



dbSustainability

What are Scope 3 emissions and why are they important?

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Defining different types of emissions (Scope 1-3)

Regulatory and corporate disclosure requirements aimed at reducing GHG emissions are increasing. More requirements and incentives will no doubt be needed to be introduced if governments intend to make good on their stated environmental commitments. For example, ~127 countries have committed to or are considering committing to net zero emissions. Most have not explained how they will achieve this. We believe regulation will need to require companies to evaluate their Scope 3 emissions to effect real change and approach carbon neutrality.

To explain Scope 3, let's start by adding another acronym to your ESG knowledge bank: the Greenhouse Gas Protocol (GHGP). It is the most widely used corporate accounting standards for emissions. It defines Scope 1-3 as follows:

- **Scope 1:** direct GHG emissions from sources that are owned or controlled by the company. These emissions occur from the following activities: (1) generation of electricity, heat or steam including boilers, furnaces and turbines, (2) physical or chemical processing, (3) transportation of materials, products, waste and employees from company owned or controlled sources, (4) fugitive emissions (e.g. unintended leaks, or irregular emissions of gases). Emissions include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, and perfluorocarbons sulfur hexafluoride.

- **Scope 2:** indirect GHG emissions from the generation of purchased or acquired electricity, steam, heat, and cooling. Emissions physically occur at the facility where electricity is generated. Not only can these emissions account for a big part of a corporation's environmental footprint, they are also typically necessary information for some GHG programs and calculation of emission costs.
- **Scope 3:** other indirect emissions from sources that are not owned and not directly controlled by the reporting company. Scope 3 is often referred to as the company's value chain. It is an optional reporting category for the GHG protocol, but various stakeholders (e.g. governments, customers and investors) ask for this disclosure.

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In general terms, Scope 3 emissions include a corporate's upstream and downstream value chain (e.g. suppliers and distributors), as well as business travel, leased assets, and even bank lending exposure. It is typically the most difficult to calculate and frankly involves a lot of estimation. See the list of formal Scope 3 categories below:

Figure 1: Scope 3 emissions categories

GHG Protocol - 15 Categories	
Upstream	Downstream
Purchased goods and services	Downstream transportation and distribution
Capital goods	Processing of sold products
Fuel and energy related activities	Use of sold products
Upstream transportation and distribution	End of life treatment of sold products
Waste generated in operations	Downstream leased products
Business travel	Franchises
Employee commuting	Investments
Upstream leased assets	

Source : The Greenhouse Gas Protocol (GHGP)

At present, many companies will measure and target reductions to Scope 1 & 2 emissions. They are easier to measure and control relative to Scope 3. But, (Scope 3) will often represent 50% or more of true impact. For example, in the case of ConocoPhillips, the company estimates its Scope 3 emissions are 10x more than its combined Scope 1 & 2 emissions. Interestingly, in what is a shift in tone, the SEC recently denied requests by the company to dismiss a shareholder motion that would require management to provide detailed plans for cutting its Scope 3 emissions.

Scope 3 emissions are often multiples higher than combined Scope 1 & 2 emissions. The CDP estimates that a company's supply chain emissions are on average 5.5x larger. The chart in figure 2 shows dispersion of estimated Scope 1-3 emissions for select companies from a number of different industries. Note that we chose companies to include in the chart based on their disclosure of Scope 3 and relative size/ recognition.

By including Scope 3 emissions in their evaluation, it allows management to make more sustainable decisions. The exercise allows companies to better understand which partners and vendors take sustainability seriously. Moreover, it can help them to improve the sustainability of their products and services when the full life-cycle is understood. Lastly, it forces companies to take into account business travel and employee commuting. This transparency and decision making will be important for corporates as global climate regulation continues to rise. Many investors already expect corporates to outline reduction targets. This pressure will only increase as sustainable investing strategies continue to represent institutional and retail inflows.

