

TOWARDS NET ZERO: EBBSFLEET'S ANNUAL DECARBONISATION REPORT

2025–26





Ebbsfleet has made good progress in reducing carbon emissions over the past year. We're working hard to make our community cleaner, greener, and more sustainable for everyone.

This report draws on a combination of monitoring data, analysis of development activity, and a residents' travel survey undertaken in 2025. Together, these sources provide insight into trends and behaviours, while recognising that some data reflects reported activity rather than continuous measurement.

WHAT HAS BEEN ACHIEVED

Buildings

- All new buildings are now designed without gas or oil heating.
- The last new home with a gas boiler is expected in 2028.
- Solar panel installation continues to increase: around 7,400m² on homes and 2,600m² on other buildings.
- Together, these solar panels could supply around 11% of Ebbsfleet's current electricity needs.
- EDC's first carbon zero homes have been completed at Alkerden, with a 47-home residential scheme combining solar panels, electric heating and battery storage. These homes are designed to generate more energy than they use and export surplus power to the grid.
- Average household electricity use fell by 18%, from 2,727 kWh per meter in 2023 to 2,231 kWh in 2024. The figures are not weather-adjusted, so year-on-year changes may partly reflect differences in weather conditions.

Travel

- More people are walking or cycling: around 10% of peak-time journeys are made on foot or by bike, rising to about 13% for work and education trips in resident surveys.
- Walking is well established for local journeys, with strong uptake for short trips within villages.
- Sustainable travel to rail is already embedded, with most residents walking, cycling or using the bus to reach stations.
- The long-term ambition is for 40% of local trips to be by walking, cycling or public transport by 2035, and current behaviour shows this direction of travel is already underway.
- All new homes built since 2019 have access to electric vehicle chargers.
- Around 7% of vehicles are electric based on observed data, more than three times the Kent average, with higher ownership levels reported in resident surveys.
- The Fastrack bus network continues to perform strongly, with over 100,000 passenger journeys per month across the network and rapid growth on newer routes serving expanding communities.
- A new Go-Coach on-demand bus service launched in 2025, recording on average 4,000 passenger trips each month.

Waste

- Gravesham has switched 100% of its refuse collection vehicles to low-carbon fuel made from plants (hydrogenated vegetable oil), cutting lifecycle emissions by up to 90%.
- Food-waste and recycling collections have been expanded in Gravesham, leading to a 21% increase in food-waste recycling and a 12% increase in dry recycling.

- Dartford has introduced integrated glass recycling, allowing glass bottles and jars to be collected alongside other dry recyclables in the main recycling bin, making recycling simpler for residents.

Green Spaces

- More than 4,300 trees are now mapped across Ebbsfleet, with around 350 added in the last year.
- The Ebbsfleet GREENmap provides a live, interactive record of trees, habitats and wildlife, helping track biodiversity and the health of local green spaces over time.
- A detailed ecological assessment of the River Ebbsfleet has now been completed, establishing a baseline for the river's condition and identifying long-term opportunities to improve biodiversity, resilience and the performance of this important green corridor.
- Over 40% of Ebbsfleet will be made up of green and blue spaces, providing cooling, shade, wildlife habitats and wider wellbeing benefits.



PROGRESS REVIEW

Action	What Has Happened	What's Next
Strategy	Ebbsfleet Development Corporation has published a long-term decarbonisation plan to reduce carbon emissions across the Garden City and has established an annual reporting process to track progress. Decarbonisation objectives are now embedded across planning, delivery and organisational processes, supported by staff training and governance arrangements that strengthen carbon awareness and accountability.	Continue annual monitoring and reporting on progress, refine the evidence base, and keep the Decarbonisation Plan under review so it remains aligned with emerging data, policy and delivery priorities.
Buildings	All new development in Ebbsfleet is now being delivered without gas or oil heating, supporting a long-term transition to low-carbon buildings. Solar panels are increasingly included in new schemes, and planning guidance has been introduced to promote higher standards of energy efficiency, renewable energy generation and low-carbon design across both residential and non-residential development.	Maintain the consistent application of sustainable building guidance through the planning process, support the continued rollout of low-carbon heating and on-site renewables, and improve data collection to better understand how buildings perform once they are occupied.
Travel	Levels of walking, cycling and electric vehicle uptake are higher in Ebbsfleet than in surrounding areas, supported by good access to rail, early provision of electric vehicle charging, and an expanding public transport network. Bus services, including Fastrack and the new on-demand GO-Coach service, are showing strong and growing use, particularly in newer neighbourhoods.	Focus on making best use of existing travel data to inform future decisions, continue working with partners to improve public transport services, and support the gradual delivery of infrastructure and initiatives that make sustainable travel easier, safer and more attractive.

