Carbon: Our story so far 2022 – 23

Doing it Right
Iceland

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Our targets

We are working hard to cut down the carbon emissions in our own operations, reduce our energy demand, and maximise the use of environmentally-friendly gases.

Iceland is a signatory to the Courtauld Commitment 2030, which brings together organisations across the food industry to reduce the environmental impact of food and drink, with the shared target of reducing absolute greenhouse gas emissions by 50% by 2030. This is aligned to a 1.5℃ pathway, and a milestone towards achieving net zero by 2040.

The Climate Pledge, to which Iceland is a signatory, calls for businesses to be net zero by 2040, alongside committing to producing regular reporting, implementing decarbonisation strategies, and using credible offsets for remaining emissions.

We are proud signatories to the BRC climate action roadmap, which brings together the retail industry on a roadmap to 2040 net zero.

In 2011, we set targets to reduce absolute carbon emissions in our own operations.

2020	2030	2042
30% absolute reduction	**60%** absolute reduction	**100%** absolute reduction

In 2020, we set targets to achieve net zero within our own operations and our supply chain.

2030	2035	2040
Net zero for UK electricity use **50%** reduction in absolute GHG emissions	**Net zero** for UK fuel, gas and refrigerant use	**Net zero** for all products sold in the UK

Reporting and Transparency

Scope 1 and 2

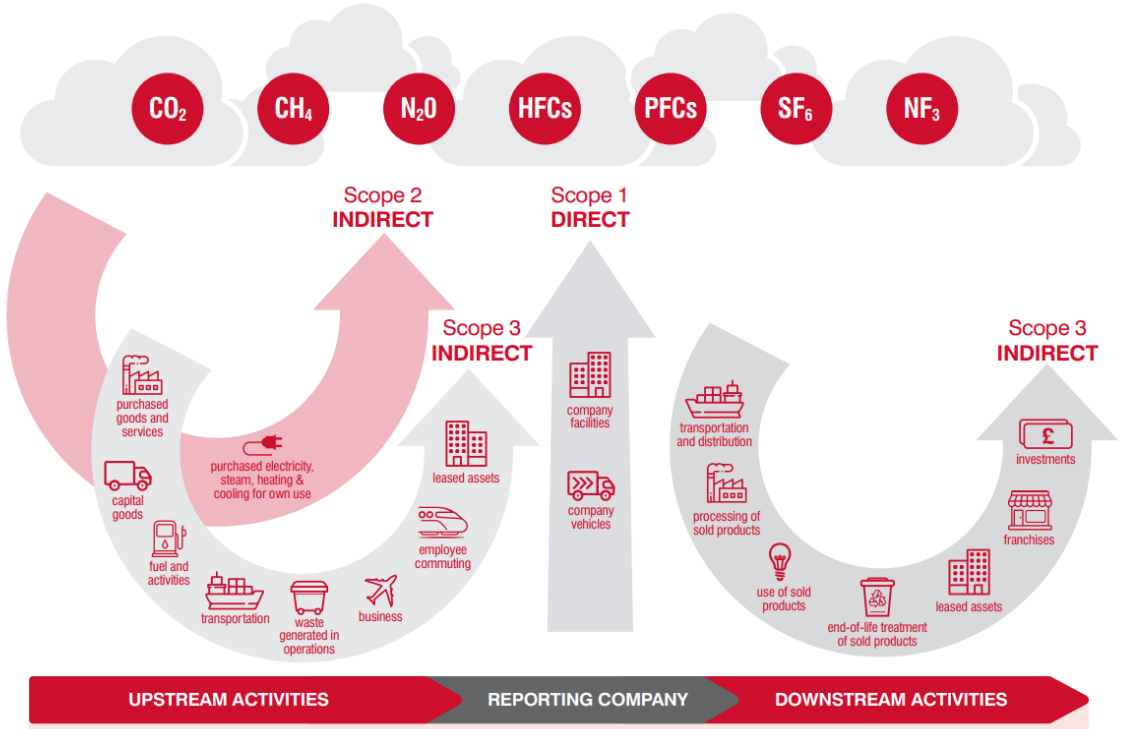
Our scope 1 and 2 carbon footprint is calculated and verified by Inspired Energy PLC who follow the UK Government Greenhouse Gas Conversion factors for their calculations.

