



CIÉ Group Sustainability Annual Review 2023















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The Value We Create

As Ireland's largest public transport provider, ClÉ Group is central to the provision of sustainable mobility across the country. Transport is a major driver of economic and social development, connecting people to jobs, education, health care, and each other. By offering a sustainable alternative to private car use, our services alleviate traffic congestion, improve road safety, reduce air pollution, and mitigate GHG emissions from the transport sector. Please see **our website** for additional information on the policies and programmes ClÉ Group support from an Irish and international perspective.





Message from the CIÉ Group CEO

As the largest public transport provider in Ireland, CIÉ Group is working hard to provide efficient, low-carbon travel services across Ireland.



Our services underpin the creation of economic value and social cohesion to the communities we serve. Over 2023, the ClÉ Group of Companies worked to deliver the **Climate Action Plan (CAP) 2024** target of increasing daily public transport journeys by 130% by 2030, connecting communities, reducing congestion in urban areas, and critically, enabling large scale modal shift. We are working with stakeholders to deliver a massive expansion of low carbon public transport services to reduce dependency on the private car. The enormity of the required climate transition will necessitate close cooperation across Government and stakeholders to enable this vital and economic response.

With the support of the Department of Transport (DoT) and the National Transport Authority (NTA), investment in the transformation of the national transport network continued in 2023. On the rail network, larnród Éireann continued its design development of the DART+ programme, which will triple the length of the electrified network, double the passenger capacity, and add electric and battery electric train carriages to the fleet. Across the ClÉ Group bus operators, Bus Átha Cliath and Bus Éireann carried out retrofits in key depots to install charging infrastructure and commenced the planned deployment of new electric buses to the fleets.

This year, ClÉ Tours developed a comprehensive decarbonisation strategy to address the greenhouse gas (GHG) emissions from their operational activities as well as the tour packages that they offer. This strategy builds on the Responsible Tourism Policy developed by ClÉ Tours in 2022, increasing the scope and ambition of ClÉ Tours' sustainability efforts.

A successful sustainability strategy hinges on a sustainability-oriented culture within our ClÉ Group. Throughout 2023, we invested in the skills, expertise, and awareness of our employees, underpinning employee-led change. In 2023, foundational-level and advanced sustainability training courses were provided for employees, with many participants implementing sustainability projects within their teams and locations.

The ClÉ Group is committed to transforming our services and operations into a sustainable business. Across the ClÉ Group, significant progress is being made in the delivery of this multi-annual investment and sectoral transformation, which could only be achieved through collaboration and commitment across the ClÉ Group Operating Companies.

Lorcan O'Connor

ClÉ Group Chief Executive Officer

The ClÉ Group is committed to transforming our services and operations into a sustainable business.

Message from the CIÉ Group CSO

I am delighted to present the ClÉ Group Sustainability Report for 2023, along with the cross-Group Sustainability team.



This is the third review since setting out our ambitions in the Group Sustainability Strategy 2020 and the report outlines the progress made in delivering on our sustainability commitments in the context of the challenges and opportunities we face in the coming years.

In the race to tackle sectoral emissions, the ClÉ Group is working to meet a target of 51% reduction in GHG emissions while delivering a substantive expansion of the public transport network. The impact of service expansion sees a near-term increase in emissions, but a rise in energy efficiency as passenger journeys and kilometers travelled increase. Each passenger journey with ClÉ Group represents a potential private car taken off the road, reducing congestion, air pollution, energy consumption, and carbon emissions.

A key priority is to transition the bus and rail fleets to zero emission vehicles, in line with national targets for sustainable mobility. Over 2023, a significant milestone was achieved by delivering Ireland's first all-electric bus service, through Bus Éireann's fleet in Athlone town, and work is well underway to retrofit our remaining depots to support nationwide operation of zero emission buses.

