

# SuperValu

Real Food, Real People, Real Action



## Impact Report

**LOCAL**  
**ACTION** | **GLOBAL**  
**IMPACT**

## Background to this study

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At SuperValu we are hugely committed to building thriving, sustainable and inclusive communities across Ireland. We want to make a real difference to people's lives every day and create a positive impact on our communities and on the planet, while making it easier for our customers to do the same.

People see the climate and biodiversity crises as a global problem with a global solution, yet how we live and work together in local communities is central to a more sustainable future.

SuperValu wants to help people to connect that the small actions they take at a local level can have a real impact in addressing the global climate and biodiversity crises.

SuperValu has worked with Irish sustainability consultancy, Sustineo to calculate the estimated emissions impacts for some local actions. We have provided calculations for individual greenhouse gas emissions savings versus what might be achieved with collective action by SuperValu customers.

When looking at the collective action piece, we've used 1 million as our multiplier – SuperValu have over 1 million unique customers in a year scanning a Real Rewards card.

# 1. Cut Food Waste

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## Context

Roughly one-third of the world's food is never eaten. By reducing loss and waste, we can reduce the need for land and resources used to produce food as well as the greenhouse gases released in the process. When food is wasted, all the energy, resources, and money that went into producing, processing, packaging, and transporting it are wasted, too. It is estimated that food waste generates about 8% to 10% of global greenhouse gas emissions.

In Ireland, the Irish Government has committed to **reduce food waste by 50% by 2030**, which is in line with UN Sustainable Development Goals and EU targets. The Environmental Protection Agency (EPA) estimates that Ireland generated 753,000 tonnes of food waste in 2021, where Households were the biggest producers of food waste, accounting for 29% of the total in 2021 (221,000 tonnes, and amounting to **44kg food waste per person**). Food waste costs the average Irish household about €700 per year.

## Calculation

### Potential emission saving per person

= 50% reduction x 44 kg average food waste / person x 1.7 kgCO<sub>2</sub>e / kg food

= 37.4 kgCO<sub>2</sub>e per person per annum

**Saving across customer base:** 0.0374 tCO<sub>2</sub>e x 1,000,000 Real Rewards Customers = 37,400 tCO<sub>2</sub>e  
(37,400 tonnes of greenhouse gas emissions)

### Cost saving per person

= 50% reduction in food waste x €700 annually / household ÷ 2.7 persons / household

= €130 per person per annum or €130m annually for 1,000,000 Real Rewards Customers

## Assumptions

- Reduce by 50% in line with Irish Government target to reduce food waste by 50% by 2030
- 44kg household food waste per person ([EPA](#))
- Average emissions per kg of food waste per person of 1.7 kgCO<sub>2</sub>e / kg food ([Breaking Boundaries](#) drawing from [Poore et al., 2018](#)).
- €700 Average household food waste cost per year ([EPA](#))

## 2. Recycle as Much as Possible (dispose / recycle correctly)

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### Context

People living in Ireland produce more than 14 million tonnes of waste every year. We do this in our homes, our places of work and leisure.<sup>12</sup> Honing in on household waste, each person generated on average 372 kg in 2020 (EPA), which was larger than normal and likely linked to behavioural changes caused by the Covid-19 pandemic (more time at home, and household clear-outs). Of this household waste 39% was placed in the residual (black) bin, 14% in the recycling (green) bin and 11% in the organic (brown) bin, and the balance being at waste collection centres or unmanaged waste.

There are two parts to the carbon footprint of waste: firstly, there are the emissions from throwing stuff into landfill where, if it is organic and rots, it produces methane emissions some of which will escape to warm the world; the second aspect is that by not recycling something you are forcing more virgin materials to be used in future products.

### Calculation

**Potential emission saving per person (10% diversion from landfill/incineration)**

$$= 10\% \times 130 \text{ kgCO}_2\text{e/person}$$

$$= 13 \text{ kgCO}_2\text{e per person per annum}$$

**Saving across customer base:**  $0.013 \text{ tCO}_2\text{e} \times 1,000,000 \text{ Real Rewards Customers} = 13,000 \text{ tCO}_2\text{e}$   
(13,000 tonnes of greenhouse gas emissions)

### Assumptions

- Mike Berners-Lee puts the average emissions for the general waste bin at 130 kgCO<sub>2</sub>e per person (rather than putting in the compost or recycling) ([How Bad are Bananas? The Carbon Footprint of Everything, 2<sup>nd</sup> ed. 2020](#))
- So, improving your recycling rate by 10% could yield a 13 kgCO<sub>2</sub>e saving (lower calculation for household waste only is conservative)
- Sense check EPA waste emissions data for Ireland in 2021 was 937,000 tCO<sub>2</sub>e divided by 5.2m population = 180 kgCO<sub>2</sub>e/capita (upper bound calculation)

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<sup>1</sup> <https://www.epa.ie/our-services/monitoring--assessment/waste/national-waste-statistics/> accessed 8/6/2023

### 3. Bring Your Reusable Cup

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#### Context

In 2022, SuperValu provided around 5,387,053 single use 100% certified compostable cups and lids for both teas and coffees.