Refrigeration

From 2020 onwards, we have included the use of refrigerant gases within our footprint. As industry leaders in frozen food, Iceland uses refrigerant gases throughout its operations; we follow best practice to minimise the losses of these gases and therefore the impact on our environment.

Scope 3

Working with the Carbon Trust we calculated our scope 3 emissions in 2020/21. This data will be updated on a multi-year basis as opposed to annually with the context that Scope 3 data has a high level of averaging and assumption within its calculation.



Scope 1 emissions
Our scope 1 includes emissions from heating and transport.

Scope 2 emissions
100% of the electricity we purchase is from renewable sources, using the market-based method for scope 2 reporting.

Scope 3 emissions
Our scope 3 emissions cover our value chain; the majority of our emissions come from the production and processing of products we sell.

CARBON TRUST

Our full carbon footprint and methodology can be seen on pages 12-14.

Our progress

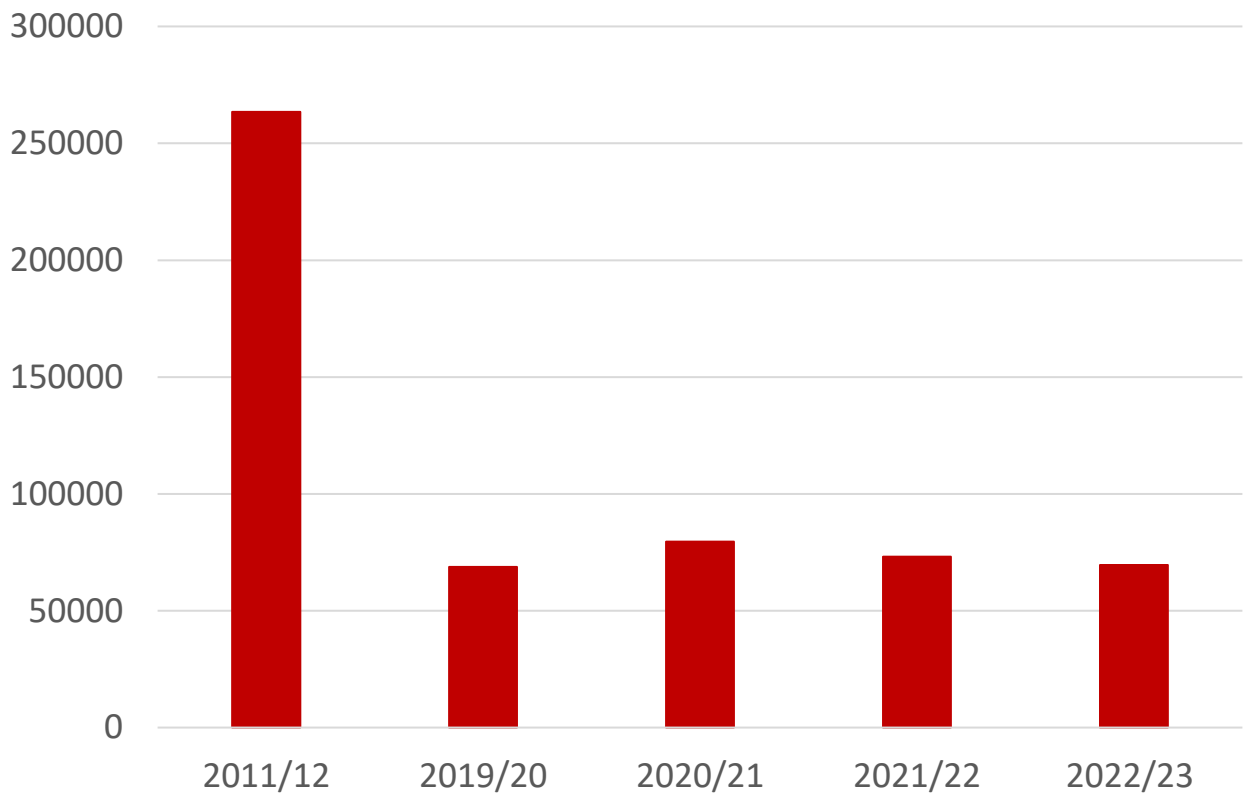
2022/23 we have reduced emissions in our own operations by

