

# Sustainability Report 2021



**MCCABE'S**  
**CO. WICKLOW**

# Sustainability Report 2021

This is our first comprehensive sustainability report. It outlines our commitment to a sustainable business approach that minimises any negative impact on this generation and generations to come. This report clearly lays out our energy consumption and carbon footprint in both 2019 and 2020. The details of our offsetting initiatives are also disclosed. This data will be updated annually to assess our progress towards our sustainability targets.

## Summary

- We processed over 104,000 kg of green coffee in 2020.
- We calculated our carbon footprint<sup>1</sup> in 2020 to be 35,811 kg of CO<sub>2</sub>e.
- This is a slight increase from 35,616 kg of CO<sub>2</sub>e in 2019.
- Diesel consumption is our largest source of emissions.
- Natural gas used in the coffee roasting process is the second largest source.
- The carbon emissions associated with coffee importation declined in 2020.
- We recently purchased our first electric delivery vehicle.
- We are investigating the potential to install solar panels at our roastery in Wicklow.
- Working with our partners we have now planted over 5,000 trees.
- These trees remove a total of 38,100 CO<sub>2</sub>e a year from the atmosphere.
- This means we have achieved operational carbon negativity.

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<sup>1</sup> Carbon footprint here refers to Scope 1 and 2 emissions.

# Carbon Footprint

This is an organisational carbon footprint that considers the greenhouse gas (GHG) emitted directly and indirectly by an organisation. GHG emissions are categorised into three groups or 'Scopes' by the most widely-used international accounting tool, the GHG Protocol.

**Scope 1** covers direct emissions from owned or controlled sources.

**Scope 2** covers indirect emissions from the generation of purchased electricity, steam, heating, and cooling consumed by the reporting company.

**Scope 3** includes all other indirect emissions that occur in a company's value chain.

Scope 1	Scope 2	Scope 3
Diesel combustion in company vehicles Gas combustion in the coffee roaster	Purchased electricity	Business travel Coffee importation Waste disposal

This study aims to quantify the Scope 1 and 2 emissions resulting from the processing and distribution of our coffee in Ireland. The Scope 3 emissions resulting from business travel, waste, and coffee importation are also investigated. The reporting period for both 2019 and 2020 was from the 1st of January to the 31st of December.

The first step required to calculate our carbon footprint was to gather all the relevant activity data. This was obtained from company records such as electricity and gas bills. All relevant activity data used in this report can be viewed in the Appendix.

This activity data was then translated into a carbon footprint using suitable emission factors. These were sourced from the Sustainable Energy Authority of Ireland (SEAI) and the UK Department for Business, Energy & Industrial Strategy (BEIS). The table on the next page shows the breakdown of our carbon footprint by source.

