

CLIMATE ACTION
FOCUS AREAS



WASTE
MANAGEMENT



ENERGY
MANAGEMENT



WATER
MANAGEMENT

CASE STUDY
**AIRFIELD
ESTATE**

ABOUT US

Airfield Estate is a registered charity and visitor experience in South County Dublin. It is Dublin's only urban working farm on 38 acres with the mission of educating people on making better food choices. Visitors can enjoy distinguished organic food and ornamental gardens, regenerative farmlands, a visitor centre, award-winning restaurant and cafés, culinary and horticultural workshops and the historical Airfield House. The Estate hosts an array of events and is a popular wedding venue.

“ Right now, we have set an ambitious target to reduce our carbon footprint by 25% in 2023 based on Scope 1 and 2 data. Our priority focus is on the three areas of energy, food waste and water. ”

John O'Toole, Director of Operations and Sustainability, Airfield Estate

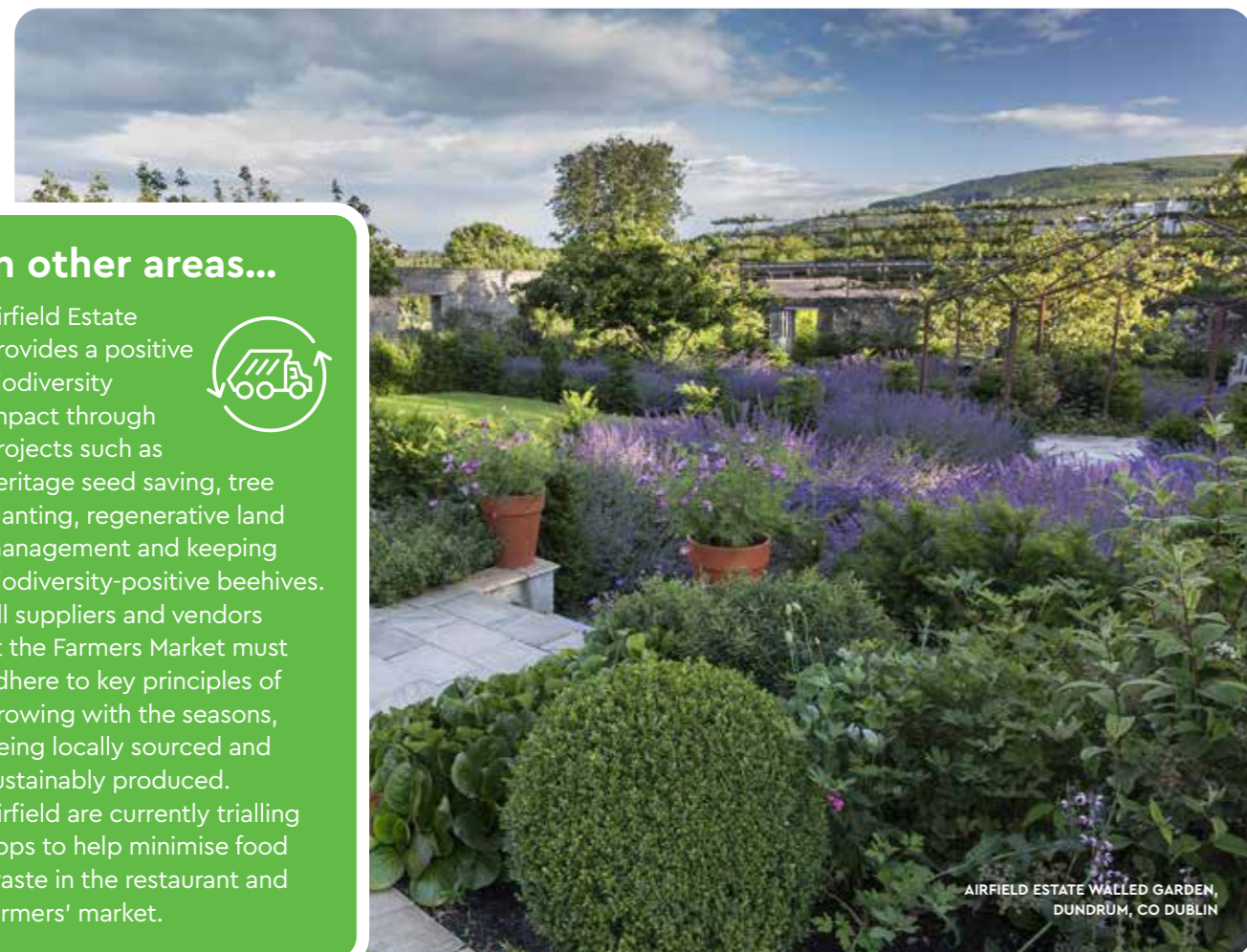
Committing to a carbon neutral future

GETTING STARTED

"To align with Airfield Estate's green, SDG-focused and carbon-conscious ethos, we set ourselves the objective of becoming carbon-neutral by 2030. We worked with expert consultants to establish our overall carbon footprint across Scopes 1, 2 and 3 based on 2019 levels of activity. This gave us concrete data to work with – we now knew where we were starting and could make data-based

decisions going forward. Right now, we have set an ambitious target to reduce our carbon footprint by 25% in 2023 based on Scope 1 and 2 data. Our priority focus is on the three areas of energy, food waste and water."