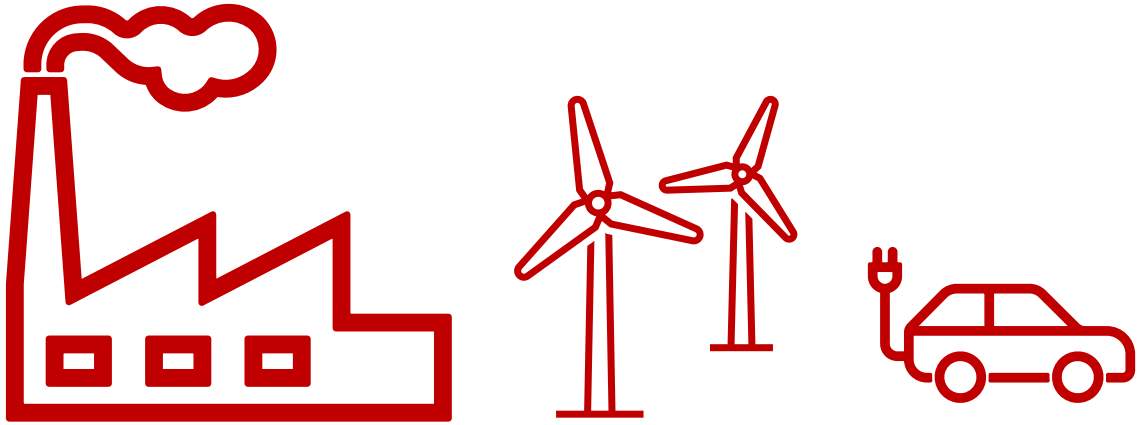
74%

From our 2011 / 2012 baseline

In our baseline year of 2011/12, the business generated 263,461 tCO2e through its direct operations (Scope 1 and 2 emissions). The majority of our remaining scope 1 and 2 emissions are directly attributed to transporting product across our business and to our customers. For 2022/23 we generated 69,571 tCO2e, which is a 74% reduction on our baseline year.

Iceland's scope 1 & 2 emissions tCO2e





69,571 tCO2e is a 5% year on year reduction and we will continue towards reducing our overall energy consumption and associated emissions.

How we're taking action

Renewable energy

100% of electricity purchased for Iceland sites in the UK comes from renewable sources, supported by green energy certificates.
In an effort to not only purchase renewable energy, we have also started developing additional renewable energy generation projects for Iceland. A large off-site solar PV farm Power Purchase Agreement has been signed and rooftop solar PV arrays on our depots and Food Warehouse stores around the UK are currently being developed. This renewable energy generation will come onstream in 23/24.

Refrigerant gases

Over the last year we have made further progress to improve the accuracy of our data relating to refrigerant gases, whilst we also continue to switch to more environmentally friendly gases including natural refrigerants.

New Initiatives

Initiatives for 23/24 include installing doors on chillers, replacing mechanical thermostats with digital on older freezers and removing open end freezers.

More efficient equipment

We have an ongoing asset upgrade programme, replacing our older freezers with new, more efficient versions. Not only do the new freezers use natural refrigerants wherever possible, they are also more energy efficient. On average, stores refitted with new freezers consume 30% less energy than stores using older equipment.

We have worked hard to introduce various measures in our stores to reduce our energy consumption, through reducing lighting times and signage as well as adjusting trim heaters on freezers. These measures alone have saved 5mWh of electricity.

