ARE YOU READY?

Why energy and carbon reporting requirements for large organisations matter to you...

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Rachael Madeley-Davies, Head of Sustainability

Background

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Back in April 2019, the UK Government launched a new Streamlined Energy and Carbon Reporting (SECR) policy, replacing and building on its previous Carbon Reduction Commitment (CRC) scheme.

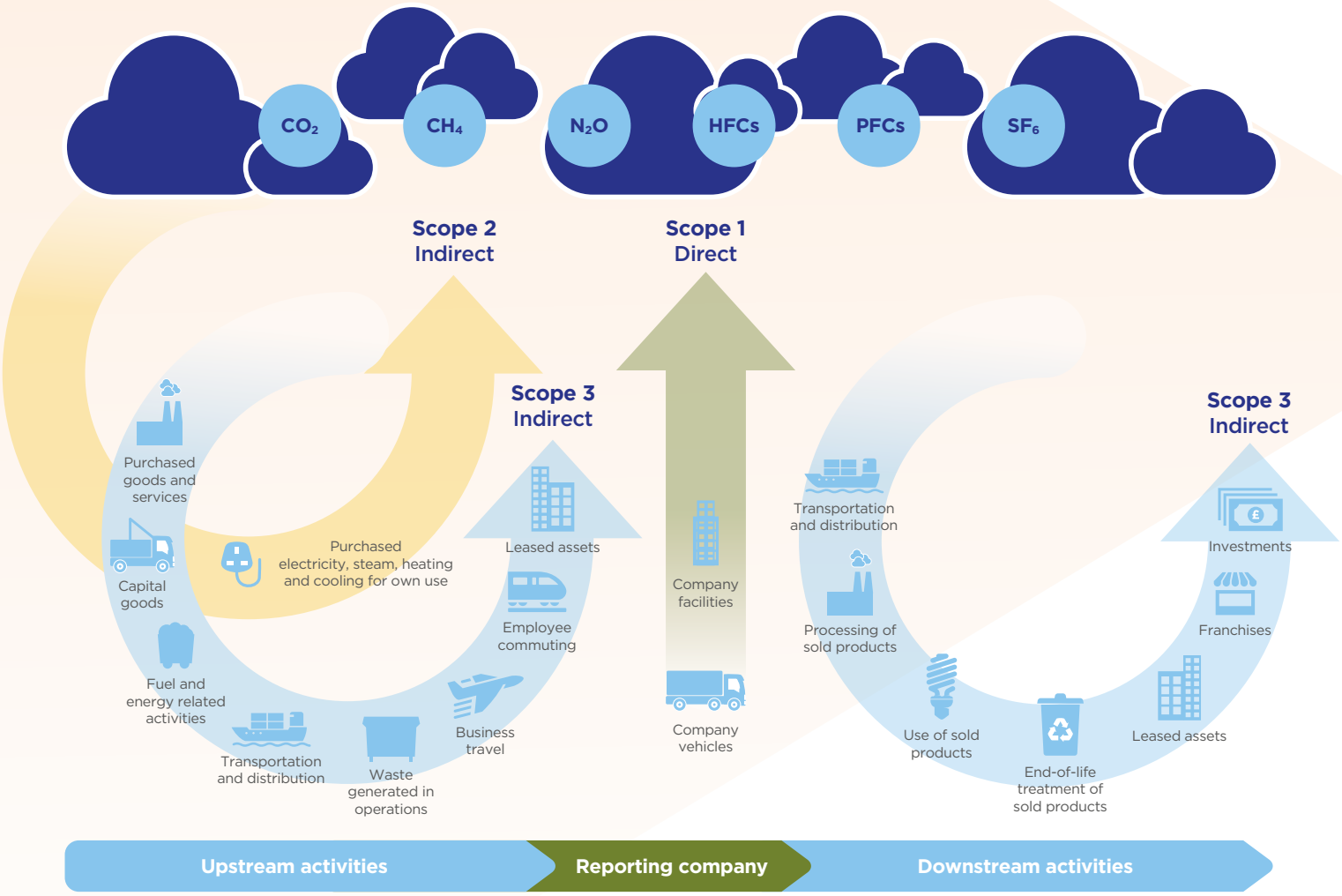
The development of the SECR was intended to achieve two things – to increase awareness of energy and carbon output by large organisations and to help them address their impact on climate change.

SECR expands mandatory carbon reporting to around 11,900 companies and involves three 'Scopes' of reporting – Scope 1 includes direct GHG emissions; Scope 2 refers to indirect emissions; Scope 3 aims to incorporate all emissions in a company's value chain that they do not own or control.

