customer Engagement

Source: Trucost. Data as of June 2017. Chart is provided for illustrative purposes.

Trucost found that companies are increasingly using various mechanisms to track, quantify, and manage GHG emissions throughout their value chains—including upstream suppliers and downstream customer use and disposal (see Exhibit 4). However, EMEA companies lagged behind global companies in modeling scope 3 emissions to simplify their carbon calculations.

There was a trend toward expanding supply chain engagement both to collect more emissions data and to collaborate to decrease shared climate change impacts. Across all CDP respondents, over 60% reported engaging their suppliers to implement measurement and reduction activities. Supply chain engagement among EMEA businesses slightly exceeded this average, at 66%.

Additionally, many companies were working with partners to reduce emissions. Over 50% of global CDP respondents pointed to customer engagement for carbon savings, and over 30% reported engagement with others in their value chains to achieve similar goals. Similarly, 56% of EMEA respondents acknowledged customer engagement on climate change, and 32% indicated engagement with others in their value chains.

Global firms reported partner engagement as covering just over 50% of their spending, while EMEA firms reported that engaging with partners covered just over 25% of their spending. Trucost recommends that all businesses—especially EMEA ones—consider collaborating with upstream and downstream partners to reduce their indirect scope 3 emissions.

Exhibit 4: EMEA Firms Ahead on Supply Chain and Customer Engagement					
EMISSIONS MEASUREMENT OR REDUCTION TOOL	GLOBAL CDP RESPONDENTS (%)	EMEA CDP RESPONDENTS (%)			
Spend Analysis or Input-Output Modeling of Scope 3 Emissions	35	30			
Supply Chain Engagement	63	66			
Customer Engagement	51	56			
Other Value Chain Engagement	31	32			
Percentage of Spend Included Within GHG Engagement Efforts	51	27			

Source: Trucost. Data as of June 2017. Table is provided for illustrative purposes.

Science-Based Carbon Targets Led by EMEA Companies

Over 80% of global and EMEA businesses responding to the CDP questionnaire have established carbon targets. Although the percentage of global companies has not changed over the past few years, target setting among EMEA companies has increased dramatically—over 25% since 2015.

Over 80% of EMEA companies that responded to the CDP questionnaire are employing science-based carbon targets, a significant growth from single digits in 2015.

An important change among all businesses has been the recent emergence of science-based targets, which are aligned with the Paris Agreement to limit global warming to 2 degrees Celsius and are considered best practices for carbon management. The proportion of companies adopting science-based targets has grown from single digits in 2015 to 20% of global firms and over 50% of EMEA firms in 2017 (see Exhibit 5).

Exhibit 5: More Companies Set Carbon Targets and Science-Based Targets					
EMISSIONS REDUCTION TARGET	GLOBAL CDP RESPONDERS (%)	EMEA CDP RESPONDERS (%)			
Absolute Target Only	26	25			
Intensity Target Only	32	32			
Both Absolute and Intensity Targets	24	24			
Science-Based Absolute Targets	12	48			
Science-Based Intensity Targets	8	58			

Source: Trucost. Data as of June 2017. Table is provided for illustrative purposes.

More Companies Set an Internal Carbon Price

Internal carbon pricing is an increasingly common way for companies to make the business case for low-carbon investments by assessing the financial implications of current and future carbon taxes, emissions trading schemes, and fuel duties (see Exhibit 6). More than 500 firms globally and 200 EMEA firms have established an internal carbon price. About 300 more global companies and over 100 EMEA companies expect to follow suit in the near future.

Exhibit 6: More Firms Set an Internal Carbon Price						
ADOPTION OF	2017		2016			
INTERNAL CARBON PRICE	GLOBAL CDP RESPONDERS (%)		GLOBAL CDP RESPONDERS (%)	EMEA CDP RESPONDERS (%)		
Currently Utilizing	23	24	21	20		
Expected to Utilize Within the Next Two Years	16	14	16	14		

Source: Trucost. Data as of June 2017. Table is provided for illustrative purposes.

MOVING FORWARD

Corporate reporting of carbon emissions has reached an all-time high and is expected to continue rising in the future, as it effectively becomes a requirement of doing business. EMEA companies are more actively measuring the carbon footprint of their own operations, upstream suppliers, and downstream customers, broadening the range of emission sources that they track, and setting targets to decrease their climate change impacts.

Companies will need to continue to raise their game on disclosure to meet demand from investors for financially relevant carbon data and forward-looking metrics, such as carbon pricing and science-based targets. The disclosure of such data is being encouraged by the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD), as it provides market participants with a strategic lens on carbon risks and opportunities. Starting in 2018, the CDP is to align its annual climate change information request with the TCFD recommendations.

EMEA companies are increasingly prioritizing climate change disclosure and action.

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Trucost is part of S&P Dow Jones Indices. A leader in carbon and environmental data and risk analysis, Trucost assesses risks relating to climate change, natural resource constraints, and broader environmental, social, and governance factors. Companies and financial institutions use Trucost intelligence to understand their ESG exposure to these factors, inform resilience and identify transformative solutions for a more sustainable global economy. S&P Global's commitment to environmental analysis and product innovation allows us to deliver essential ESG investment-related information to the global marketplace. For more information, visit www.trucost.com.

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