Energy Efficiency Improvements

We are committed to year-on-year improvements in our operational energy efficiency. Measures ongoing and undertaken throughout financial year 2022/2023:

Digital signage

We have updated our digital signage with a switch off between 10am to 2pm, saving 443,000 kWh/annum

Instore

We have turned off the lightboxes on our freezer cabinets in The Food Warehouse and new concept stores, saving 2,551,613 kWh/annum

Store lighting

Our store lighting has been adjusted to align with the exact trading hours to reduce electricity consumption, saving 296,165 kWh/annum

Freezers

We have installed trim heaters to improve our freezer efficiency, this has decreased the heater duration by 50%, equivalent to saving 1,638,668 kWh/annum

Helping our customers to save energy, money and carbon

Iceland and Utilita are working together to help UK households use less energy. As part of this partnership, we now sell discounted air fryers and have updated the cooking instructions on Iceland own-label products to include air frying instructions.

Utilita's smart energy data reveals that air fryers are one of the most energy efficient cooking appliances to use, especially when cooking frozen products, costing an average of just 26p per day to run – compared to 91p for an electric cooker. Each household could make substantial savings by using cost-effective cooking methods.

AFFOODABL£

We have set up "Afoodable" a blog to help customers during the cost-of-living crisis. There is dedicated space to help customers save waste, time and money by cooking smarter with their air fryers, microwaves, kettles and slow cookers.

Top tips and recipes highlight how customers can save money and reduce energy consumption in the home

[Affoodable Recipe Blog | Affoodable money saving tips (iceland.co.uk)]

Air Fryer Aisle

Iceland became the first supermarket to launch an aisle dedicated to air fryable foods. With 46% of people in the UK having personally bought or gifted an air fryer in the last five years, the aisle aims to give customers easy access to products that go hand in hand with the energy saving cooking appliance.

The aisle which was trialled for a week in a Food Warehouse store saw over **250 products** promoted as being cookable in an air fryer.

Deeside electric car charging station

We installed 19 electric car chargers at Iceland head office, providing staff and visitors with EV charging facilities.

Company cars

82% of company cars have now been switched to hybrid vehicles, this has reduced the average carbon output for the overall fleet by over 57% since baseline year.
We continue to offer hybrid vehicles to all colleagues eligible for company cars and explore suitable electric vehicle options.

Safe, energy efficient driving

All Iceland home delivery drivers are part of an innovative telematics programme, Lightfoot. They undertake specific training to enhance their driving skills, focusing on techniques to improve safe driving and increase fuel efficiency.
Early 2023 saw the full rollout of Lightfoot across our delivery drivers and vans. Since launch we have seen a 12.9% saving in both fuel and CO2 emissions, equating to:

14.6m washing machine cycles

79,649 trees

Replacing 221 of our ICE vehicles with electric

65.2m kettles boiled

CO2 savings fleetwide per year

Electric delivery vans

In 2022 we trialled our first fully electric home delivery van in Chester, based on a Mercedes eSprinter Panel van, the vehicle operates at both chill and freezer temperatures with a payload of around 300KG.
We continue to trial Electric Vans on a small pilot scale and continue to review the capabilities of new Electric Vans as they come to market and have further trials with two additional manufacturers throughout 2023

Supply chain optimisation

Our supply chain team continue to undertake optimisation projects with our suppliers to maximise the volume of product we are able to get out of each delivery.

Environmentally-friendly depots

Iceland has signed a Climate Change Agreement (CCA) administered by DEFRA for temperature controlled storage buildings. We have surpassed our energy reduction targets for our depots every year since 2015.

Maximising the efficiency of HGVs

Our Heavy Goods Vehicle (HGV) fleet is regularly renewed with the aim of maximising fuel economy and minimising emissions. Alongside this, on our lorries' return journeys from store deliveries, we work with our suppliers to route our HGVs to collect stock directly from the supplier, third party distribution centres, or collect recyclable waste from our stores. We also work with our EU suppliers to maximise efficiency by offering them the ability to deliver to just one of our depots, with Iceland distributing stock throughout the network. This limits the number of partially filled lorries moving around the country.