In 2022, the ClÉ Group allocated a multi-annual sustainability fund to invest in the delivery of the Group Sustainability Strategy. The fund underpins investment in direct action and reinforces our commitment to responsible and ethical business practices. In 2023, a total of 22 projects received approval for funding.

Our Group-wide Sustainability team looks for opportunities to increase energy efficiency across operations to reduce costs, emissions and dependence on fossil fuels. We have implemented programmes to improve our energy performance, such as installing LED lighting, solar PV systems, smart meters and energy management systems. The ClÉ Group Operating Companies are certified to the Energy Management standard ISO 50001 and monitor and benchmark energy consumption and carbon footprint performance and set targets for continuous improvement.

Another important aspect of our approach is to ensure transparency and accountability through sustainability reporting and preparing for the Corporate Sustainability Reporting Directive (CSRD), which will require us to disclose more information on our environmental, social and governance (ESG) performance and impacts. In 2023 the ClÉ Group also committed to validating our climate targets through the Science Based Target Initiative.

We are committed to protecting and enhancing biodiversity and natural capital, both within our own operations and across our supply chain. We recognise that nature provides us with essential services and resources, such as water, energy, and materials, and that we have a responsibility to safeguard them for future generations. We have implemented various measures to minimise our impacts on biodiversity, such as planting native trees, enhancing wildlife habitats, implementing biodiversity guidelines and promoting circular economy principles.

We are dedicated to supporting social inclusion, health and well-being, both for our employees and for the communities we serve. We believe that public transport is a key enabler of social cohesion, economic development and quality of life. Over 2023, we invested significantly in measures to improve the health and well-being of our employees across the Group. We see sustainability as a unique opportunity to unite our people around a common purpose and have worked to build a culture of sustainability and opportunities for leadership and action.

Collective action is needed to pave the way for a sustainable future, and we actively seek to collaborate with partners by supporting research and innovation through the SH2AMROCK Consortium and UCD NexSys Programme and by joining the Climate Disclosure Project (CDP) Ireland Steering Group, Biodiversity for Business and Institute for Corporate Responsibility and Sustainability Ireland Steering Group, among others.

We know that sustainability is a journey, not a destination, and that we need to constantly adapt and innovate to meet the changing needs and expectations of our stakeholders. We look forward to working with our stakeholders to make public transport more sustainable for everyone.

Caoimhe Donnelly

Chief Sustainability Officer

We know that sustainability is a journey, not a destination, and that we need to constantly adapt and innovate to meet the changing needs and expectations of our stakeholders.

Zero Emission

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Who We Are

The ClÉ Group of companies, including Bus Átha Cliath, Iarnród Éireann, Bus Éireann and ClÉ Tours, is the largest public transport provider in Ireland. In conjunction with the National Transport Authority (NTA), we operate bus and rail services across the country, connecting communities, enhancing mobility, and providing a sustainable transport option.

CIÉ Group of Companies



Our Mission: At ClÉ Group, we are dedicated to providing efficient and accessible transport services that enhance the quality of life for our passengers and promote social inclusion. Our mission is to deliver a safe, efficient, and low carbon public transport network across Ireland, contributing to a greener and more sustainable future.

Our Vision:

Together, with our passengers, partners, and communities, we are committed to transforming public transportation into a powerful force for positive environmental, social, and economic change.

Low Carbon Transport



Transform our bus and rail fleets to low carbon, zero tailpipe emission vehicles

Responsible Resource Use



Promote the sustainable use of resources, safeguarding the environment for present and future generations

Renewable Energy



Prioritise the adoption of efficient technologies and renewable energy sources

Inclusive Communities



Foster diverse and inclusive communities where every individual is valued, respected, and empowered



The CIÉ Group Sustainability Strategy – 2023 Review

At ClÉ Group, sustainability is embedded throughout operations and strategy. We are committed to creating a positive impact on the environment, society, and economy through the provision of sustainable, low carbon public transport and taking measure to ensure we are operating sustainably. Our mission is to scale modal shift, providing a solution for people to choose public transport instead of private car use; contributing to the decarbonisation of Ireland's transport sector and supporting the ambition of the CAP and achievement of the **UN SDGs**.