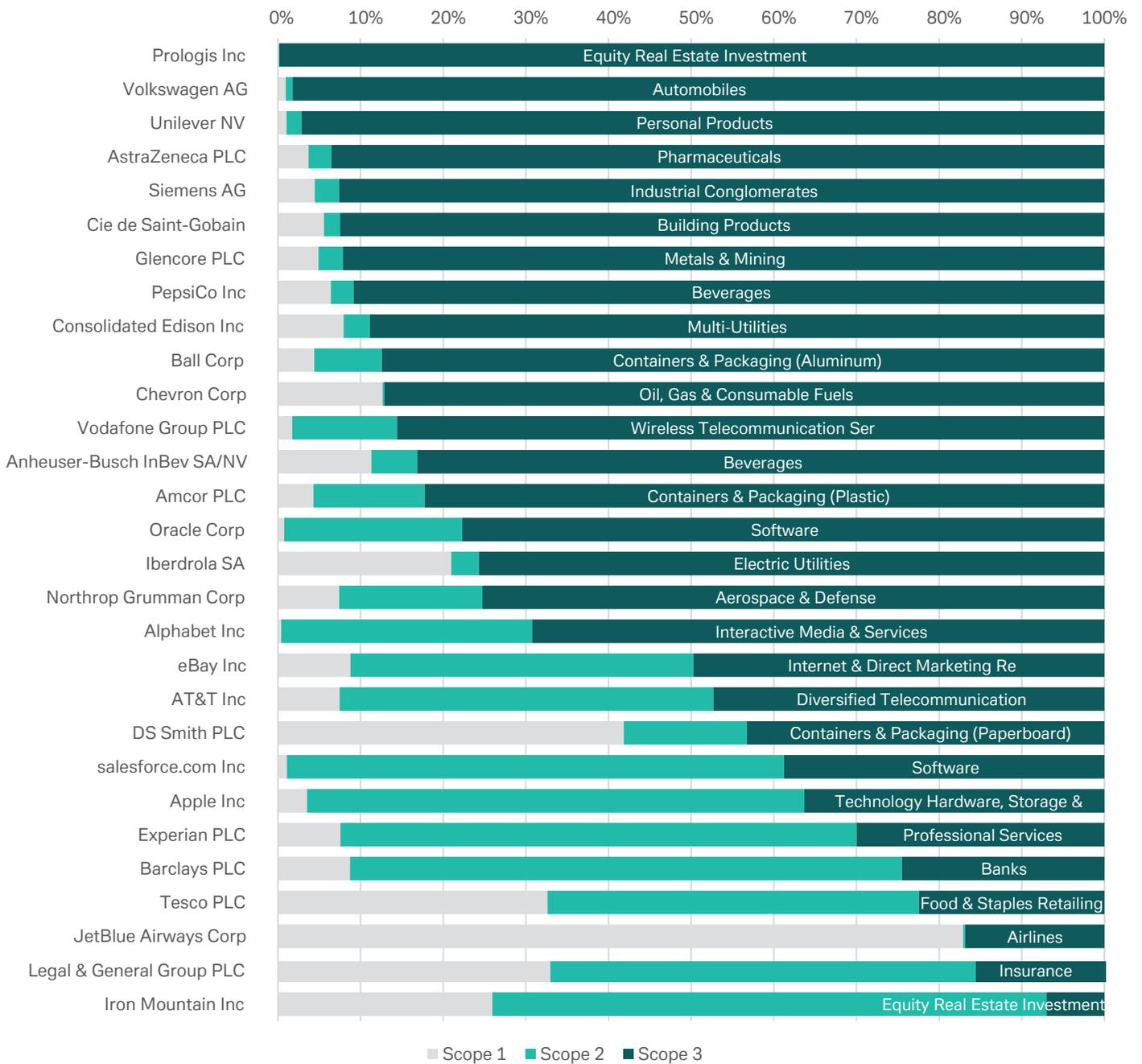
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Scope 3 emissions calculations can be imprecise, but set a benchmark

Reading the fine print. As noted above, the GHGP classifies 15 different categories of Scope 3 emissions. When reading the fine print in corporate disclosure, one will find that corporates will often only disclose against a certain number of these categories or the categories they deem to be material. While regulation is increasing, this can leave things open to interpretation. In some cases, companies will only seek to estimate Scope 3 for the core businesses or bigger operational segments. Thus, it may not be advisable to compare two companies even when they are competitors.