Action	What Has Happened	What's Next
Waste	Recycling performance has improved through changes to local authority collection services. Emissions linked to waste collection have been reduced through the transition to lower-carbon fuels for refuse vehicles, and a Circular Economy Study has identified opportunities to reduce waste, increase reuse and improve recycling.	Work with local councils to strengthen waste and recycling data at a more local level, support behaviour change where possible and continue exploring practical ways to reduce waste-related emissions through service improvements and lower-carbon collection methods.
Green spaces and nature-based solutions	The Ebbsfleet GREENmap has been launched and expanded, providing a live digital record of trees, habitats and wildlife across the Garden City. Thousands of trees are now mapped, and a detailed ecological assessment of the River Ebbsfleet has established a baseline understanding of one of the area's most important natural assets.	Continue to improve the quality and coverage of green infrastructure data, strengthen partnerships to support nature-based solutions, and use the GREENmap and supporting studies to inform future planning, biodiversity enhancement and long-term carbon sequestration monitoring.

WHAT'S NEXT

- Improve how energy use and renewable energy generation are measured by working more closely with energy suppliers and building owners.
- Continue to develop the Ebbsfleet GREENmap to support future planning, biodiversity monitoring and carbon tracking.
- Use existing travel surveys and available data to inform future decisions on walking, cycling, public transport and electric vehicle provision.
- Continue baseline studies and partnership-building for nature-based solutions, including river corridors and wetlands.
- Work with local councils to improve data on waste and recycling and support behaviour change to reduce waste.
- Keep working with residents, schools and community groups to support sustainability learning and everyday low-carbon choices.

CASE STUDIES

The following case studies demonstrate how Ebbsfleet’s planning and environmental policies are being translated into real-world outcomes across buildings, public space and infrastructure.

WELDON HEART: ONE OF THE FIRST CARBON ZERO COMMUNITY CENTRES

Summary

Designed as the heart of the neighbourhood, Weldon Heart is a flexible community hub where residents can meet, celebrate and connect.

The centre includes a café/kitchen, a hall for up to 110 people, meeting rooms, offices, changing facilities, parcel lockers and outdoor play space.

Impact

- Achieved BREEAM Outstanding, reflecting exceptional performance across energy, water, materials, transport and wellbeing.
- Air source heat pump and underfloor heating provide efficient, low-carbon heating and high levels of comfort.
- Mechanical ventilation with heat recovery (MVHR) improves energy efficiency and indoor air quality.
- Rainwater harvesting system sized to meet around 75% of toilet flushing demand, significantly reducing mains water use.

- Highly water-efficient fixtures, including low-flush WCs, low-flow taps and water-saving showers.
- Low-energy lighting with intelligent controls throughout the building.
- Use of cross-laminated timber, reducing embodied carbon and creating a warm internal environment.
- Electric vehicle chargers, cycle facilities and strong public transport connections support sustainable travel.

Together, these features help reduce running costs, lower carbon emissions and create a comfortable, healthy space for the community.

What’s Next

As Weldon Heart becomes fully operational, energy and water use will be monitored to ensure it performs as intended. The building will continue to support a wide range of community activities, acting as a flagship example of low-carbon, high-quality community infrastructure in Ebbsfleet.



GROWING DEMAND FOR BUS SERVICES ACROSS EBBSFLEET

Summary

Bus services play a key role in supporting more sustainable travel choices in Ebbsfleet, particularly as new neighbourhoods are occupied and public transport networks expand. During the 2025–26 reporting year, data from Fastrack and GO-Coach shows strong and growing demand for bus travel across the Garden City, reflecting improved connectivity to homes, local centres and employment destinations.

Impact

- Passenger journeys on Fastrack Route E more than tripled during the year, exceeding 21,000 trips per month by early 2026. Growth has been driven by increasing occupancy in Castle Hill, Alkerden and Western Cross, alongside improved connectivity including a new direct route to Bluewater.
- Patronage on the more established Fastrack Route B/N remained strong and stable, typically fluctuating between 93,000 and 125,000 trips per month, reflecting its role in serving Springhead Park.
- Passenger boarding data shows Springhead Park as the largest generator of bus trips, with monthly boardings at Bonham Way and the Eastgate Community Centre regularly exceeding 3,000 trips.
- Castle Hill continues to generate high levels of demand, while Alkerden and Western Cross show clear year-on-year growth in boardings as new homes are occupied.

- The new GO-Coach GC1 on-demand service, introduced in January 2025, has seen steadily increasing use, with over 4,000 passenger trips now recorded per month, indicating sustained appetite for flexible, shared transport options.

Together, these trends highlight growing use of bus services across both established and emerging neighbourhoods, supporting Ebbsfleet’s long-term ambition to reduce car dependency.

What’s Next

As the Fastrack network continues to expand, including through Eastern Quarry, work will focus on securing more detailed and disaggregated bus patronage data. This will support better understanding of travel patterns at a village level and strengthen future assessments of how bus services contribute to decarbonisation and mode shift. For GO-Coach, further refinement of patronage data, including stop-level boarding information, will help inform its role alongside fixed-route services as part of a growing public-transport network.





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