



How better measurement is transforming the food industry

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Measurement uncertainty can often feel like a haze obscuring climate action. When it isn't clear how or what you have to measure, it can be hard to decide where to focus action. While the Greenhouse Gas Protocol has provided a common framework for measuring emissions for many years, agriculture presents unique challenges. The complex interactions between land, plants and animals have led to debate about the best way to accurately measure the industry's effect on the climate. This issue becomes more complicated because nitrous oxide and, particularly, short-lived methane are produced in greater volumes than carbon dioxide (CO₂), making it more important to consider how the different gases are compared into a single measurement.

Over the last few years, Hilton Foods has focused on how we can clear the fog of confusion that surrounds measuring the environmental impact of the food sector. Working with NGOs, governments and industry partners we have helped develop consistent methodologies and practical tools across the sector that reduce the amount of time the supply chain spends reporting and support better decision-making.

One area where this is particularly important was seafood. Measurement at sea is difficult and, historically, the industry relied on a limited number of outdated studies as the primary resource for calculating the carbon footprint. Rather than developing multiple competing calculation tools, Hilton Foods worked with Seafish and industry partners through the UK Seafood Federation to develop the Seafood Carbon Emissions Profiling Tool (SCEPT). Today, SCEPT enables businesses across the seafood sector to calculate emissions using the same methodology, providing clearer insights into where emissions occur within the supply chain. By introducing a shared data collection template, SCEPT helps reduce the administrative burden on our shared supply chain.

SCEPT solves the challenge for Seafood, but the same challenge exists across food production. Our team are members of DEFRA's Food Data Transparency Partnership's Eco Working Group, the Expert Review Panel of the European Commission's Product Environmental Footprinting Category Rules for Marine Fish and several WRAP working groups. Through these groups, our specialist team have supported the development of clear guidance, rigorous governance structures and flexible tools that measure emissions on a level playing field across the whole industry.

At the same time, over the last four years, Hilton Foods has funded doctoral research at the University of Oxford to explore how different ways of measuring emissions can influence decision making. These metrics included GWP*, which attempts to better measure the impact of methane's shorter life in the atmosphere on global warming, and Carbon Opportunity Cost, which considers the potential climate benefit of using land for agriculture. The findings showed that while those metrics can aid decision making in specific applications, they rarely change the overarching direction. Reinforcing our approach that businesses shouldn't wait for perfect measurement before taking action.

Measurement challenges aren't limited to climate. Food production is dependent on nature, but measuring across water, biodiversity, soil, air pollution, noise, and so much more can feel like an endless task. Without clear structures, it's easy for businesses to get stuck spending more time collecting data than delivering improvements. Alongside our ongoing in-house environmental risk modelling, the Hilton Foods team are supporting the Taskforce on Nature-related Financial Disclosure (TNFD) and the UK Sustainability Technical Advisory Committee to develop guidance to assess and disclose businesses' nature risk profile. These frameworks help companies to understand the most material risks to their business, enabling resources to be focused where they can have the greatest impact.

But frameworks alone are not enough, in many areas of sustainability we don't have underlying data to accurately assess improvements. Developing and deploying technologies that can robustly measure nature are key to scaling nature recovery as an intrinsic business process. This is why Hilton Foods has partnered with Chirrup in recent years to develop their bioacoustic AI that uses birdsong to monitor the health of an ecosystem. As this technology develops, Chirrup will enable us to effectively measure and evaluate nature regeneration throughout our supply chain.

As we enter the next phase of our Sustainable Protein Plan, we will continue to improve the assessment of environmental risk in our supply chain and the measurement technologies to evaluate that. From September, we will partner with the Universities of Lincoln, Aberdeen and Strathclyde through the SUSTAIN CDT on two new PhDs. One will explore the use of satellites to measure subaquatic emissions from fishing, while the second will explore how drones can measure methane emissions from cattle grazing outdoors. Together these will enable Hilton Foods to more accurately measure emissions in our supply chain and better understand the benefits of reduction projects.

Bringing clarity and consistency to sustainability measurement is an ongoing journey, but we have made significant progress. As we continue to deliver our Sustainable Protein Plan, aligned measurement and better data will ensure the food sector can focus on what matters: delivering meaningful environmental progress.



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