As Ireland's largest public transport provider, we work with our stakeholders, the NTA and the DoT to offer a low-carbon transport option, connecting communities, maximising accessibility, supporting compact growth and providing a sustainable alternative to private car use across the country. Importantly, we recognise a unique opportunity to drive sustainability across our national operation and to mobilise our 11,726 employees to play a central part of the transition.

ClÉ Group's Sustainability Fund, which became operational in 2022, is a dedicated resource that finances impactful sustainability initiatives across our operations by allocating funds to projects that reduce our environmental footprint, invest in nature, improve circularity and promote social equity. In 2023, a total of 22 projects received approval for funding, in addition to 35 projects which were approved in 2022. The projects centre on delivering our sustainability goals, including energy efficiency, climate action, resource management, biodiversity and critically, social and employee empowerment.



CIÉ Group Sustainability Annual Review 2023

At the end of 2023, passenger numbers across the ClÉ Group returned to pre-pandemic levels with **299.7 million** passenger journeys completed.





The CIÉ Group Operating Companies have set ambitious climate and energy targets aimed at reducing our carbon footprint and promoting the uptake of renewable energy. ClÉ Group is working toward a 51% reduction in GHG emissions and a 50% increase in energy efficiency by 2030, in compliance with the mandatory Public Sector decarbonisation and energy efficiency targets administered by the Sustainable Energy Authority of Ireland (SEAI), The CAP sets out the requirement to deliver a 50% reduction in GHG emissions in the transport sector by 2030, enabled by modal shift to public transport and active travel modes. For the CIÉ Group, this means delivering an increase in passenger journeys alongside a significant investment in public transport services by the NTA and Government. Over 2023, the CIÉ Group of Companies delivered an increase in services along with the planned shift to zero emission technology, supported by the NTA.

Achieving modal shift is critical to tackling sectoral emissions, which is where the expansion of public transport services plays an instrumental role. At the end of 2023, passenger numbers across the ClÉ Group returned to pre-pandemic levels with 299.7 million passenger journeys completed. However, this increase in services presents a challenge in reaching ClÉ Group climate targets as we expand our public transport network to meet growing demand while also striving to decrease our absolute carbon emissions. Nevertheless, we are actively pursuing initiatives to accelerate emission reductions.

Work continued in 2023 to progress the design development of the DART+ programme, which will expand the current DART network and add electric and battery electric train carriages to the fleet over the coming years. Bus Átha Cliath and Bus Éireann have carried out retrofits across key depots to install the necessary charging infrastructure in preparation for the planned deployment of new electric buses to the fleets. In 2023, the first fully electric bus service in Ireland became operational, with Bus Éireann introducing eleven battery-electric single-deck buses to the Athlone town bus fleet. Additional charging infrastructure retrofits continued in Bus Átha Cliath and Bus Éireann depots in 2023, with battery electric buses deployed in Bus Átha Cliath's Summerhill depot by year end. Over the next decade, Bus Éireann and Bus Átha Cliath will gradually expand and transition their fleets from diesel to zero tailpipe emission vehicles and Iarnród Éireann will add electric and battery electric train carriages to their existing fleet.



ClÉ Group is investing in biodiversity. During 2023, a number of key projects were delivered in each Operating Company, with biodiversity gardens and pollinator plans installed across several stations and depots.



Given the technical challenges to decarbonise the national network, in particular, long distance rail and bus networks; ClÉ Group is exploring alternative technologies where electrification is challenged. Over 2023, the trialling of renewable fuels and energy efficient technologies on both rail and bus fleet were planned and initiated. Green hydrogen may have a role in enabling low carbon transport, particularly for long distance journeys, and as such the Group is working with partners to develop a hydrogen valley for Ireland. In parallel, work is ongoing to reach our public-sector energy efficiency targets by designing and delivering energy saving projects across our buildings, including building retrofits and the installation of solar photovoltaic (PV) systems.