At the present time, Scope 3 reporting requirements are limited, but in the food industry, many organisations are already beginning to focus on reporting in this area, simply because such a high proportion of their total emissions comes from primary production and transport.

As a result, this document aims to investigate the ramifications of Scope 3 reporting: who is eligible, how it may work in practice and why it is an important part of business reporting as the UK strives to rapidly decarbonise over the next decade, towards the goal of a Net-Zero 2050. Indeed, in recent times, Boris Johnson has highlighted the importance of a 'green economic recovery' post-COVID and recently increased the target of emissions reduction by 2030 from 53% to 68% compared to 1990. It is clear, therefore, that focus on this area is only going to accelerate in the future. But what does that mean for food processors and farmers?

Figure 1: Overview of GHG Protocol scopes and emissions across the value chain



Eligibility

SECR reporting is mandatory for certain companies at the end of every financial year. It applies to all quoted companies and unquoted companies that meet the criteria of an annual energy consumption of > 40,000 kWh and at least two of the following:

- 250+ employees
- £36m+ annual turnover
- £18m+ annual balance sheet total

Under the current regulations, quoted companies must report on global emissions, whilst unquoted companies only need to report on UK energy consumption.

A significant shift in emphasis

Scope 1 and 2 reporting methodology will be familiar to companies of this scale, but Scope 3 represents a substantial shift in emissions reporting that aims to encourage big companies to essentially become responsible for their entire value chain emissions and incentivises them to pressurise suppliers or distributors to make progress on decarbonisation efforts.

This brings substantial challenges, particularly for industries like agriculture where emission calculations are already a complicated issue and supply chains are complex and diverse. Figure 1[1] gives an overview of what each Scope includes.

1) Greenhouse Gas Protocol, 'Corporate Value Chain (Scope 3) Accounting and Reporting Standard', https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporing-Standard-EReader_041613_0.pdf pp. 5

Why Scope 3 reporting affects all food and farming businesses

Scope 3 is defined as *'any emissions that occur as a consequence of your organisation's activities but that aren't owned or controlled by your organisation'*[2]

Currently, the only mandatory Scope 3 reporting is *'energy use and emissions from business travel in rental cars or employee-owned vehicles (where they pay for the fuel)'*[3], but there is strong encouragement to go further.

Large food businesses and retailers are already focusing on voluntary Scope 3 data collection from their food suppliers and agricultural supply chains, with a view to reporting broader Scope 3 data annually. This is because agriculture, and particularly ruminant livestock production, is in the spotlight because of overall greenhouse gas emissions. We anticipate that this will become mainstream across retailers in the years ahead, even if it isn't mandatory under legislation, and so all food and farming businesses need to be mindful that supply chains will be asking for energy and carbon data as it becomes a competitive issue in the future.

This is because Scope 3 represents a massive section of a company's total emissions. For example, Kraft Foods identified that 90% of its emissions fell under Scope 3 and estimates suggest it will account for between 80% and 97% of total emissions for a large business[4].

2) https://www.neechamber.co.uk/our-members/news/secr-your-2021-checklist

3) https://www.neechamber.co.uk/our-members/news/secr-your-2021-checklist

4) https://secrhub.co.uk/scope-3-emissions-your-frequently-asked-questions/

ASDA Case Study

ASDA signed up to the Courtauld Commitment 2025, which is "a ten-year commitment to identify priorities, develop solutions and implement changes to cut the carbon and waste associated with food & drink by at least one-fifth in 10 years" (WRAP, 2020). As part of monitoring progress against this commitment, ASDA commissioned Kite Consulting to look at its primary dairy and beef supply chains to determine if they are on course to comply with the requirements in respect of carbon reporting and carbon emission reduction.

This work focused on ASDA's dairy supply chain with Arla Foods, and its beef supply chain with ABP.

Data shows that its dairy supply chain appears to be on course to deliver a 20% reduction in GHG emissions between 2015 and 2025, therefore meeting the Courtauld commitments.

Performance to the end of 2019 showed a 7% reduction in total GHG emissions per kg of milk vs. 2015 data, with a 12% reduction among farmers on the ASDA-sponsored Challenger project. On average, three different data sets, using different methodologies, indicate an overall consistent downward trend of 2.2% GHG emissions per kg of milk per year.

