

Artisan
Finnebrogue

Sustainability
Report

2019-20

We make food the best it can be, without being
bound by the way it has always been done.

finnebrogue.com

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Foreword

This, the **first of Finnebrogue's sustainability audits in the 2020s**, has concluded in the midst of an unparalleled period of destabilisation throughout Western supply chains and blue collar labour markets. It is also published in the last throws of a truly unprecedented year for our business.

We have opened Europe's largest and most advanced plant-based food facility, our fourth new factory in six years. We have launched groundbreaking new products, such as our landmark Evolution burger. We have struck new and refreshed long-term commercial partnerships with major retailers, quick service restaurants and café chains. We have launched a major, international non-profit organisation, **Foundation Earth**, to deliver a radical system change across the global food industry.



But most of all, the Finnebrogue family has faced the loss of its leader and inspiration: our founder Denis Lynn. Denis was a visionary and restless innovator. For these last few years, his focus was on leaving a better, more sustainable world behind him. His premature passing in May means many of his latest initiatives, not least an agenda-setting new Foundation, will be delivered without him seeing the positive impact they make.

Denis established Finnebrogue to be a vehicle for change. The number one priority was to build a more sustainable planet. But he knew that no matter how successful or large this business became, it wouldn't be able to make the giant leaps required to reduce the food industry's environmental impact across the planet. That's why he dreamt up Foundation Earth, a new organisation set up to provide consumers with the clear and credible information they need to make

more sustainable buying choices; and producers large and small the tools to innovate in a more sustainable way.

Since Denis's passing, the Foundation has garnered the support of multi-national giants Nestlé, PepsiCo, Danone and Tyson Foods, many of the UK's supermarkets, the British government, official opposition and leading lights in Brussels. It has brought together a group of the world's leading food and environmental experts to form a rigorously independent scientific committee. And now an 18-month research and development programme stands between the Foundation and delivering the most important sustainable shake-up in European food production for a generation.

For this reason – driving the Foundation's agenda will be Finnebrogue's number one sustainability priority. That said, we know we now have a considerable footprint of our own. Three factories in 2020 became four this year. 800 staff became 1200. Turnover of £100m in 2019 surged to £150m a year later. And so it is now more important than ever that we independently measure our impact and drive improvements throughout our business.

Working with CarbonQuota to independently assess our impact, this paper is the first of our now annual audits. We include a set of tangible targets for the coming year – and broader ambitions tied to our 2030 ambition.

Finnebrogue's mission will always be to make food as good as it can possibly be, without being bound by the way it's always been done. At the heart of this mission is to make food more sustainable – and that is what we intend to do.


Jago Pearson

CHIEF STRATEGY OFFICER | FINNEBROGUE

Introduction

This **Sustainability Report** acts as an introduction to Finnebrogue's environmental initiatives and credentials. It includes environmental targets, the sustainability credentials of our operations, emissions, packaging, waste, and Foundation Earth. The report highlights what we are doing for the Earth throughout our value-chain.

BY 2025



TARGETS

TRANSITION TO 100% RENEWABLE ENERGY.




100% OF OUR PACKAGING TO BE REUSABLE, COMPOSTABLE OR RECYCLABLE.

ACHIEVE 50% AVERAGE RECYCLED CONTENT ACROSS ALL PLASTIC PACKAGING.

BY 2040

ACHIEVE NET ZERO GREEN HOUSE GAS EMISSIONS



2019 | 2020

Finnebrogue increased production volume by 46% from 2019 to 2020. In 2020 we produced an additional 9,908 tonnes in comparison to 2019; from 21,608 to 31,516 tonnes in 2020 across all of our product areas; from sausages & bacon, to meatballs & burgers as well as our new ground breaking plant-based alternatives from our best-in-class and largest plant-based facility in Europe.

The increase in production was due to exponential growth of our sausages, bacon and plant-based ranges and due to the efficiency plans we put in place to Feed the Nation during the onset of Covid-19 in 2020. We worked with Asda and M&S; our biggest customers, to streamline product ranges and to focus production on high capacity products in order to keep shelf availability high.

