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Trucost by S&P Dow Jones Indices ESG Analysis

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Corporate Carbon Disclosure in North America

North American 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, North American businesses continued to expand their carbon reporting to all-time highs. However, this reporting varied greatly in terms of depth and breadth.
- Many corporations, particularly in the health care, financial services, and information technology sectors, do not fully track the carbon sources that are most material to their business activities.
- North American companies surpass global companies in quantifying supply chain carbon emissions.
- Companies in North America are increasingly setting science-based targets that will cut emissions in line with international efforts to limit global warming to 2°C.
- More than one-third of North American companies have 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 North America. The analysis covers 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

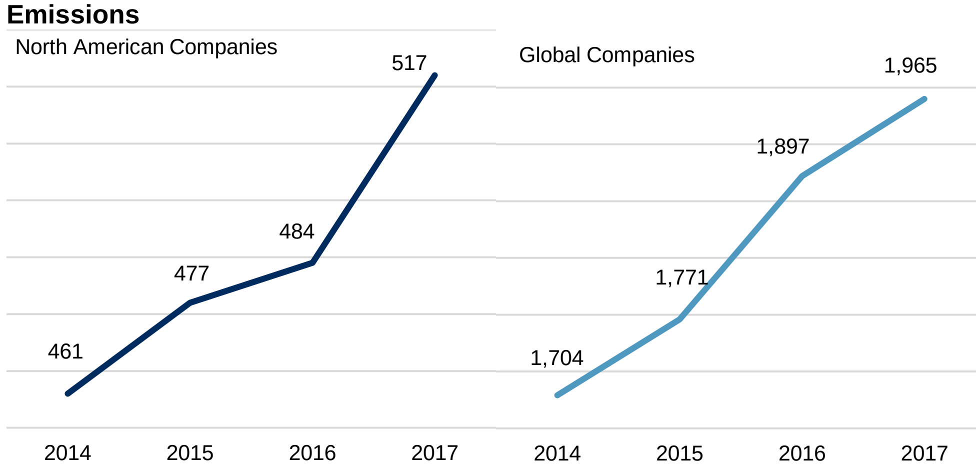
Carbon Disclosure Continues to Grow

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 represent a small fraction of all publicly listed companies—just 4% of global corporations and 6% of North American corporations.

In 2017, North American companies accounted for 517 CDP responses—over 25% of global reporting. As reflected in Exhibit 1, disclosure among North American businesses rose 7% since 2016 and 12% since 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

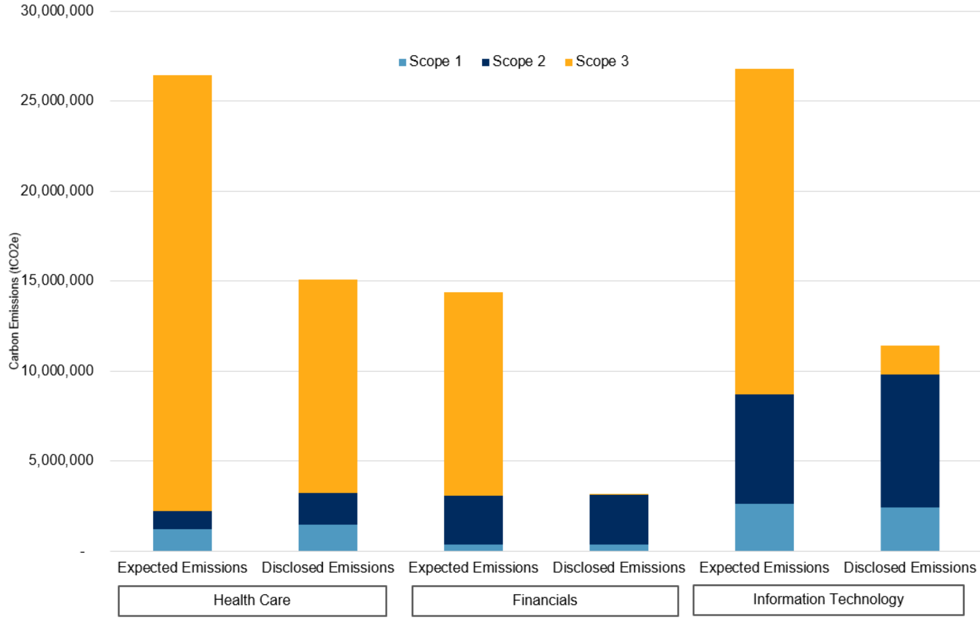
Companies disclosing emissions represent a diverse set of industries and sectors. The sectors accounting for the greatest percentages of responders were financials (15% of North American respondents), consumer discretionary (14%), industrials (14%), and information technology (13%).

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. The next chart compares the extent of disclosed emissions with expected emissions by sampling company data within three typical North American sectors.

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

Among companies in the health care, financials, and information technology sectors, expected emissions greatly surpass disclosed emissions—both for total quantities and many individual scopes—with scope 3 emissions being of notable concern.