The UK beef supply chain does not currently conduct routine measurement of GHG emissions per kg of beef produced, suggesting that the beef sector is some way behind the dairy sector on GHG emission measurement. This has been blamed on differing farming systems and difficulties in accurate allocation of emissions. In the short term, however, analysis of beef slaughter information by Kite Consulting to calculate the relative efficiency of production showed no evidence of improved production efficiency in the years 2016-2019. As such, there is no evidence at this point that the beef supply chain will be able to meet the Courtauld commitment to reduce GHG emissions by 20% between 2015 and 2025 unless significant changes are made.

Commenting on the work, Chris Brown, Head of Sustainability at ASDA said:

"Demonstrating that you are a responsible business, taking action to reduce greenhouse gas emissions, is rapidly becoming a requirement, not simply a 'nice to do'. All agricultural supply chains need to respond, but it would appear that the beef sector has more to do than some others in this respect, as there is little sign of progress in this area to date. The world is changing rapidly, and supply chains need to be able to prove that they are being responsible in terms of carbon emissions recording and mitigation or they are likely to see consumer demand fall.

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"The first step is having robust carbon measurement in place. The sector needs to innovate and commit to collecting data to prove progress. It needs to listen to consumers and customers who are asking for more information and reassurance about GHG emissions. Not only are large companies now having to report on this data, but ethical investors are impacting capital flows to business based on climate impact, so Scope 3 emissions are firmly in the spotlight.

"Once a baseline is established, then clear plans to achieve net zero need to be enacted. Across both dairy and beef, this will mean a focus on efficiency measures including genetic gain, feed efficiency, precision use of inputs and improved herd and farm management. It may also mean changes to production systems to deliver step-change progress."

To help farmers in its supply chain tackle these issues, ASDA has started a project with ABP to benchmark farms through the Pathfinder programme, which will include carbon footprinting. This will help drive understanding and, potentially, future sourcing policy decisions. It also has well established programmes running with Arla, including the Challenger groups, which are already driving positive change in farm efficiency and associated carbon output.

Reporting

As mentioned, mandatory reporting on Scope 3 emissions is initially fairly minimal. The methodology of reporting also leaves plenty of discretion to companies and the lack of standardised data guidelines indicates SECR is designed to demonstrate improvements year on year within companies rather than for comparative purposes. Once data is collected, it must be presented relative to a base year – which can be a fixed year, an average year or a rolling year. Non-CO_2 emissions are recommended to be converted using GWP100. For ruminant livestock agriculture this is not ideal, as a high proportion of emissions are methane that are better accounted for using newer modelling (such as GWP*) which accommodates the rapid (10-year) natural dissipation of methane into the atmosphere. GWP also overlooks other mitigation efforts in the agriculture industry which are difficult to quantify, for example carbon sequestration, something that is getting much more attention in recent times as focus turns toward regenerative agricultural principles.

Data must also be converted using a consistent emissions intensity ratio which will vary by industry. For example, agricultural products may use Kg CO_2e per litre of milk/kg of beef. This is to measure whether emissions targets (which can be absolute targets or per unit targets) are being met. Some emissions can be estimated if the data is unavailable or incomplete but throughout, there is emphasis on the mantra 'comply or explain', where qualifying statements are given for each calculation or omission: *'why you have collected the data; how you have gone about it, such as the assumptions, methodologies, and reference data used; (and) to which parts of your organisation the data relates'*[5]. The guidelines suggest that data assurance 'should be conducted by a qualified, independent third-party reviewer'[6], although there is no obligation officially to do so.

The level of responsibility given for self-reporting and the inability to engage in intra-industry comparisons (unless an industry data measurement standard is adopted) may mean the reporting process becomes more of a box-ticking game to demonstrate progress, even if the progress is fairly illusory. This is potentially dangerous for those in the agri-food supply chain, however, as different organisations could end up seeking data in different formats or using different methodologies, resulting in significant duplication and complexity in data provision.

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5) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/850130/Env-reporting-guidance_inc_SECR_31March.pdf pp. 15

6) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/850130/Env-reporting-guidance_inc_SECR_31March.pdf pp. 19

Implications for the Value Chain

There is a clear emphasis in the governmental guidance indicating the direction of travel for companies, as part of a broader shift towards more stakeholder-centred capitalism. The goal is to encourage large companies to incorporate climate concerns into business decision-making.

Guidelines suggest companies which demonstrate substantial initiative in Scope 3 reporting will *'benefit from lower energy and resource costs, gain a better understanding of exposure to the risks of climate change and demonstrate leadership, which will help strengthen your green credentials in the marketplace.'*[7] There is emphasis on 'reputational pressure' and on demonstrating substantial emission decreases for increasingly climate-conscious capital investors and consumers.

