

Bus Éireann Sustainability: Driving Change Strategy 2024-2030



Background

- Bus Éireann is Ireland's national bus and coach operator, providing public transport across cities, towns, and rural communities. It operates more than 230 passenger and 9,765 school transport routes.
- Despite progress in public transport systems and sustainability policies, private cars still account for approximately 74% of all journeys in Ireland. In response to growing environmental concerns and Ireland's international climate commitments, Bus Éireann has developed this strategy, to improve its services. It supports the delivery of national goals outlined in the Climate Action Plan, Project Ireland 2040, and the UN Sustainable Development Goals (SDGs 11, 12, and 15).
- **Stakeholders involved:** National Transport Authority (NTA), the Department of Transport, the Department of Education, the CIÉ Holding Company, Dublin Bus, Iarnród Éireann, Sustainable Energy Authority of Ireland (SEAI), the Environmental Protection Agency (EPA), and the Road Safety Authority (RSA).

Key Activities

Fleet Decarbonisation

- Expanding hybrid and electric bus services, including 34 new electric buses in Limerick (2024).
- Trialling hydrogen fuel cell and biofuels (e.g. Hydrotreated Vegetable Oil) as low-emission alternatives.

Depot and Infrastructure Upgrades

- Electrifying depots, installing EV chargers and solar PV systems.
- Retrofitting buildings to cut thermal emissions and support Net Zero goals.

Circular Economy & Resource Efficiency

- Implementing waste reduction, recycling, and water-saving measures.
- Upgrading equipment and introducing smart meters across sites.

Biodiversity and Land Management

- Conducting sustainability risk assessments and integrating habitat creation into site developments.

Cultural Heritage and Community Engagement

- Preserving historic sites like Busáras and promoting company heritage through public programmes.

Accessibility and Inclusion

- Upgrading bus stops and stations for full wheelchair accessibility.
- Expanding low-floor, wheelchair-accessible fleet and launching Travel Assistance Teams in major cities to support passengers with disabilities.



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Impact

1. Environmental Impact

- Ireland's first all-electric town service launched in Athlone (2023).
- Limerick's fleet electrified in 2024 with 34 EV buses.
- Setting the target to achieve a 50% zero-emission fleet by 2030, with a 51% CO₂ reduction from 2018 levels.
- Biofuel trial using Hydrotreated Vegetable Oil as a potential replacement for diesel began in 2024.
- Three double-decker buses powered by hydrogen fuel cells and electric motors on a route connecting Dublin to Ratoath (2020-2021) as part of ongoing hydrogen bus trials.

2. Accessibility and Inclusion

- 100% city and town services are now low-floor and wheelchair accessible, a 25% increase since 2019.
- 16 projects focused on the improvement of bus stops completed.
- 10 routes to be made more accessible by 2025.
- Travel Assistance Teams active in Cork (since 2022), expanding to Limerick, Galway, and Waterford by 2025.

3. Urban Development

- Five station redevelopments planned; Limerick complete, Galway underway, three more to follow.

Challenges & Solutions

Challenges:

- Limited and costly zero-emission options for long-distance coaches and contractor-operated school buses.
- Large proportion of the fleet still diesel-powered.
- Balancing emissions reduction targets with passenger and network growth.
- Significant investment needed for fleet and depot upgrades.
- Space and infrastructure constraints at existing depots.
- Staff upskilling required

Solutions:

- Bus Éireann is addressing these challenges through phased fleet replacement, targeted depot upgrades, and piloting alternative fuels like hydrogen and HVO. It is working with government partners to secure funding and support for fleet and infrastructure transition. Staff are being upskilled to manage new technologies.



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Tips for Similar Projects

- Strong partnerships with government and transport authorities.
- Clear, phased targets with realistic timelines.
- Pilot projects to test new technologies before scaling.
- Integration of ESG principles into planning and reporting.
- Design for accessibility from the outset to ensure inclusivity.



Video

Videos on Bus Eireann's Sustainability Projects

Video Description

Short videos of sustainable projects within this plan, including electric buses in Athlone and Limerick, as well as hydrogen buses in Dublin.

Identified Limitations/Weaknesses

The hydrogen bus trials were a good practice, that showed potential. However, the high cost (2.4 million) would make it difficult to replicate in other countries. The trial also highlighted the need for hydrogen production, which currently isn't in place in Ireland.

Feedback from the focus groups showed recurring concerns around buses being late or unpredictable in Ireland. The particular impact on persons with disabilities or those who are neurodivergent, for whom delays can be especially stressful was mentioned. Unreliable services were also seen as a deterrent to wider public use.

However, participants also acknowledged and appreciated recent improvements, noting an increase in new routes and more frequent service times.

Resources

- [Bus Eireann Driving Change Strategy](#).
- [Bus Eireann sustainability Website Page](#)
- [Hydrogen Bus Trials Description by National Transport Authority](#).

Partners