GXO logistics

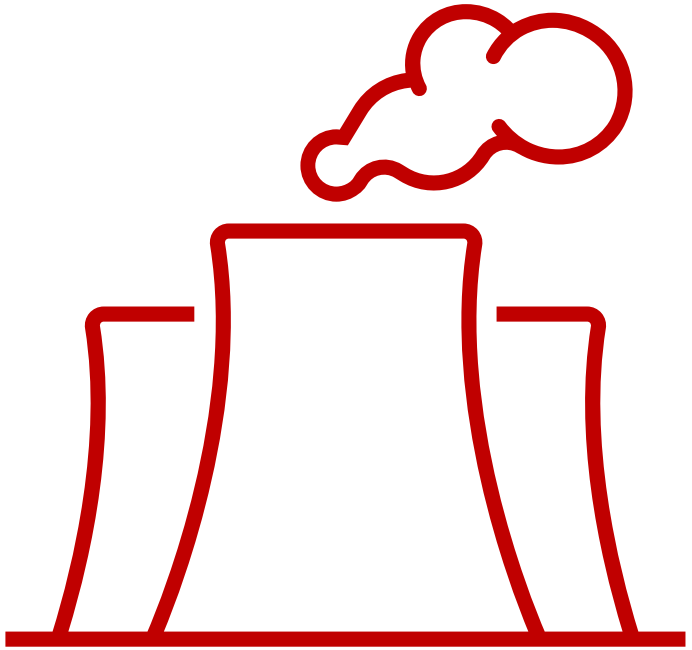
We are working with GXO Logistics, a leading global provider of transportation and logistics solutions, to find innovative ways to make our fleet of HGVs more environmentally-friendly. GXO operates Iceland's five depots across three temperature ranges, servicing over 1,000 stores nationwide. With a complex network covering over 50 million kilometres per annum, with the help of GXO we have significantly benefited from the application of AI. By improving route efficiency, we have reduced the distance driven from one depot by over 900,000 kilometres per year, decreasing diesel consumption by over 25,000 litres and delivering over 720 tonnes of overall carbon emission savings to date.

Food surplus reduction carbon saving

In 2022/23 we redistributed 2,173 tonnes of food surplus. 2,100 tonnes of food was redistributed for human consumption (to colleagues and local communities). This food redistribution equates to a carbon reduction of 9,057 tCO2e, assuming all redistributed food is eaten and replaces the need for equivalent food purchases and food production.

We continue to work with our partners to increase food redistribution through colleague giveaway, Olio, charity partnerships and to animal feed.

	Tonnes of food surplus redistributed	Carbon reduction achieved through redistribution
Total	2,100	9,057 tCO2e



The tC02e saved is calculated by looking at the total amount of tC02e that would have been released into the atmosphere by storing, transporting the food, and the methane that is not released (as the food has not been thrown away).
We have used wrap guidance to calculate this (4.3128kg of CO2e is save per 1kg Estimates of Food Surplus and Waste Arisings in the UK (2017) | WRAP

Carbon footprint 2022/23

Scope 1

	Market-based emissions (tCO2e)	Location-based emissions (tCO2e)
Natural gas	3,472	3,412
Fuel for transport	66,100	66,100