Our factories

Our facilities boast environmental measures such as Heat Recovery and Solar Panels, designed to make Finnebrogue energy efficient and materially sustainable. All of our buildings also have smart LED lighting and have been fitted with high grade insulation to reduce cold loss internally.

In 2017, we invested £353,000 in a Heat Recovery System to heat water in our headquarters. A heat pump was installed on the existing refrigeration system to take the heat from the system to generate hot water.

The heat recovery system can heat up to 100m³ of water per day, capable of producing enough hot water for the whole facility on a daily basis. This includes water used for production

FINNEBROGUE INCREASED PRODUCTION VOLUME BY 46% FROM 2019 to 2020



WE HAVE AVOIDED
643 TONNES
OF CO2 PER YEAR
& SAVED OVER £100K
IN WATER HEATING
COSTS ANNUALLY

In 2017, we installed a 2639 PV module system to the roof of our headquarters. The project represented a £530,000 investment, which was funded by Guinness Asset Management, with installation in association with Solar Energy Company – POB Solar based in Lurgan. It is believed the project was the third largest of its kind in Northern Ireland in 2017.

Over the summer months, when daylight hours are long and the sun is shining, they can generate around 15% of electricity required by the factory in a month.

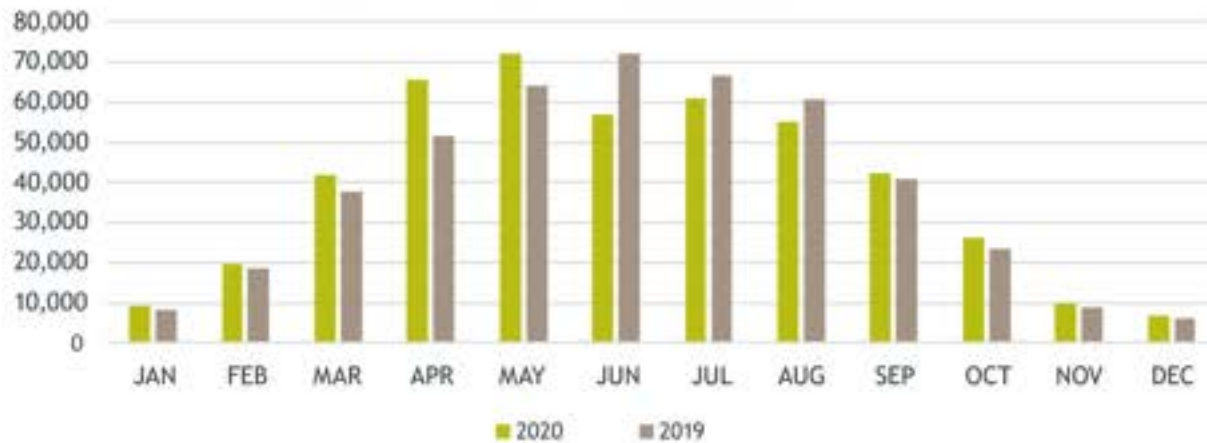
As our electricity consumption increases, the percentage of self-generated electricity has decreased. In 2020, the PV panels generated an average of 6% of our total electricity demand, while in 2019 they generated 8%.

We are in the process of adding more renewable energy sources on site, such as wind and solar energy. These additions are an important step towards reducing our operational carbon footprint and reaching our renewable energy target by 2025.

processes, hygiene, and underfloor heating within the warehouse to provide permafrost protection rather than using electrical heating mats.

The introduction of this system has reduced the need for an additional boiler to cope with increased production. As a result, we have avoided 643 tonnes of CO2 per year and saved over £100k in water heating costs annually.

PV PANELS KWH GENERATION (HEADQUARTERS, 2019-20)



Note: The factories included in this report are Finnebrogue headquarters, our previous plant-based facility and the Naked bacon factory. At the end of 2020, we built the most technologically advanced plant-based factory in all of Europe, the size of two football pitches. However, this facility did not start production until 2021 and as such has not been included in this report.