Reading between the lines, it seems there may even be new environmental regulations to identify company progress, possibly through a 'green credit' rating, or increased emissions transparency requirements on product packaging or advertising. Whether this will be led by government intervention or by progressive companies wanting to outdo one another to tap into the sustainable consumer trend is unclear; however, it is clear that by carrot or stick (or a combination of both), companies who commit to demonstrable carbon improvements will be rewarded and those who do the bare minimum or are slow to adapt will be quickly left behind.

The financial and reputational sustainability of businesses will be increasingly linked to their environmental sustainability, and this applies to everyone in the value chain, not just the reporting companies.

The guidance encourages companies to *'influence purchasing decisions with the information gathered. Improvements in your suppliers' environmental performance will be more likely if they know that their environmental performance is a factor in your organisation's buying decisions.'*[8]

Harvesting data and looking at processes that can be improved necessitates increased co-operation between large companies and all actors in their value chain, from the footprint of production, packaging, distribution, all the way through to consumer purchase and product end-use. For example, guidance suggests companies should consider the amount of water used in washing machines or electricity

energy use from bought TVs – so-called 'downstream' emissions, as well as upstream emissions involved in the production and presentation of a product to consumers.

This increased scale of accountability offers opportunities and problems. On one hand, there are plenty of potential areas for creative businesses to look at and demonstrate marginal improvements, but the overwhelming scope of potential considerations means picking and choosing which policies to implement may take time or encourage companies to focus on low-hanging fruit.

In short, companies can report as much or as little as they think is appropriate, with qualifying statements on what was excluded and why. This raises the spectre of companies presenting results in a way that could be considered 'greenwashing' to gain short-term competitive advantage, rather than out of a real desire for transparency and improvement in carbon emissions. In the interests of transparency and identifying areas where improvements can be made, those who go deeper into data collection will likely be able to demonstrate better targeted reductions in emissions and will benefit reputationally from a more thorough approach, as long as their reporting outlines the depth and credibility of their chosen path.

7) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/850130/Env-reporting-guidance_inc_SECR_31March.pdf pp. 5

8) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/850130/Env-reporting-guidance_inc_SECR_31March.pdf pp. 21

Data collection

A variety of independent carbon calculator tools have been set up, which reporting companies should assess and decide with their value chain which is most suited to their needs. These include 'stand-alone' calculators that depend on self-entry of data (e.g., the Farm Carbon Toolkit, the Cool Farm Tool and AgREcalc) or more outsourced approaches using data collection businesses with integrated tools (e.g., Alltech ECO_2, Promar and Intellync). For those who want full control over the data collection process, in-house calculations can be done using IPCC guidelines (updated 2019) for livestock emissions inventory[9] which goes into intensive detail on feed characterisation, enteric fermentation and manure management emissions, and gives estimates which vary by region.

But this range of approaches is a problem for food and farming businesses. Moving forward, large organisations that fall under the requirements of SECR regulations are likely to make the provision of energy and carbon data a condition of supply, which is likely to result in additional cost for businesses throughout the supply chain, as this will be complex and time-consuming.

This will only be worse if there are a huge range of approaches or methodologies required by different organisations. It is, therefore, in everyone's interests to be deciding credible, pragmatic and cost-effective approaches to carbon reporting sooner rather than later, so that data is already collated and understood when downstream customers start asking for it. Indeed, proactively having data available before it is required may also provide a positive point of difference in the market, demonstrating to others that a business is acting responsibly and may reduce the chances of a proliferation in the approaches to data collection when a business serves multiple customers.

9) https://www.ipcc-nggip.iges.or.jp/public/2019rf/pdf/4_Volume4/19R_V4_Ch10_Livestock.pdf

Conclusion

SECR represents a sea change in how large companies view and report on their carbon footprints. By making these companies responsible for the emissions of their broader value chain, progressive change will be driven from actors within the market rather than imposed from external legislators (at least for the time being).