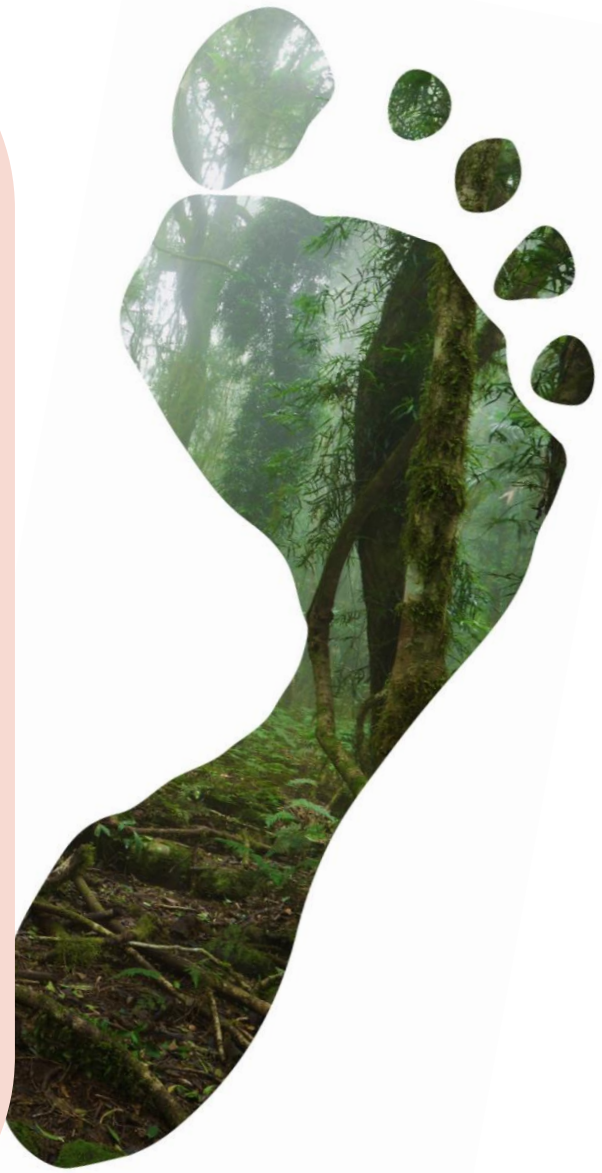
Scope 2

	Market-based emissions (tCO2e)	Location-based emissions (tCO2e)
Electricity	0[1]	98,201
Total	**69,572**	**167,773**

Refrigerant & air conditioning gas usage	**15,416 tCO2e**

1. We buy 100% of our electricity from renewable sources, using Green certificates to purchase electricity generated by wind and hydro assets matched to Renewable Energy Guarantees of Origin.

2020/21 Scope 3 Category	Total Emissions (tCO2 e)	% of Scope 3
1a: Purchased goods and services (product)	3,197,630	74%
1b: Purchased goods and services (non-product)	61,774	1%
2: Capital goods	20,501	0%
3: Fuel and energy related services	45,416	1%
4: Upstream transportation and distribution	400,196	9%
5: Waste generated in operations	1,478	0%
6: Business travel	47	0%
7: Employee commuting	14,147	0%
8: Upstream leased assets	-	-
9: Downstream transportation and distribution	371	0%
10: Processing of sold products	-	-
11a: Use of sold products (direct)	6,016	0%
11b: Use of sold products (indirect)	545,608	13%
12: End-of-life treatment of sold products	44,377	1%
13: Downstream leased assets	-	-
14: Franchises	150	0%
15: Investments	10,829	0%
Total scope 3 emissions (tCO2e)	**4,348,541**	



Methodology

The data in this report is for the financial year 2022/23 (26th March 22 to 24th March 23) and covers Iceland UK operations. Emissions have been calculated for the total tonnes of CO2 emissions. We measure and report on carbon emissions using the Greenhouse Gas Protocol.

Scope 1 & 2

Includes emissions from Iceland, The Food Warehouse and Swift stores

Scope 3

Includes emissions from Iceland, The Food Warehouse and depots

Use of data

Iceland is principally a high street retailer of frozen food.
The data we publish is not designed to be and should not be used for comparison with other retailers operating different business models. It would be inconsistent, inaccurate and would not be a fair comparison of any retailer to do so.

Iceland UK

Refers to all Iceland, The Food Warehouse and Swift stores (nearly 1,000) and depots (5 depots) in the UK

Scope 1 and 2

Includes all emission from scope 1 and 2, this data is checked and verified by Inspired Energy PLC who use the UK Government Greenhouse Gas Conversion factors. Scope 1 includes all direct emissions from our own or controlled sources using the market-based method. Scope 2 relates to indirect emissions from the generation of purchased electricity

Scope 3

Calculated in 2020/21, data was provided by Iceland to The Carbon Trust, which calculated the scope 3 emissions according to methods compliant with the GHG scope 3 protocol

Refrigerant gases

Data is recorded in our maintenance system. Outlining the nature of the work, type of gas and volume of gas

Market-based emissions

Reflects emissions from electricity sources that have been chosen

Location-based emissions

Reflects the average emissions intensity of the electricity grid

Carbon: Our story so far

www.sustainability.Iceland.co.uk

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