Emissions

With the help of **Carbon Quota** we measured our operation's emissions (scope 1 and 2) and set emissions targets. In 2020 the intensity of CO₂e emissions associated with our direct operations have reduced by 8% per tonne of product manufactured compared to 2019. While our absolute emissions increased by 1040 tonnes of CO₂e from 3146 tonnes in 2019 to 4186 tonnes in 2020. Scope 1 encompasses all direct emissions from activities within an organisation or under their control, these include generators, company vehicles, refrigerants, and gas boilers. Scope 2 are indirect emissions from purchased electricity, steam, heat and cooling, which are needed to run the organisation.



at least 1950 tonnes of CO₂e from purchased electricity annually.

To deliver these targets we have created the Energy Master Plan, which will act as the framework to establish a structured approach to reduce the environmental impact of our sites. Through the plan, we will create a dedicated Energy Team with members from multiple departments. Additionally, we are also looking at alternative fuels for generators and boilers, and alternative methods of energy and heat generation. And we are mapping our refrigerant use and reviewing preventative maintenance practices in order to reduce emissions from refrigerants.

By transitioning our operations to 100% renewable energy, we will avoid at least 1950 tonnes of CO₂e from purchased electricity annually.

The increase in overall emissions is directly related to the 46% increase in production volume from 2019 to 2020. To increase production in line with consumer demand Finnebrogue had to increase energy consumption. That said, the like for like CO₂e emitted to make a tonne of product was successfully reduced

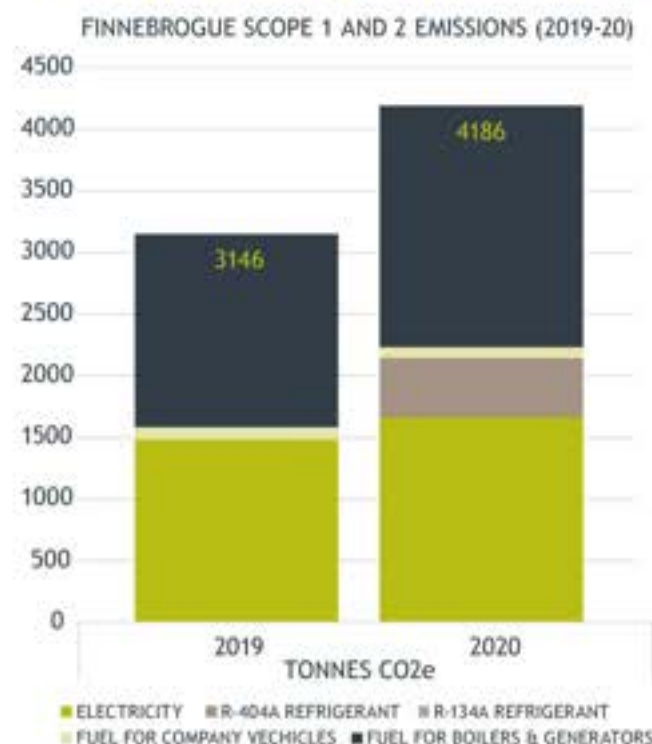
We have set the following targets:

Achieve Net Zero GHG Emissions by 2040.

Transition to 100% renewable energy by 2025.

We must at least achieve Net Zero to play our part in limiting climate change. We have therefore set an ambitious and essential target of becoming Net Zero by 2040. We will reduce our operational emissions and work towards reducing emissions within our supply chain by working closely with our retail and supply partners.

We have also set an intermediate target which will bring us closer to operational Net Zero. By transitioning our operations to 100% renewable energy, we will avoid



Packaging

We have removed black plastic, only source paper sleeves from Forest Stewardship Council certified suppliers, and have set important recycled packaging targets.

In 2019, we moved away from unrecyclable black plastic trays to recyclable alternatives.

