ClimatePartner

Lidl GB and Duncan Farms Working together to tackle supply chain emissions



When value is about more than just price

About Lidl GB

Famous for its "Big on quality, Lidl on price" advertising, Lidl GB has grown steadily since launching in the UK in 1994. Part of the Schwarz Group, the company now employs over 31,000 people and has more than 960 stores and 14 distribution centres in England, Scotland, and Wales. Social responsibility and sustainability are at the core of Lidl GB's daily operations, with emphasis on its responsibility for the environment, people, and society. Lidl GB is passionate about working with British producers and sources two thirds of its products from British suppliers.

ALC: NO

Where quality meets sustainability

About Duncan Farms

Duncan Farms is Scotland's fastest-growing egg business, focused on producing traceable, sustainable eggs. Based in the north-east of Scotland, the family-run business has a fully integrated approach to egg production, from in-house rearing and laying to grading and packing. Every step of the process is carefully managed to produce premium quality, nutritious eggs. Promoting true traceability, Duncan Farms enables every egg to be tracked back to the farm.



The challenge Taking control of supply chain emissions

Calculating <u>scope 3 emissions</u> presents one of the biggest challenges for producers and retailers alike. Compared to scopes 1 and 2, scope 3 is not only harder to measure, but also harder to act on. Successful outcomes are achieved through a genuine commitment on both sides, resulting in collaborative partnerships and shared targets.

98% of Lidl GB's carbon emissions lie within scope 3, mostly in its supply chain

To tackle its scope 3 emissions, Lidl GB has set a supplier engagement target. Suppliers representing 75% of Lidl GB's product-related emissions will commit to their own science-based targets for carbon reduction by 2026.

Supplier engagement

To meet these objectives, Lidl GB has set up a comprehensive supplier engagement and learning programme. As part of this, Lidl GB is supporting farmers and suppliers like Duncan Farms to conduct carbon footprint assessments of their businesses and products, and to develop carbon reduction plans.

Laying the foundations for a reduced carbon footprint

The biggest carbon hotspot in egg production is the feed mix. The current UK poultry industry is heavily reliant on soy feed, due to its low price and and high protein level. According to WWF, soy makes up roughly 20% of the feed source for poultry in the UK.

Soybeans are a major driver of tropical deforestation and conversion, with approximately 80% of the intended use being for animal agriculture. This poses both a major carbon emissions challenge and a biodiversity challenge. In fact, land-use change (usually resulting in deforestation) caused by soybean production can amount to up to 80% of the overall footprint.

Feed composition	Soy (%)	Fishmeal (%)
Poultry	20	
Pig	17	
Salmon	20	13

Heading in the right direction

Transitioning towards feed sources that reduce deforestation and forest conversion, reducing the use of soy where possible, and trialling homegrown proteins would be both feasible and beneficial to UK agriculture. However, ensuring the alternative feed choices have the desired effect in reducing emissions requires robust carbon footprint analysis. Duncan Farms needed to understand how impactful its feed choices and other carbon reduction activities – such as switching to renewable electricity and heating – could be, in order to better inform its decarbonisation strategy.

The solution A climate action strategy in five steps

What is the carbon footprint of a six-pack of eggs?

ClimatePartner supported Duncan Farms in calculating product carbon footprints – lifecycle assessments focused on the greenhouse gas emissions of individual products – as well as its corporate carbon footprint. This covered the emissions not directly attributable to the product life cycle, such as office procurement, employee commuting, and business travel – all for multiple years. By providing reports compliant with the Greenhouse Gas Protocol, Duncan Farms was able to compare emission reductions year-onyear – as well as the impact of its reduction measures at a product level.



Measure carbon footprints

Understand the emissions of your company and its products.



Set reduction targets

Define a roadmap to continually reduce emissions.

Implement reductions

Take action to reduce your company's emissions.

Finance climate projects

Support verified climate projects to finance global climate action.



Communicate transparently

Share your climate action efforts to maximise impact.



Emission sources	kg CO ₂	%
End of life	0.00	0.2
Electricity	0.01	0.3
Logistics	0.05	3.1
Packaging	0.07	3.9
General emissions*	0.18	9.9
Raw materials/farm-level emissions	1.48	82.6

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Raw materials: Breakdown	%
Feed	85.8
Pullets	8
Manure	5.6
Other**	0.6

Overall result: 1.79 kg CO₂

* General emissions: Emissions linked to the operations of the business that are not attributed directly to the production of the eggs. These include things like business travel, employee commuting, and energy used in central offices. These have been calculated via a corporate carbon footprint and assigned proportionally to the product based on historical data and sales volume estimates. ** Other raw materials: Includes fuel, litter, purchased electricity, water supply, water treatment, and medical emissions.

Implementing the most effective reduction measures

ClimatePartner supported Duncan Farms in setting reduction targets at a company level, considering what measures had already been implemented and offering advice on targets for scopes 1, 2, and 3. By analysing the various carbon reduction initiatives, Duncan Farms was able to understand the impact of its decisions and prioritise accordingly.



Lower carbon, local feed

Over 80% of the feed mix is now grown on its Aberdeenshire farms. This diet includes wheat, barley, beans, and oilseed rape. All crops are grown within a 20-mile radius of the laying farm and packing centre. This contributed to the largest reduction in emissions.