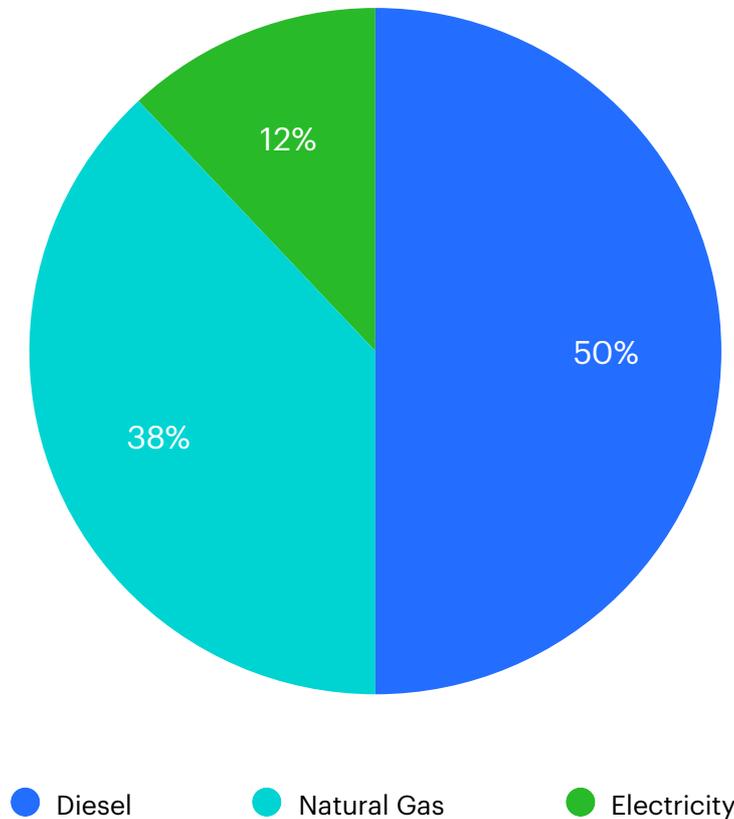
### Carbon Footprint Breakdown

	2019	2020
<b>Scope 1</b>	(kg CO <sub>2</sub> e)	(kg CO <sub>2</sub> e)
Natural Gas	14,454	13,660
Diesel	16,755	17,710
<b>Scope 2</b>		
Electricity	4,406	4,440
<b>Scope 3</b>		
General Waste	15	24
Recycling Waste	38	32
Organic Waste	37	26
Business Travel	3,516	0
Coffee Importation	24,005	20,504
<b>Scope 1 + 2</b>	<b>35,616</b>	<b>35,811</b>
<b>Scope 1 + 2 + 3</b>	<b>63,227</b>	<b>56,397</b>

The calculations reveal that our Scope 1 + 2 carbon footprint in 2020 was 35,811 kg of CO<sub>2</sub>e. This is a minor increase from 35,616 kg of CO<sub>2</sub>e in 2019.

