CASE STUDY

AVON ENERGY PARTNERS

GHG EMISSIONS INVENTORY AND PCF INTEGRATION

The Client:

Yeo Valley is the UK's largest family-owned organic dairy brand, producing organic food in the heart of Somerset for over 30 years. With a range of more than 150 products, from organic yoghurts and milks to soups and burgers, Yeo Valley combines quality, sustainability, and great taste across its diverse portfolio. Looking to the future, the brand has set out three ambitions for the business, focused on Food, Climate, and Nature.

The Challenge:

Yeo Valley's production company employees a team of 1,750 people to produce and sell a wide range of organic products. With four food production sites and a dedicated logistics centre across the Southwest, the business operates at a large scale. The challenge was to develop a comprehensive emissions inventory capturing all activities across Scopes 1, 2, and 3, aligned with Forest, Land, and Agriculture (FLAG) reporting requirements, and to set robust targets in line with the Science Based Targets initiative (SBTi).

Key Greenhouse Gas (GHG) Protocol categories:

Fuels and electricity consumption across four production sites, one logistics centre, and two head office locations.	**Purchased Goods ledger containing over 500 unique products.**
A 115,000 sq ft logistics and distribution centre managing inbound and outbound operations for 100 HGVs per day.	**Other relevant categories covering purchased capital goods, employee commuting and homeworking, business-related travel, and waste generated in operations.**

Establishing a comprehensive emissions inventory provides the data essential to support informed decision-making on emissions reduction and business strategy. This detailed review of emissions hotspots has enabled Yeo Valley to pinpoint key opportunities of green electricity across the business and the exploration of innovative packaging solutions to enhance sustainability and minimise waste.

The Solution:

Since 2022, Avon Energy Partners has supported Yeo Valley in building a robust emissions inventory. Through collaboration with suppliers, team leads, employees, and wider stakeholders, we created a complete picture of supply chain emissions, covering Scope 1, 2, and 3 providing the foundation for targets reduction initiatives. This work also enabled Yeo Valley to set ambitious Science-based Targets which were subsequently accepted.

How we delivered value

Stakeholder Collaboration	Avon Energy Partners led the emissions data collection process, co-ordinating closely with suppliers and departments to establish a high-quality, decision-ready dataset built on accuracy and consistency.
FLAG Alignment	Ensured emissions were aligned under the Forest, Land, and Agriculture (FLAG) guidance, including Land Use Change, Land Management (CO2 and non-CO2), and Fossil Fuel sources. This provided Yeo Valley with the clarity needed to monitor progress against general and FLAG-specific SBTi targets.
Dairy Emission Factor Development	Avon Energy Partners worked with Yeo Valley and its suppliers to develop supplier-specific emission factors for dairy products, incorporating variations in product type, ingredient composition, and processing-related emissions to improve accuracy of reporting.
Packaging LCA Integration	Developed a dynamic system to calculate packaging emissions using a combination of product-specific LCAs where available and material-based emissions factors were not. This live framework allows new LCAs to be integrated instantly, ensuring packaging procurement decisions and reduction strategies are continuously reflected in emissions analysis.

Outcomes and Impact

Comprehensive GHG Emissions Inventories	Dynamic Database of Product and Packaging Emission Factors	SBTi-Validated Targets and Ongoing Progress Tracking
Delivered full GHG and FLAG-aligned emissions inventories across ten reporting entities, providing a robust emissions baseline for SBTi submissions.	Developed live emission factor databases enabling new product and Product Carbon Footprints (PCFs) to be added seamlessly, ensuring accurate measurement based on product-specific data rather than generic averages.	Supported the development of Science-based Targets that were successfully approved by SBTi, alongside continuous monitoring of progress towards the 2030 near-term targets, and 2040 and 2050 net-zero goals for Scope 1 and 2, and Scope 3, respectively.

Why this case matters:

Emissions inventories that incorporate product-specific emission factors provide businesses with a far more accurate understanding of their true carbon footprint. This level of detail not only enables the development of effective, targeted reduction strategies, but also allows organisations to clearly quantify the impact of changes across their overall emissions inventories, something that is not achievable when relying on generic average-based factors.

This is a challenge that many food manufacturers continue to face, as supply chain complexity makes accurate product-level accounting difficult. Avon Energy Partners' work with Yeo Valley demonstrates the value of integrating Product Carbon Footprints directly into the emissions inventory process, creating a solid foundation for credible reporting and effective decarbonisation action.

Contact

AVON ENERGY PARTNERS

Email: will@avonenergypartners.co.uk

LinkedIn: https://www.linkedin.com/company/avon-energy-partners/

Website: https://www.avonenergypartners.co.uk