#### Calculation

**Potential emission saving if everyone brought a reusable cup**

= 0.04 kgCO<sub>2</sub>e/disposable cup x 5,387,053

**Saving across customer base:** = 215 tCO<sub>2</sub>e

(215 tonnes of greenhouse gas emissions)

#### Assumptions

- KeepCup provides an emission factor of 0.04 kgCO<sub>2</sub>e per disposable cup (see [KeepCup impact calculator](#))

## 4. Grow Your Own Veg

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### Context

Possibly the best reason to get involved in the grow it yourself movement is to get in touch with nature, better understand seasonal foods and weather patterns and develop an understanding of sustainable food systems. GIY Ireland suggests 5 'Food Empathy' behaviours:<sup>3</sup>

1. Eat more plants
2. End food waste
3. Support small producers
4. Reduced food pollution; plastic & chemical
5. Connect with nature & the seasons

SuperValu launched a [Let's Grow! campaign](#) with GIY which enables 50,000 kids in primary schools across Ireland to develop food literacy and experience the wonder of growing their own food at their school.

[GIY research](#) shows that a typical family who are 'new growers' will harvest up to 100kgs of food a year in a typical garden-sized space. GIY know from evaluation of their food growing programmes that 87% of people will continue growing once they start, and *"established growers with 5 or more years of growing experience bring in a whopping 205kg of vegetables ..."*

Coupling this with other studies, and applying them to an Irish context, there is an equivalent 1 to 1 ratio of GHG emissions savings to food grown. This means that every 1 kg of food that's grown at home (organically, composting your food, etc) can result in **1 kgCO<sub>2</sub>e** savings (carbon dioxide equivalent). There are lots of factors that feed into this (excuse the pun) – including the fact that you're growing & eating vegetables that have been grown locally (limiting travel miles), and producing vegetables that have not been grown intensively using synthetic supports (e.g. chemical fertilizers).

Furthermore – and even more excitingly – the research undertaken by GIY shows that people who grow food also start on what they called their **food empathy journey**. Food empathy is seen through the sustainable behaviours that start to happen as people's knowledge & understanding of food and the food system changes when they start to grow their own food. A study by GIY and UCC shows that food growing *"decrease(s) the likelihood of wasting food, supporting a shift in mindset surrounding how food is viewed and reducing the disconnect between consumers and food that is prevalent in modern society"* (Examining the Relationship between Consumers' Food-Related Actions, Wider Pro-Environmental Behaviours, and Food Waste Frequency: A Case Study of the More Conscious Consumer).<sup>4</sup>

When we consider the 'food empathy' factor, another key impact is dietary choices. *"Food growing influences our overall food practices, in particular our diet choices. We found that those that had been growing food for over 5 years were more likely to follow a lower emissions diet (as defined by the WWF Impact and Action Calculator) compared to new growers. Whether due to their higher yields or new attitudes towards diet, the emissions savings of this came out at just under 200kg CO<sub>2</sub>e..."* This means that *"after a 5-year period of growing some of your own food ... this is the equivalent of 2.5% of the average Irish person's carbon footprint."* ([GIY : A Climate Action Tool](#))

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<sup>3</sup> <https://giy.ie/about-us/> accessed 8/6/2023

<sup>4</sup> <https://www.mdpi.com/2071-1050/15/3/2650>

## Calculation

**Potential emission saving per person starting GIY in last 2 years**

= 100 kgCO<sub>2</sub>e/year

**Saving across customer base,**

assuming SuperValu can persuade 10,000 of its customers to become GIYers:

= 10,000 x 0.1 tCO<sub>2</sub>e/year = 1,000 tCO<sub>2</sub>e

(1,000 tonnes of greenhouse gas emissions)

## Assumptions

- Conservatively, take GIY's value of 100 kgCO<sub>2</sub>e saving for people starting GIY in last 2 years
- Assume SuperValu can reach 10,000 customers, representing 1/5<sup>th</sup> of its *Let's Grow!* children's campaign