In 2023, ClÉ Group improved circularity across our operations by introducing new circular initiatives, rolling out infrastructure to improve waste segregation across stations and depots, and implementing waste management and water use efficiency programmes. ClÉ Group also implemented and monitored sustainable procurement through our responsible purchasing policies, which were introduced across Iarnród Éireann, the ClÉ Holding Company and Bus Éireann in 2022.



ClÉ Group continues to invest in biodiversity and during 2023, a number of key projects were delivered in each Operating Company, with biodiversity gardens and pollinator plans installed across several stations and depots. The scale of the national network offers a unique opportunity to invest in biodiversity and the Group is developing a biodiversity strategy, commencing with the design of a national biodiversity mapping project across the rail and ClÉ network, which will help inform future biodiversity programmes.



ClÉ Group has a significant property portfolio across our network and in urban locations where we seek to enhance the public realm and enable modal shift by supporting transit oriented development (TOD). In 2023, ClÉ Group advanced planning for TOD in strategic urban locations, supporting high quality development around major transportation hubs.





Empowering employees to take action and embed sustainability within their roles is critical to building a culture and mindset of sustainability across the CIÉ Group. Over 2022-2023 we implemented sustainability training programmes to develop skills and expertise and motivate staff members to integrate sustainability principles into their daily tasks and decision-making processes. ClÉ Group continued to provide a foundational level 'Sustainability Pass' course, of which approximately 1,000 employees completed over the course of 2022-2023. We also provided the opportunity for employees to register for a Level 7 certificate on Sustainable Resource Management, a Level 8 Lean Yellow Belt for Sustainability, and an in-depth biodiversity and energy leadership course. Following the training, many participants have since implemented sustainability projects within their teams and locations, leveraging the knowledge gained from the programme.



Our commitment to sustainability extends beyond environmental stewardship to encompass the well-being and inclusivity of our employees. In 2023, the ClÉ Group Operating Companies published the second iteration of their gender pay gap reports, setting out their targets and strategies for fostering a gender balanced workforce. ClÉ Group has employee wellness programmes in place to promote the health and wellbeing of our staff, ensuring a supportive work environment that fosters physical, mental, and emotional wellness.

ClÉ Group currently reports under a range of voluntary and mandatory reporting frameworks. We have reported on our climate related performance to the CDP since 2020, and in our most recent 2022 reporting year, we received a score of B. In 2023, ClÉ Group became signatories of the Science Based Targets (SBTs) initiative, confirming our commitment to strive for ambitious climate targets. This year also saw ClÉ Group sign up to the UN Global Compact to ensure that our policies and procedures reflect best practice in promoting human rights, labour rights, anti-corruption and the environment across our operations.

Throughout 2023, ClÉ Group continued to prepare to disclose our sustainability performance for reporting under the Corporate Sustainability Reporting Directive (CSRD), the EU Taxonomy, and the New Economy and Recovery Authority (NewERA) Climate Action Framework. By complying with these standards, ClÉ will provide increased transparency and standardisation on sustainability performance and assess material impacts, risks and opportunities in relation to ESG matters. In 2023 ClÉ was awarded the 'Sustainability and ESG Reporting' award at the Chartered Accountants Leinster Society Published Accounts Awards 2023. Progress under each reporting framework is summarised in Appendix II: Sustainability Reporting Frameworks.

CIÉ Tours



Recognising the need to promote sustainable tourism and reduce their carbon footprint, ClÉ Tours developed an in-depth decarbonisation strategy to help tackle the GHG emissions from their business operations as well as the tours that they operate. This strategy builds on the Responsible Tourism Policy that they created in 2022, raising the ambition of ClÉ Tours' sustainability planning.

