

An introduction to: Carbon Disclosure

Companies are increasingly being asked to share information about their environmental impact, in particular, their carbon output. For some companies, carbon emissions might be a direct output of operating (e.g., airlines). Others might have less obvious but still significant carbon emissions in their value chain (e.g., in the materials they buy to make their products, like lumber, or the use of their products by customers, such as computer printers).

What is meant by “carbon”?

In this context, “carbon” is a shorthand expression for “carbon dioxide” (also written as CO₂). Carbon dioxide is a colorless gas that is produced by a number of naturally-occurring processes. Carbon dioxide is also released through the burning of fossil fuels and other human activities (such as manufacturing).

Why is carbon a problem?

With the growth of human activities, carbon is being produced at levels beyond the Earth’s natural capacity to mitigate it. Along with other greenhouse gases, carbon can cause a “greenhouse effect,” raising temperatures and creating a number of other environmental impacts, commonly known as “climate change.”

What is meant by “climate change”?

Climate change refers to the scientifically observed rise in average temperatures globally, rising sea levels, the expansions of deserts, changes to the polar regions, and more extreme weather events (such as droughts, more frequent and bigger storms, etc.).

While the climate does change naturally over long periods of time, the overwhelming consensus of scientists is that human-led activities are the cause of recent rapid climate change.

What is meant by “carbon disclosure”?

Carbon disclosure means measuring and providing information about how much carbon an organization emits as a result of its activities. However, carbon disclosure is often a starting point for companies to collect and share even more – information about an organization’s overall impact on the environment (air, water, forests and other natural systems).

This information can be used by management (as well as investors, regulators and other observers) to assess the organization’s exposure to environmental risks, as well as identify possible business opportunities (savings or new products or services), and manage the effectiveness of its efforts to reduce its impacts.

Typically organizations start by measuring and reporting their internal carbon emissions and other impacts. Increasingly, organizations also monitor the environmental impact of their supply chain (materials and services they purchase and include in their own products), as well as the after-sale impact of their products (when used by their customers and consumers).

Who is asking for carbon disclosure?

Institutional investors and policy makers want to know more about how companies and governments are managing their carbon emissions to better inform their decision-making. To do this, they need clear and comparable carbon disclosure.

Who provides carbon disclosure?

Several comprehensive disclosure protocols exist, including CDP (previously the Carbon Disclosure Project), the Global Reporting Initiative and the Greenhouse Gas Protocol.

The Carbon Disclosure Project (CDP) is the dominant global carbon reporting system. The CDP's mission is to "make environmental reporting and risk management a business norm and drive disclosure, insight and action towards a sustainable economy." It represents over US\$100 trillion in investor assets and purchasing contractors. While reporting to the CDP is not mandatory, over 6300 companies (including 400 of the world's largest 500 companies) and 500 cities disclosed information to the CDP.

As well, there are a number of regional and/or industry-specific disclosures (e.g., Alberta Specified Gas Emitters Regulation, Japanese Voluntary Emissions Trading Scheme, Swiss Climate CO2 label, among many others, some of which are also accepted by CDP).

Why would companies and governments want to disclose their carbon footprint?

Peter Drucker once wrote: "What gets measured gets managed." Internally, measuring carbon emissions is a starting point to understanding a company's climate change risks and opportunities. Disclosure also allows companies to measure themselves against their peers. Perhaps most compellingly, disclosing companies can provide clear information to institutional investors to better inform their investment decisions.

Are there financial incentives to disclose?

Many companies that monitor carbon have reported significant savings by reducing their carbon footprint.

Companies proactively measuring and disclosing carbon may help be better able to attract investment from institutional investors, who are increasingly using CDP and other carbon disclosure systems to inform decisions. Companies that disclose climate risks and show proactive measure to mitigate them may pass through analysts' scrutiny faster, and with more confidence, than those who do not.

As well, disclosure may influence the cost of capital for companies. One Oxford study concludes that disclosing companies receive lower interest rates from banks compared to those who choose not to disclose (Kleimeier and Viehs 2016).

About this series

This series presents brief introductions to new and ongoing issues in sustainability for business audiences. It is not intended to be used as business or investment advice.

About the Lee-Chin Institute

The Michael Lee-Chin Family Institute for Corporate Citizenship is a research centre at the Rotman School of Management, University of Toronto. The LCI helps business leaders integrate sustainability into business strategy and practices by actively developing and disseminating research, tools and curricula. Our research focuses on three themes: sustainability strategy, social entrepreneurship, and responsible investment. For more information about the LCI, visit our [website](#) or follow us on [Twitter](#) and [LinkedIn](#)