We do think that it is fair, however, to compare companies and industries regarding their emissions reduction strategies. At the very least, the attempt to measure emissions, while imprecise, gives a company enough information to understand where its hot spots are and allows them to make decisions to improve the sustainability of their value chain.

Figure 2: Emissions by Scope 1, 2 and 3 (% of total) (select companies, 2019 data)



Source :Bloomberg, Company data (2019)

* Note the stocks shown were selected by DB as examples due to their disclosure of Scope 3 (first) and relative industry market cap/ recognizability. The industry names reflect the GIC code of the company.



Yes, there can be double counting with Scope 3.

Just as it can be difficult to compare the emissions of two companies, it is problematic to simply sum Scope 1-3 emissions when trying to determine the emissions exposure in a portfolio of investments. For example, if a fund manager owns a producer and its supplier, including Scope 3 emissions will result in double counting on certain Scope 1 categories if the supplier is also held in the investment portfolio.

Scope 3 reporting increasing, take note of the impact to the banking sector

Through the UK's Streamlined Energy and Carbon Reporting Scheme (SECR), companies are strongly encouraged to report Scope 3 emissions, especially if it is a material source of emissions. For large unquoted companies and LLPs, the UK's scheme does require emissions from fuel burned during certain business related travel to be reported.

The Task Force on Climate-Related Financial Disclosure (the TCFD) also recommends that Scope 3 emissions should be measured and reported "if appropriate". This is important when considering BlackRock endorses this framework and has asked all public companies held to align their reporting with the TCFD. Considering that Scope 3 is a large portion of the emissions for many companies, it would seem that reporting them is, in fact, appropriate. Note that the Financial Conduct Authority (FCA) in the UK will be requiring corporate disclosures consistent with the TCFD in annual financial reports published in 2022. We would not be surprised to see the SEC look to elements of the TCFD when determining relevant and material financial disclosures.

The EU guidelines on non-financial reporting (the NFRD) also include recommendations of the TCFD, including disclosure of Scope 2 emissions. In fact, the NFRD guidelines state that banks and insurers should disclose Scope 3 emissions, which for them will include exposure from underwriting and investing activities in addition to its own operational emissions.

Scope 3 reporting for banks and the impact to financing considerations and capital requirements.

With the increased transparency, it is not surprising to see a number of large banks committing to reduce the carbon emissions they finance. In fact, the European Central Bank recently stated that the impact of climate change is "a major source of systemic risk" when conducting preliminary stress tests which could lead to elevated capital requirements for banks exposed to higher levels of climate risk. While it may not be a front and center discussion in the US, the Fed has also made comments supportive of climate stress tests for banks.

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UN efforts to reduce carbon emissions - looking to COP26 in November

The United Nations has been a key driver of effort to address climate change. The United Nations Framework Convention on Climate Change (UNFCCC) began in 1994 with conferences hosted annually from 1995. The first was the Conference of the Parties (COP1) held in Berlin, Germany. The work done at these events has produced a number of important protocols and agreements regarding the global effort to combat climate change. This includes the Paris Agreement (2015), which is largely considered to be an accelerator of global regulation focused on carbon neutrality.

- **The Paris agreement (2015).** This international treaty was adopted by 196 countries with a goal of limiting the global temperature rise to well-below 2°C above pre-industrial levels and pursuing efforts to limit warming to 1.5°C (Part of COP21). Note that the IPCC believes the delta between 1.5 and 2 degrees could mean more poverty, extreme heat, sea level rise, habitat loss and drought.

Looking to COP26 in November. Signers of the Paris Agreement (2015) are expected to submit their plans for climate action, also known as nationally determined contributions (NDCs) at COP26. This conference will be held in Glasgow, Scotland, in November of 2021. It was delayed from 2020 due to the pandemic.

The evidence thus far suggests that the goals highlighted at the Paris Agreement (2015) will struggle to be fully achieved, at least in the near term. That said, progress has been made with regulation in Europe, pressure on nations to comply is increasing, and more regulation is likely to be introduced by nations seeking to comply with their carbon neutrality commitments.

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