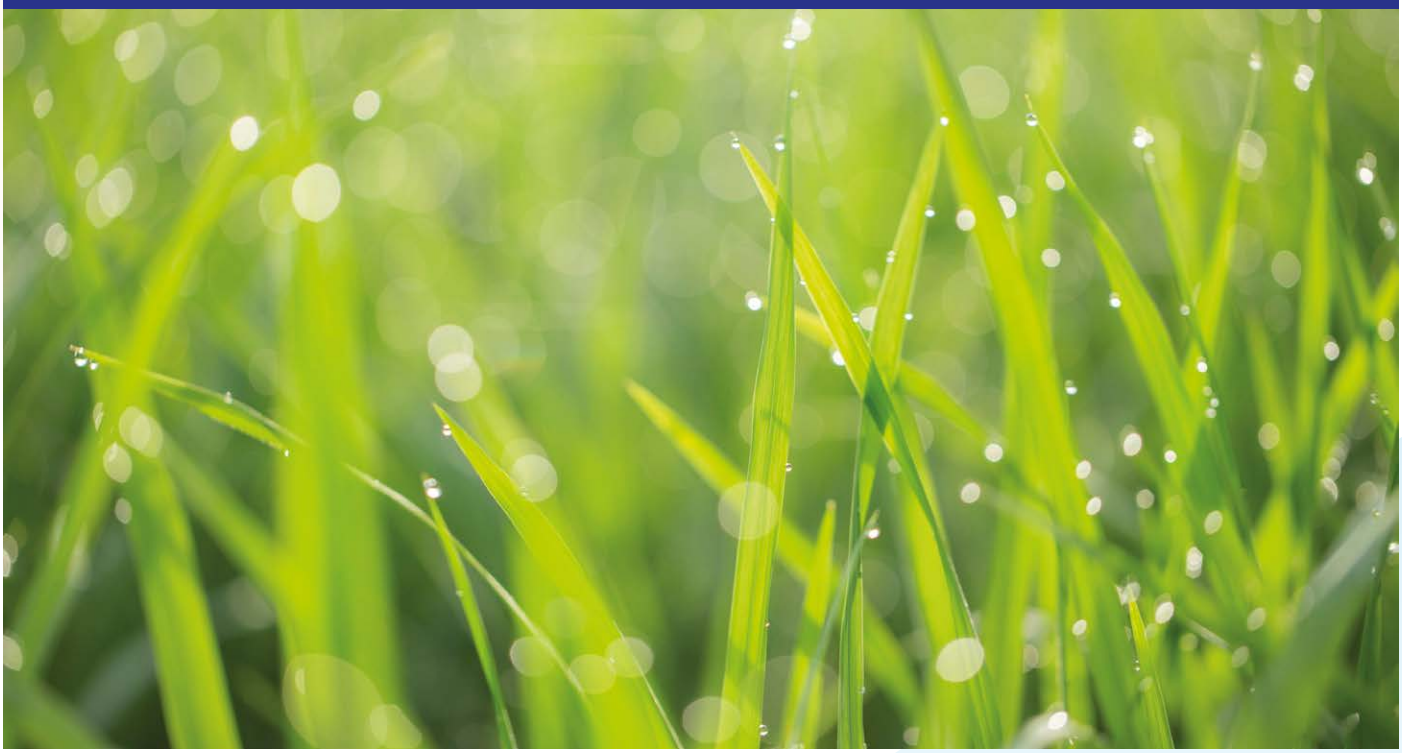
At this relatively early stage of our understanding of anthropogenic emissions, and the complexity of measuring living, agricultural systems, it is difficult to say how feasible significant GHG emission reductions are - or what will be deemed a successful reduction. However, the only way to better understand this phenomenon, and align with the sustainability direction of travel is for all actors in the supply chain to co-operate and harvest as much data as possible. Only once this is done can realistic modelling and emissions targets be set, and tangible improvements to processes be made.

There is debate about carbon measurement protocols and approaches, and this has, along with cost, delayed supply chains in adopting carbon measurement back to farm level. It is, without doubt, complex. But debate about measurement is, to an extent, a distraction. The reality is that the assessment of GHG emissions, and the reduction of absolute emissions, remains a priority for humanity, and the dairy and beef sectors will have to play their part in this. As such, the assessment and proactive management of GHG emissions will be an integral part of farm management tasks in the future.

Innovators will be rewarded and those who are slow to act or don't take this seriously as an urgent priority may very quickly find themselves redundant in an increasingly environmentally-conscious marketplace. The agricultural industry, and the ruminant livestock sectors in particular, are in the spotlight. As such, the message is simple. Act now to understand your energy and carbon outputs and put in place mitigation methods to address annual reductions, or potentially lose out.

Find out more:

Kite Consulting provides business services to the entire food chain, from farm to retailer. We can provide specific advice around environmental issues relating to carbon reporting, with expertise in data interpretation. Contact us on **01902 851007** or email **enquiries@kiteconsulting.com** to find out more.



For enquiries regarding the information in this document please contact:
Kite Consulting | The Dairy Lodge | Dunston Business Village | Dunston | Staffordshire | ST18 9AB
Tel: 01902 851007 | Email: enquiries@kiteconsulting.com