John O'Toole,
Director of Operations and Sustainability,
Airfield Estate



AIRFIELD ESTATE WALLED GARDEN, DUNDRUM, CO DUBLIN

In other areas...

Airfield Estate provides a positive biodiversity impact through projects such as heritage seed saving, tree planting, regenerative land management and keeping biodiversity-positive beehives. All suppliers and vendors at the Farmers Market must adhere to key principles of growing with the seasons, being locally sourced and sustainably produced. Airfield are currently trialling apps to help minimise food waste in the restaurant and farmers' market.



PRIORITY FOCUS: ENERGY MANAGEMENT

IMPACT OF INSTALLING PV PANELS

Airfield Estate is investing in 50KwH array of photovoltaic (PV) panels. The following forecast savings, provided by expert advisory consultants, provide the basis for the investment decision:

Reduction in energy bill costs:	70% in the peak months of May-September
Reduction in carbon emissions:	70 tonnes per annum
Net Investment (after grants):	€35,000
Payback time:	5.5 years

In addition to the above, Airfield are proposing the implementation of six electric vehicle charging points on the estate, to promote renewable transport for both staff and customers.



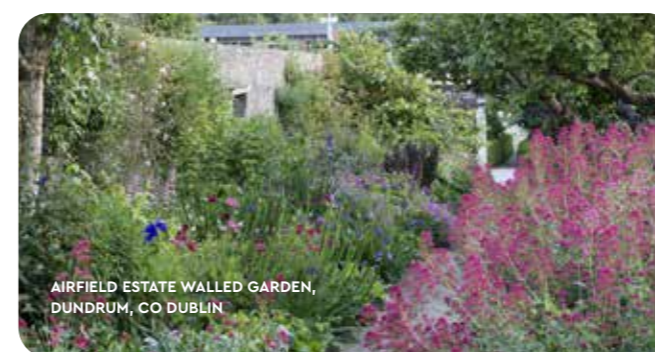
PRIORITY FOCUS: FOOD WASTE MANAGEMENT

IMPACT OF ACCELERATED AEROBIC DIGESTER

The baseline data revealed that 50.6% of total waste generated at Airfield Estate was brown or organic waste. The business invested in an Accelerated Aerobic Bio-Digester to manage this waste stream. The Bio-Digester handles all 'brown bin' waste including compostables,

converting them into compost within 24 hours, which can then be used on the land, as a source of material for community gardens or sold commercially. The following are the forecasted savings based on the calculations of expert advisory consultants:

Reduction in waste bill costs:	€5,000 per annum through elimination of brown bin lifts
Reduction in carbon emissions:	10 tonnes of carbon per year
Net Investment (after grants):	€15,000
Payback time:	3 years



AIRFIELD ESTATE WALLED GARDEN, DUNDRUM, CO DUBLIN



AIRFIELD ESTATE, CORNFLOWER KITCHEN GARDEN, DUNDRUM, CO DUBLIN



PRIORITY FOCUS: WATER CONSERVATION AND WATER MANAGEMENT



IMPACT OF WATER CONSERVATION INITIATIVES

- ✓ A 5,000 litre rainwater harvester provides water for gardening, watering plants, cleaning yards, the milking parlour and equipment.
- ✓ Grey water (relatively clean waste water) is collected and filtered on-site through a reed bed system and reused to flush toilets (saving ca 5,000 litres per annum).
- ✓ Milking times were reduced from twice daily to once daily, cutting water consumption for parlour wash-down by 1,000 litres per week.

Reduction in water bill costs: €10,000 per annum

Reduction in carbon emissions: 5 tonnes of carbon per year

Net Investment: €5,000

Payback time: less than 1 year



IMPACT OF LEAK DETECTION

Airfield Estate's water bills were approximately €60,000 per year which included a substantial water wastage charge. The facilities team undertook on-site leak detection tests and engaged with the local authority to address identified leaks.

Reduction in water bill costs: €10,000 per year plus elimination of the water wastage charge.

Reduction in carbon emissions: 5 tonnes of carbon per year

Investment: Labour cost to source leaks

Payback time: Immediate

Top Tip

"Establishing our baseline has been the most important thing and we would encourage others to do the same. It means we know exactly what we're dealing with and can then make informed decisions. It allowed us to break down the actions we could take, and it makes the individual projects seem more attainable and feasible."

John O'Toole,
Director of Operations and Sustainability,
Airfield Estate



AIRFIELD ESTATE, ORCHARD MEADOW, DUNDRUM, CO DUBLIN

About climate action

This case study is part of Fáilte Ireland's suite of climate action business supports, helping tourism and hospitality businesses on their climate action journey.

Find out more at [Climate action \(Failteireland.ie\)](https://www.failteireland.ie)