



# Green Investment Partners

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A Net Zero Strategy

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# A Net Zero Strategy – Growing Capital, Cutting Carbon

This insight explores how greenhouse gas (GHG) emissions are currently measured, reported, and used by asset managers. There are several shortfalls with the current approaches; however, improvements are being identified and implemented.

As an investment manager of an Article 9 fund<sup>1</sup>, we have the dual focus of long term capital appreciation and GHG emissions reduction.

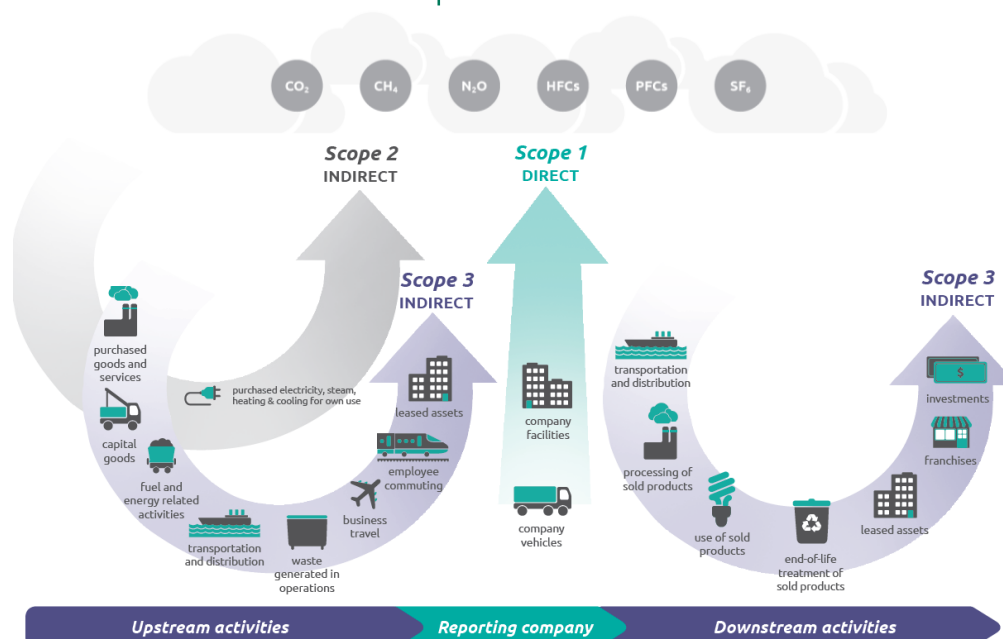
## Introduction

The global economy must decarbonise faster than forecasted due to the urgency of climate warming. Aggressive growth is needed in renewable energy and related sectors to achieve the transition to a net zero economy, as summarised in Bill Gates' 'How to Avoid a Climate Disaster'. The measurement and reporting of GHG emissions is an important driver of this transition, for individuals, governments, companies, and investors.

To measure a company's GHG emissions, many have adopted the standards put forth by the [Greenhouse Gas Protocol \(GHGP\)](#), which divides emissions into three Scopes:

- **Scope 1 – Direct GHG emissions:** From operations that are owned or controlled by the reporting company, such as company vehicles or facilities
- **Scope 2 – Indirect GHG emissions:** From the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the reporting company
- **Scope 3 – Other Indirect GHG emissions:** All indirect emissions (not included in Scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions such as business travel, use of sold products or leased assets

Figure 1: Overview of GHG Protocol Scope and Emissions Across the Value Chain



Source: [GHGP](#), Diagram of scopes and emissions across the value chain.

<sup>1</sup> Article 9 under the EU's SFDR covers products targeting sustainable investments as their objective. Sustainability is a binding and mandatory part of the investment process for these products.