North American 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

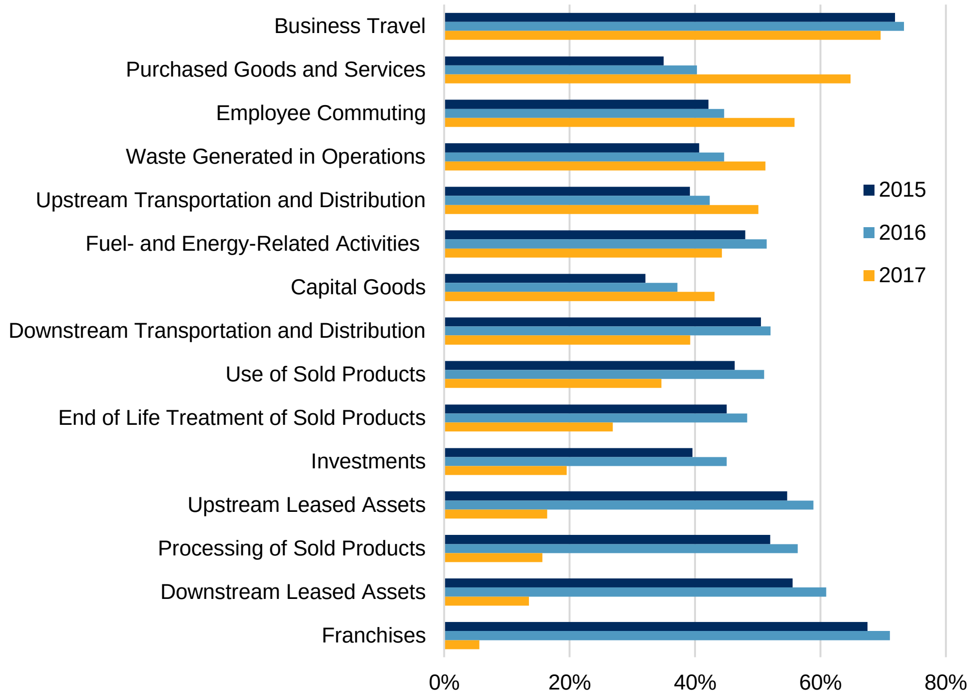
Businesses are increasingly reporting on supply chain scope 3 emissions to quantify and manage their most material value chain impacts.

Businesses are increasingly reporting on supply chain scope 3 emissions to quantify and manage their most material value chain impacts. Exhibit 2 captures the variety of scope 3 categories being disclosed by North American companies as percentages of the region's CDP responders, as well as the change in prevalence among categories over time.

The exhibit shows that 70% of North American firms continue to identify business travel as a material source of carbon emissions. However, categories such as purchased goods and services, employee commuting, and waste generated in operations have clearly grown in importance since 2014. Conversely, other scope 3 emission sources have decreased in importance, such as processing of sold products, downstream leased assets, and franchises.

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

Exhibit 2: North American Firms Broaden Disclosure of Scope 3 Emissions



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

North American Firms Lead in Supply Chain Modeling

North American companies surpassed global companies in modeling scope 3 emissions to simplify their carbon calculations.

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 3). North American companies surpassed global companies in modeling scope 3 emissions to simplify their carbon calculations.

There is a trend toward expanding supply chain engagement both to collect more emissions data and collaborate to decrease shared climate change impacts. Across all CDP respondents, over 60% report engaging their suppliers to implement measurement and reduction activities. Supply chain engagement among North American businesses is aligned at 61%.

Additionally, many companies are working with partners to reduce emissions. Over 50% of global CDP respondents point to customer engagement for carbon savings and over 30% report engagement with others in their value chains to achieve similar goals. Similarly, 52% of North American respondents acknowledge customer engagement on climate change and 29% indicate engagement with others in their value chains.

Global firms report partner engagement as covering just over 50% of their spending, while North American firms report that engaging with partners covers just over 20% of their spending. Trucost recommends that all businesses—especially North American ones—consider collaborating with upstream and downstream partners to reduce their indirect scope 3 emissions.

Exhibit 3: North American Firms Ahead on Modeling and Assurance

EMISSIONS MEASUREMENT OR REDUCTION TOOL	GLOBAL CDP RESPONDENTS (%)	NORTH AMERICAN CDP RESPONDENTS (%)
Spend Analysis or Input-Output Modeling of Scope 3 Emissions	35	56
Supply Chain Engagement	63	61
Customer Engagement	51	52
Other Value Chain Engagement	31	29
Percentage of Spend Included Within GHG Engagement Efforts	51	21

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

Science-Based Carbon Targets Gain Popularity

Over 80% of global and North American businesses responding to the CDP questionnaire have established carbon targets. Although the percentage of global companies has not changed over the past several years, target setting among North American companies has increased over 5% since 2015.

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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°C 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 19% of North American firms in 2017 (see Exhibit 4).

Exhibit 4: More Companies Set Carbon Targets but few Are Science-Based

EMISSIONS REDUCTION TARGET	GLOBAL CDP RESPONDERS (%)	NORTH AMERICAN CDP RESPONDERS (%)
Absolute Target Only	26	25
Intensity Target Only	32	32
Both Absolute and Intensity Targets	24	25
Science-Based Absolute Targets	12	14
Science-Based Intensity Targets	8	5

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 5). More than 500 firms globally and 100 firms in North America have established an internal carbon price. About 300 more global companies and 50 North American companies expect to follow suit in the near future.

North American companies are increasingly prioritizing climate change disclosure and action.

Exhibit 5: More Firms Set an Internal Carbon Price

ADOPTION OF INTERNAL CARBON PRICE	2017		2016	
	GLOBAL CDP RESPONDERS (%)	NORTH AMERICAN CDP RESPONDERS (%)	GLOBAL CDP RESPONDERS (%)	NORTH AMERICAN CDP RESPONDERS (%)
Currently Utilizing	23	21	21	18
Expected to Utilize Within the Next Two Years	16	11	16	11

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. North American 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.

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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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