# Scope 1 + 2 Breakdown

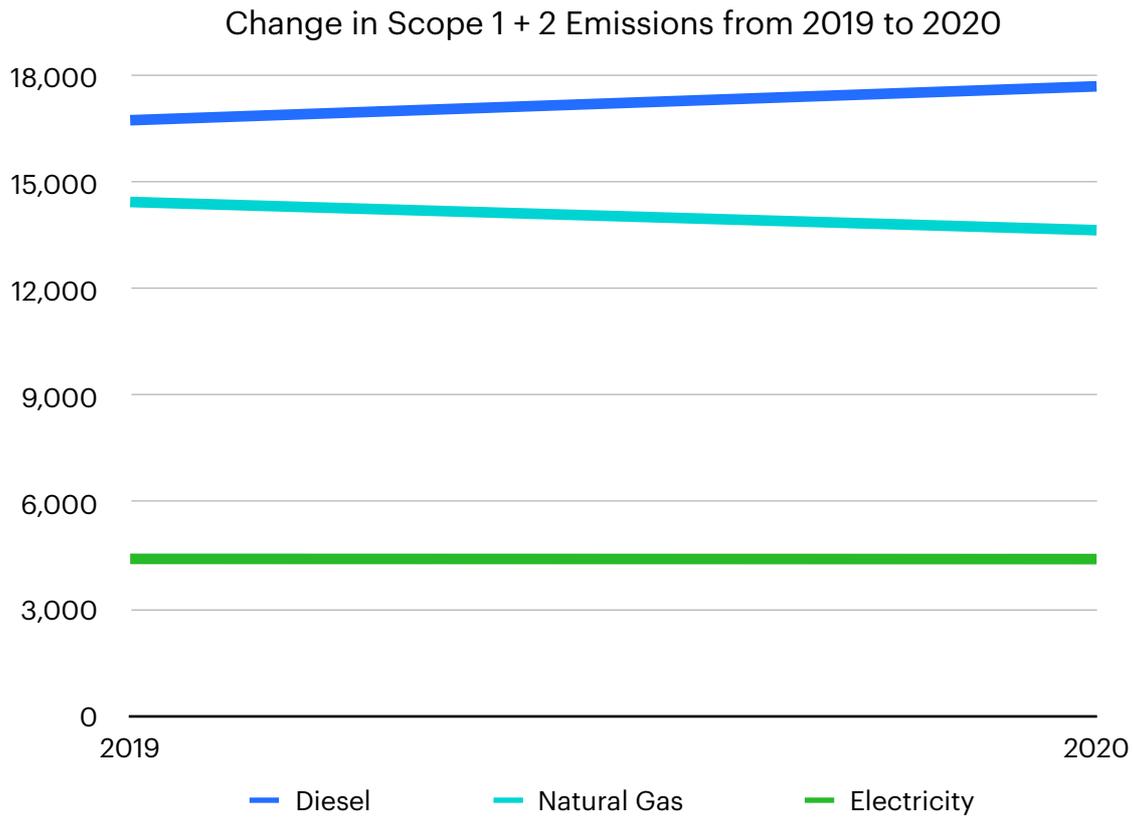
Scope 1 + 2 Emissions in 2020 by Source



Diesel consumption in our delivery vans clearly dominates our carbon footprint. This finding has led us to identify electric vehicles as a key decarbonisation strategy. Natural gas, which is used to provide heat in the coffee roasting process, is much more difficult to replace. We investigated the potential to use biogas, however, this fuel source is currently not compatible with our coffee roaster. We will continue to look out for emerging solutions in this space. Purchased electricity is responsible for a relatively small share of emissions as Ireland’s electricity system has decarbonised significantly in recent years. In 2020, 42% of Ireland’s electricity came from renewable sources, mainly wind energy<sup>2</sup>.

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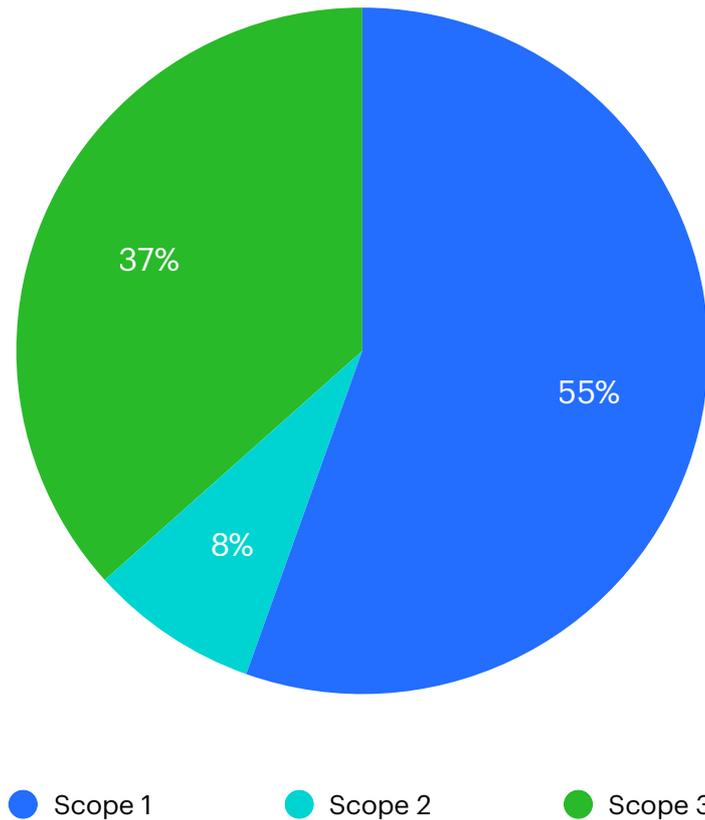
<sup>2</sup> SEAI Provisional Energy Balance 2020. View [here](#).



Emissions from natural gas declined between 2019 and 2020, likely due to the lower volume of coffee roasted in 2020. Diesel emissions increased, while electricity emissions remained largely constant.

# Scope 1 + 2 + 3 Breakdown

2020 Emissions by Category



The pie chart above clearly shows Scope 1 and 3 emissions dominate our carbon footprint. As we reduce our Scope 1 emissions it is likely Scope 3 emissions will come to represent a greater percentage of our yearly total. Due to the lack of operational control over activities that cause Scope 3 emissions they can be difficult to reduce. Despite this, we are committed to finding suppliers who share our vision and also take decarbonisation seriously.

# Carbon Offsetting

We've teamed up with Hometree, an Irish charity whose work is to establish and conserve permanent native woodland in Ireland, encouraging land regeneration and biodiversity through afforestation, restoration and education. We have planted 4,000 trees with Hometree in Milltown Malbay, Co. Clare.