The CIÉ tours decarbonisation strategy includes the following modules:

- A complete GHG emission inventory, quantifying the direct emissions associated with their business operations and the indirect emissions from their wider value chain, including hospitality, entertainment, and ground transport services.
- Setting of GHG emission reduction targets in line with the ambition of CIÉ Group and Ireland's CAP.
- Targeted emission reduction strategies aimed at reducing areas of high GHG emissions, including methods for reducing the carbon footprint of employee commuting and business travel, advertising, equipment, and energy use, paired with recommendations for improved environmental data management.
- Close engagement with ClÉ Tours' supply chain, including suppliers of the hospitality, entertainment, and ground transport services that comprise the tour packages offered by ClÉ Tours, to better understand the position of the industry on sustainability matters and communicate ClÉ Tours' aims for their own sustainability journey.
- A risk assessment and resilience analysis for potential impacts to CIÉ Tours from climate change and biodiversity loss, setting out a risk register for the monitoring and managing of these risks.

Throughout 2024 and beyond, ClÉ Tours will focus on delivering the plan of action and recommendations put forth in their decarbonisation strategy, implementing sustainable practices and leveraging collective influence for positive change.



2023 Sustainability Highlights

ClÉ Group has made important progress in reaching our sustainability milestones. Projects carried out in 2023 have contributed to energy efficiency, carbon management, sustainability reporting, and environmental protection.

ClÉ Holding Company & ClÉ Tours	Bus Átha Cliath	Bus Éireann	larnród Éireann
CIÉ Group completed an initial climate scenario analysis exercise to identify the impacts of the Group's climate- related risks and opportunities. The results of this analysis will be used to steer future sustainability strategy development.			
Developed an in-depth decarbonisation strategy to help tackle the GHG emissions from their business operations as well as the tours that they operate.	A charging infrastructure retrofit was completed in Summerhill depot in November 2023, and 20 battery electric buses were rolled out for service by year end.	Launched the first fully electric bus service in Ireland in January 2023, with eleven battery- electric single-deck buses deployed in Athlone town.	Commenced the design of a retrofit project to convert a single freight diesel locomotive to operate on hydrogen. This is the first ever trial of a hydrogen internal combustion engine retrofit on a freight locomotive in Europe.
ClÉ Group committed to hav	ving our climate targets valid	ated by the Science Based Ta	argets Initiative.
ClÉ Group commenced a preparatory exercise for reporting under the EU Taxonomy. As part of the requirements, ClÉ Group will identify the proportion of turnover and expenditure related to economic activities that qualify as environmentally sustainable.			
Completed building condition surveys, energy audits, and conservation surveys across three office locations, including the historic Heuston building.	Installed a rainwater harvesting system at their Summerhill depot in 2023.	Installed the first solar PV and battery energy system at their Skibbereen depot, with PV system installations planned for additional depot locations.	Published their Climate Action Plan 2023-2030, outlining their pathway to achieve a 51% decrease in emissions by 2030 and net zero by 2050.
ClÉ Group continued the delivery of a comprehensive sustainability training programme, and have expanded our training offerings to include biodiversity leadership, sustainability operational management, and sustainability LEAN training for staff.			
Commenced a heritage project that will establish an archives service at the Group.	Completed feasibility studies and energy audits across eight depots, the results of which will inform future building fabric retrofit works.	Trained 91 employees across all grades as Mental Health First Aiders.	Selected by DECC as an SDG Champion for 2023/24 being recognised for their role in in driving Ireland's progress towards the achievement of the SDGs.
CIÉ Group completed our first annual Communication on Progress to the UN Global Compact, disclosing the Group's policies and procedures aimed at promoting human rights, labour rights, anti-corruption and the environment.			

