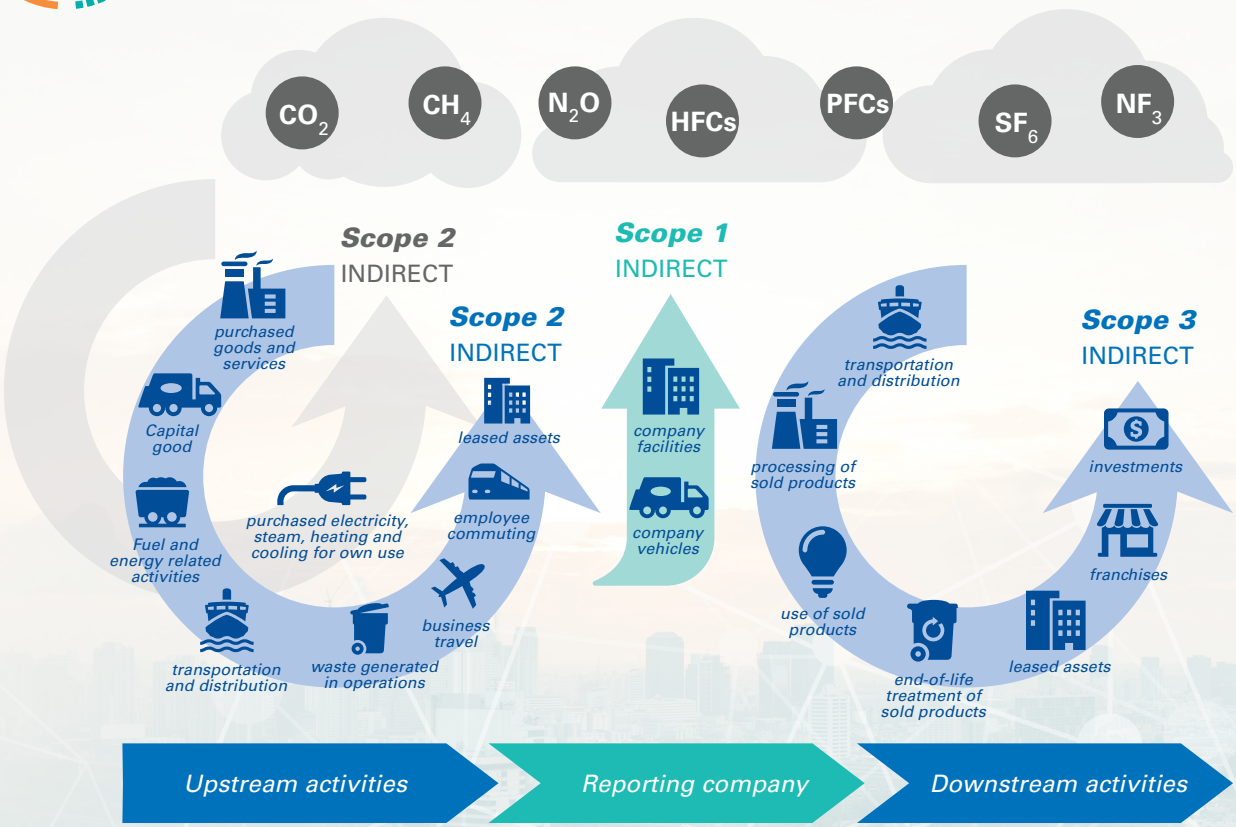
KPMG

Creating a Sustainable Value Chain

Mobility 2030

The Department of Transport reported in their Green Transport Strategy for South Africa* that the transport sector accounts for 10.8% of the country's total greenhouse gas (GHG) emissions. However, have you stopped to think how your value chain affects this astonishing percentage? In order to fully understand the impact, KPMG South Africa has taken a closer at GHG emissions and how Mobility 2030 could ease the burden.



Source: GHG Protocol

Understanding GHG Emissions

When devising a corporate climate change strategy, it is critical to look at a company's greenhouse gas (GHG) emissions. The GHG Protocol Corporate Standard categorises a company's GHG emissions into three scopes. Scope 1 emissions are direct emissions from owned or controlled sources. An example would be a company's own fleet of vehicles used for business purposes. Scope 2 emissions are indirect, from the generation of purchased energy. An example would be buying electricity from Eskom to run your business. However, companies often overlook scope 3 emissions – indirect emissions that occur in the value chain, including both upstream and downstream emissions. This includes purchased goods and services; business travel; employee commuting; waste disposal; use of sold products; transportation and distribution; investments; and leased assets or franchises. Value chain emissions often represent a company's biggest GHG impacts. An oversight of these corporate-level scope 3 emissions means missed opportunities for companies to improve.

The Importance of Value Chain Emissions

There is a growing awareness for companies to understand and account for GHG emissions along their value chains and product portfolios. As an example, the scope 1 emissions of a company in South Africa manufacturing vehicle parts for a company in Germany will be considered by the German vehicle company as its scope 3 emissions. Simply put: Who you buy from will impact your value chain (scope 3) emissions.

According to Greenhouse Gas Protocol, for many companies, value chain emissions account for more than 70% of their carbon footprint. Therefore companies play a vital role in keeping global warming below 1.5˚C.

Reducing GHG Impact

The Science Based Targets Initiative reports that over 500 companies from across the globe have committed to reducing their GHG emissions. Over 150 of those companies have set science-based targets. The pressure is mounting for other organisations to get involved. This is where Mobility 2030 and the adoption of Electric Vehicles (EVs), Autonomous Vehicles (AVs) and Mobility as a Service (MaaS) could play a critical role. Upstream, it is important to note that employee commuting is part of scope 3 emissions. While South Africa is still far from AV adoption, in the future, Autonomous Vehicles could assist in transporting employees to and from work. Looking at downstream activities, specifically the transportation and distribution of products, the introduction of hydrogen-powered trains could dramatically reduce scope 3 emissions. In 2018, Germany introduced the world's first hydrogen powered service train. Two models of zero-emission trains entered commercial service. The trains are fuelled by a mobile hydrogen filling station and run on 100kms of line. In South Africa, all major cities are connected via rail links. Thus, the adoption of hydrogen-powered trains could have a huge impact on GHG emissions in our country.

Conclusion

KPMG South Africa has a specialised team who are able to assist with evaluating a company's scope 3 emissions. Assessing value chain emissions is the first step to improving. The next step is to set achievable targets. A company is then able to focus on activities in the value chain that offer the biggest opportunity for GHG reduction. Often, the best way to achieve these targets is to innovate. Is there a way technology could make your value chain more efficient, competitive and lucrative? With Mobility 2030 fast approaching, this is the question you need to be asking.

Contact us

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** www.transport.gov.za/documents/11623/89294/Green_Transport_Strategy_2018_2050_onlineversion.pdf/71e19f1d-259e-4c55-9b27-30db418f105a*