We have also partnered with Tree Nation to plant 1,400 trees in Tanzania as part of the Usambara Biodiversity Conservation project. Together these two projects will offset 38,100 kg of CO<sub>2</sub>e each year, which is slightly more than our current carbon footprint (Scope 1 + 2). Therefore, our operations in Ireland are carbon negative



You can view our profile on TreeNation [here](#), and our interview on the HomeTree website [here](#). All of the tree planting projects we're involved with have firm partnership contracts in place to ensure the trees are managed, protected and allowed to live out their natural lives.

	Number of Trees Planted	Total CO2 Sequestration (tonnes of CO <sub>2</sub> e / year)
HomeTree	4,000	11,500
Tree Nation	1,400	26,600
<b>Total</b>	<b>5,200</b>	<b>38,100</b>

## Metrics and Targets

Despite achieving operational carbon neutrality through our offsetting projects, we intend to reduce our emissions even further. In order to track our decarbonisation progress as the business grows, we have created a carbon intensity metric. This value is calculated by dividing the Scope 1 + 2 emissions by the quantity of green coffee processed in a given year. The 2019 and 2020 carbon intensity values are outlined below.

	<b>2019</b>	<b>2020</b>
Scope 1 + 2 Emissions (kg CO <sub>2</sub> e)	35,616	35,811
Green Coffee Processed (kg)	122,580	104,700
<b>Carbon Intensity</b>	<b>0.29</b>	<b>0.34</b>

The carbon intensity of our operations increased slightly in 2020. This is likely due to the impacts of COVID-19 on our operations. For example, delivery vans operating at lower capacities, increasing the amount of CO<sub>2</sub>e released per bag of coffee delivered.

We have set a target to reduce our carbon intensity to 0.25 kg of CO<sub>2</sub>e per kg of green coffee by the end of 2022. This will be achieved by increasing operational efficiency and electrifying a greater proportion of our delivery vans.

## Supporting Coffee Farmers

Sustainability goes beyond just environmental concerns. The farmers who grow our coffee must receive a fair price. We have built close relationships with these farmers over the years, visiting when we can and contacting them each year to agree on a price that is fair.

1. The price paid to the farmer or farmers in a cooperative must be a minimum of 20% more than the Fairtrade price.
2. Typical daily payment for pickers must at least match the legal minimum daily wage.

3. Water, sanitation, and accommodation must be provided on the farms
4. Confirmation that no underage workers work on the farms.

## Achievements to Date

In 2019, we were the first Irish Coffee Roasters to offer a unique collection service of every bag of coffee we supply to our wholesale customers for recycling into plant boxes, watering cans, and park benches by Terracycle. Our roasting waste is also used as compost by Dun Laoghaire Rathdown Co. Council.

This circular economy approach is a sustainable alternative to the traditional linear model of create – consume – dispose. It keeps plastic in use for as long as possible, recovering and recycling it to extract value and regenerate it into new products. This model eliminates waste plastic into the environment and reduces the requirement for fossil feedstock in plastic production.

## Future Plans

We are currently investigating the potential to install solar panels at our roastery in Wicklow. A solar system will reduce the amount of electricity we have to purchase from the grid each year, reducing our Scope 2 emissions. As we electrify our delivery fleet having access to onsite low-carbon electricity will become even more valuable.

Our next challenge will be to investigate the climate risk faced by the farmers who grow our coffee. The tropical regions where coffee grows will be disproportionately affected by the impacts of climate change such as extreme weather events and drought. We can support coffee farmers by helping them implement climate change adaptation strategies such as incorporating shade trees into their coffee plantations to protect against extreme weather and high temperatures.

## Appendix

The table below includes all the activity data used to calculate our carbon footprint.

### Activity Data

	Unit	2019	2020
<b>Scope 1</b>			
Diesel	Litres	6,581	6,956
Natural Gas	kWh	78,612	74,294
<b>Scope 2</b>			
Electricity	kWh	13,578	15,000
<b>Scope 3</b>			

	<b>Unit</b>	<b>2019</b>	<b>2020</b>
General Waste	Kilograms	693	1,149
Recycling Waste	Kilograms	1,767	1,484
Organic Waste	Kilograms	4,148	2,869
Business Travel	Destination	Sumatra	N/A
<b>Other</b>			
Water	Litres	29,512	25,560
Green Coffee Processed	Kilograms	122,580	104,700