Renewable electricity

The laying farm, packing centre, and rearing barn are all now powered by 100% renewable electricity, provided by in-house wind and solar solutions.

Renewable heating

100% of the heating used in the rearing barn is generated via biomass.

Recyclable packaging

The packaging is designed to be 100% recyclable at kerbside, significantly reducing end-of-life emissions.

Energy efficiency

The effective use of energy across all buildings, including LED lighting, is ensured.

It has been a great opportunity developing Woodcote Responsible Free Range Eggs with Lidl and ClimatePartner. We have implemented a range of on-farm and wider supply chain measures to significantly reduce the carbon footprint of Responsible Eggs. Most significantly, we have successfully eliminated imported soy from our hens' feed and replaced it with sustainably produced, homegrown field beans. The 57% reduction in carbon is a fantastic achievement but we remain eager to continually identify and implement further measures.

Alistair McBain, Farm Operations Manager, Duncan Farms

The results

57% reduction in carbon emissions over the life cycle of a pack of eggs, compared to 2021 baseline

By working with ClimatePartner to analyse various carbon reduction initiatives, Duncan Farms was able to both understand and, importantly, communicate the carbon reduction impact of its decisions.

This also allows Lidl GB to better report on its own scope 3 emissions, with accurate, primary, third-party-validated data directly from the farm, and to share the learnings with other producers.

Informed with better quality data, this is only the start for Duncan Farms as it continually strives to reduce carbon emissions within its operations and products.

Emission sources	kg CO ₂	%
End of life	0.00	0.4
Electricity	0.00	0.0
Logistics	0.05	7.3
Packaging	0.07	8.6
General emissions	0.08	9.9
Raw materials/farm-level emissions	0.57	73.8

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Raw materials: Breakdown	%
Feed	61
Pullets	23
Manure	15
Other	1

Overall result: 0.77 kg CO₂



As part of our commitment to producing food that's good for the planet and good for producers, we're working closely with our suppliers to support more sustainable farming practices. We're therefore really proud of our collaboration with Duncan Farms and ClimatePartner, who together have implemented initiatives to achieve an almost 60% reduction in the carbon footprint of our six-pack of Free Range eggs. This project is just one example of some of the ways in which we are working with our industry partners to reduce our carbon footprint.

Shyam Unarket, Head of Responsible Sourcing & Ethical Trade, Lidl GB

Financing climate projects



As part of a comprehensive climate action strategy, Duncan Farms has also taken responsibility for the emissions it cannot reduce immediately. The Science Based Targets initiative (SBTi) recommends that companies engage in beyond value chain mitigation (BVCM), which includes investing in carbon avoidance, reduction, and removal projects in addition to – not instead of – deep emission cuts in the value chain. ClimatePartner advised Duncan Farms on how best to apply the latest guidance from reputable scientific authorities such as the SBTi, as well as providing information about the various carbon credit standards and project technologies.

Thinking globally and locally

Duncan Farms is investing in two projects:

a Gold Standard certified wind energy project in Chile and a tree planting project near the Lake District in the UK. The tree planting investment is an additional commitment to ensure the company is contributing to future climate change mitigation closer to home, along with other co-benefits, such as reduced flooding risk and increased biodiversity.





Transparent communication

ClimatePartner provided training on the Green Claims Code and advised Duncan Farms on how to ensure its communication materials, claims and messages were both compliant and accessible to a wide range of stakeholders, by communicating its climate action through ClimatePartner's product certification. Individuals can access a unique tracking page to understand the steps the company is taking, including the reduction measures implemented and climate projects financed.

Supplier engagement expertly executed

Too often, suppliers are inundated with time-consuming surveys to fill out on their sustainability strategies but are not being provided with the support they need to succeed. Lidl GB has shown that by truly understanding the challenge at hand, and supporting suppliers with both resources and financing, tangible carbon reduction outcomes can be achieved.

The challenge of the food chain

Animal feed is key to reducing the emissions from animal-based products, but getting it right isn't straightforward. There are many alternatives to soybean as the main source of protein – but choosing the right mix is key. According to WWF, the average UK food-related emissions per person per day is 5.17 kg CO_2e . This needs to reduce by 20% to 4.09 kg CO_2e per person per day by 2030 to align with the goals of the <u>Paris Agreement</u>.



Going beyond carbon

Another exciting aspect of the project is that the collaboration has not focused exclusively on carbon, there has been a big focus on biodiversity too. Duncan Farms' first dedicated Woodcote Responsible Free Range Eggs farm is Ashogle, where the company has embarked on a biodiversity enrichment program, including:

- Introducing species-rich grassland, planting hedgerows and native trees to boost biodiversity and create habitats for local wildlife.
- Grasslands: to encourage native wildflowers and slow-growing grasses, a multiyear grassland (meadow) management plan has been implemented.

- Woodlands: additional native trees have been planted on the range, including alder, European beech, and rowan trees.
- Hedgerows: To improve the connectivity of local habitats and encourage wildlife, a mixture of native hedgerow species are being planted. including hawthorn, hazel, and holly.
- Wildlife enhancements: boxes for red squirrels and bees have been erected in the mature woodland that borders the range.



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