All of the plastic trays used in own label, branded and business to business products are made from at least 80% recycled material. Clear and frosted plastic trays are detectable by automated sorting machines making them easier to sort and recycle.

Our paper and board suppliers as well as all of our pack sleeves are FSC (Forest Stewardship Council) certified.

They are printed using vegetable inks and are 100% recyclable. We only source paper from responsibly managed forests and guarantee deforestation is not taking place.

We have set two packaging targets:

By 2025, 100% of our packaging to be reusable, recyclable or compostable.

By 2025, achieve 50% average recycled content across all plastic packaging.

The first target reflects our ambition to make sure that the end of life of our packaging will not have a greater impact on the environment. While the second target focuses on the need to maintain and increase the recycled content of all of our plastic packaging components. We use a variety of packaging such as plastic trays and films, paper sleeves, cardboard boxes, and paper trays.

We have partnered with the **Responsible Plastic Management** programme to help us deliver our packaging targets. We know that plastic packaging is here to stay in the near future, therefore to minimise our impact on the planet we have to reduce our plastic use, create a plastic management system, and identify the best plastic packaging for our products, while keeping on the lookout for alternatives.

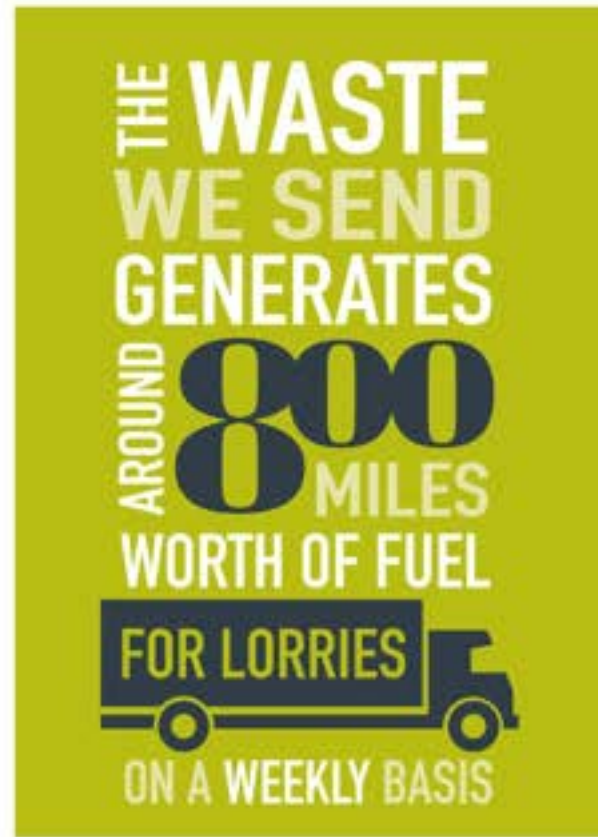


Waste

We have been a zero to landfill business since 2015. All of our waste is recycled, sent for anaerobic digestion, or is recovered for energy. We pride ourselves in always looking for ways to prevent waste and reduce its impact on the environment.

Our anaerobic digester partner, McCulla, uses organic waste to generate bio-fuel and bio-fertilizer. The waste we send generates around 800 miles worth of fuel for lorries on a weekly basis.

The rest of our waste is recycled or recovered. We have a cardboard compacting facility on site, enabling us to collect, sort & bale all our cardboard for 100% recycling by our waste management partner, MacNabb's.



Food redistribution

We donated over 27,264 meals throughout 2019 and 2020 to people in need in our local community through **FareShareNI** and **Simon Community**. Redistributed products comprise of overstock, short-notice changes in demand, and de-listed products.

In 2019 we redistributed over 6 tonnes of product and in 2020 we redistributed over 5.4 tonnes.

The reduction in redistributed food in 2020 was due to a variety of factors including an increase in production efficiency. Covid-19 affected production schedules, growth in sales and more accurate forecasts allowed for less surplus product to be made.