Further “scopes” being considered look at estimating and reporting the comparative emissions impact of products:

- **Scope 4 – Avoided GHG Emissions:** Emissions impact of a product (good or service) relative to the situation where that product does not exist, and such impact may be either positive or negative

## Shortcomings

The measurement and reporting of emissions has yet to reach a consensus within the industry. Arguably we are still at the discovery and discussion stage. A current non-exhaustive list of issues that need to be overcome include:

- Lack of data on companies, especially for mid-cap or smaller entities
- Emissions data largely relies on self-reporting by companies
- Few checks are carried out on the accuracy of data reported
- Multiple frameworks are followed, with no global consensus
- Methodologies largely rely on judgement and assumptions, which may vary between companies and stakeholders
- Differences in what data is reported
- As methods expand to Scope 3 and beyond, the risk of double counting emissions becomes significant, especially on a portfolio level

## No data. No entry.

Many ESG products and ratings only focus on Scope 1 and Scope 2, this cultivates a bias towards the companies that firstly report and secondly look favourably upon this narrow lens, such as larger and less capital intensive businesses, like software companies.

Software companies are part of the transition to a net zero economy and increase economic productivity with relatively low emissions. Low Scope 1 and Scope 2 figures and higher ESG ratings can lead to increased valuations and in turn provide an incentive for companies to report ESG data. For example, there is evidence of premiums for green bonds resulting in lower yields, compared to conventional bonds.

It is important to be aware that a mid-size company that reports little ESG data might get an unfavourable ESG rating as a proxy for the lack of data available. In our view, a better approach is to use conservative estimates for smaller businesses and engage with the management.

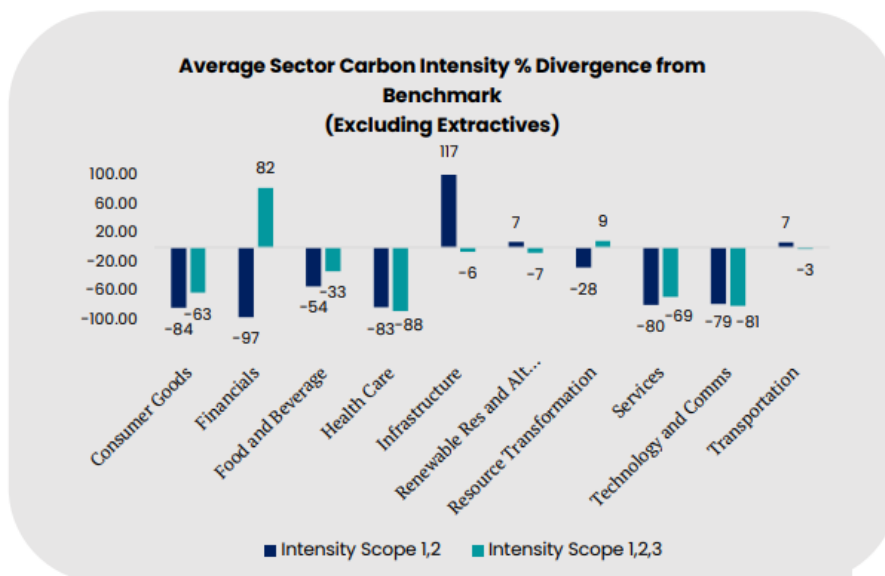
Generally, the larger the asset manager the stricter the individual portfolio manager will have to be on their internal ratings and requirements, regardless of whether the focus is on the arguably narrow Scope 1 and Scope 2 figures.

In summary, data availability, ease of reporting and requirements of asset managers drive decisions, rather than a company’s ability to reduce GHG emissions.

The reporting of Scope 3 is significantly more difficult as the additional complexity leads to a greater reliance on judgement and assumptions. Double counting of supply chain and product emissions can become material on a portfolio level. However, the importance of including Scope 3 is paramount as it accounts for an average of 85% of total emissions and can significantly

change an emissions-based decision. For example, the financial sector reveals a significantly worse average carbon intensity when including Scope 3.

Figure 2: Average Sector Carbon Intensity



Source: Urgentem, Screening for low emission portfolios. How to beat the benchmark.