As previously mentioned, due to the onset of the 2020 Covid-19 pandemic, we reduced the selection of products while



increasing total volume produced. Having less SKUs allowed for more accurate sales forecasts, significantly reducing overstock in cases where actual sales did not meet forecast sales. This was also met with strong demand by consumers who were required to cease out-of-home consumption to cooked meals in-home, therefore pushing demand for simple swaps such as ingredients, including sausages, burgers and plant-based alternatives. We will always donate surplus food, however a decrease in donations also means we are not using excess resources to produce surplus stock.

The Finnebrogue Farm

Since Denis Lynn bought the glorious Finnebrogue estate in 1991, we have been working on preserving and improving our natural environment. This has included tree planting, rewilding, regenerative farming and carbon sequestration on the farm.

The estate is located along the Quoile River and borders the Strangford Lough. It is located in an important species-rich area, with a range of ecosystems such as fens, swamps, mudflats, sandflats, saltmarshes and a rocky coastline along the Lough. The area includes Areas of Special Scientific Interest, Areas of Outstanding Natural Beauty, Special Areas of Conservation and Special Protection Areas.

The new forestry planting and rewilding initiatives on the Finnebrogue farm are designed to improve biodiversity and increase the types of ecosystems across the estate. Since 2015 we have planted over 20,000 trees and plan on planting a further 20,000 throughout 2021 and 2022. The trees planted include a wide variety of native species, and are added in a way that maximises biodiversity and not density. In 2020 the 600 acre farm was split between 320 acres of agricultural land and 280 acres of woodland, and by 2022 will be split evenly between the two.

Mark Sanford, Finnebrogue farm manager, is leading these initiatives. Most notably, in a rewilding initiative in 2020, he installed multiple nest boxes for endangered barn owls to roost and breed across the farm. Last year a barn owl moved in and claimed Finnebrogue farm as its home.

The farm also rears red deer and wagyu cattle through regenerative farming, following practices that allow the land to regenerate itself. In addition, hedges along farm borders increase the biodiversity of the fields, and cover crops



are planted at the borders to provide food for the animals and wild birds, further incentivising species to rewild the farm.

We have faced difficulties in accurately measuring red deer carbon emissions up to now. As a result, we are planning on conducting scientific research to create an accurate standard to measure red deer net emissions as part of our work in 2022.

Foundation Earth

“ Forging an unbreakable bond between people who consume things and people who produce things - and providing consumers with the independent and credible information they crave, so they can make more educated buying choices. ”



The brain-child and creation of our late founder, Denis Lynn; Foundation Earth is an independent, non-profit organisation established to issue front-of-pack environmental scores on food products, enabling consumers to make more sustainable buying choices.



We have brought together expert scientists and leading figures from food production and retailing across the UK and EU who all share a vision of a future food industry that will refuse to settle for materials and processes that contribute to the destruction of Planet Earth.

Foundation Earth has brought together the world's two leading systems for measuring the environmental impact of an individual food product by communicating the information clearly and simply to consumers via a front-of-pack score. Its aim is to promote more sustainable buying choices from consumers and more environmentally-friendly innovation

and product development from food producers, who will be determined to secure a better score.

The Foundation's pilot launch in Autumn 2021 uses a traffic-light style system developed by Mondra using data from the academic paper Poore & Nemecek (2018). The pilot will run in parallel to an intensive nine-month development programme, supported by food giant Nestlé, which will combine the 'Mondra' method with a system devised by an EU-funded EIT Food consortium of Belgium's Leuven University and Spanish research agency AZTI.

The Mondra and EIT Food systems are unique globally, in that they both allow two products of the same type to be compared on their individual merits via a complete product life cycle analysis, as opposed to simply using secondary data to estimate the environmental impact of an entire product group. This method of individual assessment using primary data is crucial to encourage sustainable innovation in the international food supply chain.

The Foundation Earth R&D programme will produce an optimum and automated system for use across the UK and EU by 2023.