## Improvements

The emission reporting standards are evolving, and data availability and reporting are improving. It is evident that Scope 3 will become the new standard. In the meantime, inference modelling and machine learning can go some way to filling gaps in data sets. It is prudent to base calculations on conservative assumptions and transparent methodologies. All stakeholders should discuss the shortcomings in current approaches openly. Engagement with company management is also a vital tool to be used by asset managers. But ultimately, regulators must be in the driving seat to enforce a standard and improve the regulations on emissions reporting.

Measuring GHG emissions is the most important first step, but how do we estimate the positive (or negative) impact of avoided GHG emissions? Only looking at low Scope 1 to 3 GHG emissions companies will result in a portfolio of capital light businesses, such as software companies, and will exclude more capital intensive but important cleantech sectors.

Scope 4 (or avoided GHG emissions) need to be accounted for in order to measure the potential benefit (or detriment) of a product or service crucial for the transition to a net zero economy. At Green Investment Partners, we look for a reduction in GHG emissions, which is estimated from the GHG emissions a company's activity produces, less the GHG emissions that would occur in the absence of a company's products or services. This indicator is used in view of achieving the long term global warming objectives of the Paris Agreement.

Scope 4 calculations need conservative assumptions and depend on the product or situation they are compared to. For example, building a wind farm in Poland, which has a significant amount of coal in its current electricity mix, will avoid more emissions than a wind farm in Norway, where 99% of power generation comes from hydropower<sup>2</sup>. Perhaps as more grid interconnectors are constructed across Europe, this will result in a more homogeneous European electricity mix to be used as a benchmark.

<sup>2</sup> Statkraft, What We Do – Hydropower.



When evaluating a company's GHG emissions impact, it is important to consider that different GHGs have different global warming potentials. Waste-to-energy facilities avoid the production of methane, a gas with 84 times more global warming potential than carbon dioxide over 20 years<sup>3</sup>, by diverting waste from landfill and producing electricity or heat. Landfill is the 'coal' of the waste sector and sits at the bottom of the waste hierarchy.

Asset heavy industries, such as solar supply chain, waste-to-energy, or metal recycling companies may come with higher Scope 1, 2 and 3 GHG emissions, but despite this energy and capital outlay, are still required for the transition to a net zero economy. Scope 4 allows us to consider a system-wide view of emissions and to be inclusive of such industries.

## Conclusion

For now, Scope 4 calculations will rely heavily on estimation and judgement. It is important that stakeholders and regulators improve the standards for GHG emission reporting, that Scope 4 is more openly discussed, and a framework is agreed upon. In the meantime, the use of conservative and transparent assumptions and engagement with companies to improve disclosure is encouraged.

Broadly speaking, the estimation and reporting of Scope 4 should follow these guidelines, as outlined by the [World Resources Institute](#):

- **Relevance:** Ensure the assessment appropriately reflects the GHG effects of the product (in relation to the base case) and is appropriate for the decision-making needs of users
- **Completeness:** Include all life cycle GHG emissions or all changes in emissions of the product
- **Consistency:** Use consistent accounting, data collection and calculation methods
- **Transparency:** Provide transparent and clear information to allow others to assess the validity and reliability of the results. Be upfront about the shortcomings of any methodology, especially in the choice of the baseline product or scenario
- **Accuracy:** Reduce uncertainties as far as possible

However, companies should first be encouraged to report Scope 1, 2 and 3 GHG emissions and be transparent about whether they are increasing or decreasing. Avoided emissions or Scope 4 should not be used to adjust Scope 1, 2, and 3 GHG emissions.

The benchmark for avoided emissions will also change dynamically as economies decarbonise. An overall alignment with the Paris Agreement is essential as the time remaining to achieve net zero is extremely limited.

Short term, reducing emissions is helpful and aligned with the Paris Agreement. However, the long term goal of keeping the increase in global average temperature to well below 2 degrees Celsius above pre-industrial levels (or ideally limiting the increase to 1.5 degrees Celsius) will require the greater aim of a net zero GHG emissions future. Put simply, switching out coal for gas may result in a decrease in emissions today but will not prevent global warming tomorrow.

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<sup>3</sup>IPCC AR5, p. 87. Future Pathways for Adaptation, Mitigation and Sustainable Development.

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