Awards and Recognition

CIÉ Holding Company & CIÉ Tours	Bus Átha Cliath	Bus Éireann	larnród Éireann
Winner of the 'Sustainability and ESG Reporting' award at the Chartered Accountants Leinster Society Published Accounts Awards 2023	Winner of the 'Biodiversity Initiative ' award at the 2023 Business & Finance Media Group ESG Awards for their 'Dublin Buzz' depot beehive initiative Winner of the "Best Energy Achievement in Transport" award at the 2023 Business Energy Achievement Awards.	Winner of the 'Sustainable Project, Transport' and the 'Grand Prix' awards at the 2023 PwC/Business Post Sustainable Business Awards and the 'Leadership in the Public Sector' award at the 2023 SEAI Award for the new Athlone bus fleet, Ireland's first all- electric bus fleet. Winner of the Transport Category in the SEAI Energy Awards 2023. Winner of the 'Diversity Equity & Inclusion Award' at the 2023 Sustainable Business Impact Awards for their Inclusive Recruitment Campaign.	Winner of the 'Embedding a culture of workplace wellbeing' for large workplaces award at the CIPD Ireland HR Awards for their employee wellbeing programme
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Commitments

Commitment	Progress	SDG Contribution	
Action Area: Low Carbon Transition			
 Transition our diesel bus fleet to zero emission vehicles 100% of the Bus Átha Cliath bus fleet will be zero emission by 2035 50% of Bus Éireann's bus fleet will be zero emission by 2030 	 Bus Éireann launched the first fully electric bus service in Ireland in January 2023, with eleven EV single-deck buses deployed in Athlone town. Preparatory work was carried out in 2023 to convert the infrastructure of Bus Éireann's Limerick depot to be prepared for electric bus services commencing in 2024. A charging infrastructure retrofit was completed in Bus Átha Cliath Summerhill depot in November 2023, and 20 EV buses were rolled out for service by year end. Bus Átha Cliath commissioned a further 80 charging points in 2023 for Phibsboro depot. They will have capacity to support 136 electric buses by the end of 2024. 	13 Altern	
Decrease our GHG emissions by 51% by 2030 • Aligns with the Climate Action Plan 2024	 ClÉ Group is working with the NTA on the procurement of low and zero emission vehicles and are preparing stations and depots for the introduction of electric vehicles across the Group. In 2023, A diesel biofuel blend was introduced for use across the ClÉ Group bus and rail operations. Bus Éireann, larnród Éireann and ClÉ Tours progressed plans to trial the use of hydrotreated vegetable oil (HVO) across their fleets. Bus Éireann continued to operate three hydrogen-fuelled, zero tailpipe emission buses in their service since 2021. The three buses have collectively completed 156,000 zero emissions kilometres up to the end of 2023. ClÉ is a member of the SH2AMROCK consortium, which aims to create Ireland's first hydrogen transport hub in Galway. 	13 ACTUA ACTUA 11 AUTOMANTES E	
 Deliver an expanded and electrified rail network through the DART+ Programme DART+ will see the DART network grow from its current 50 km in length to over 150 km. 	 In 2023, public consultations, detailed design, procurement, railway order applications, and manufacture of fleet were progressed by larnród Éireann across the five DART+ rail workstreams. 	7 drinkunge and icital isobor icital isobor icit	



Commitment	Progress	SDG Contribution	
Action Area: Energy Manag	Action Area: Energy Management		
Increase energy efficiency by 50% by 2030 • Aligns with the SEAI's energy efficiency targets for the public sector	 Energy audits and feasibility studies were conducted across depots and offices across the Group in 2023, with additional studies planned for 2024. The results of these studies will inform future retrofit works to improve building energy performance. Bus Éireann installed a solar PV system at their Skibbereen depot in early 2023 and are planning for a rollout to six additional depots from 2024-2025. Iarnród Éireann fitted a solar PV system on the roof of Heuston station in summer 2023 as part of an initial pilot programme. From August to December 2023, the solar PV system generated approximately 4.7 MWh of energy for the site. LED lighting retrofits were completed in office and depot locations across the ClÉ Group in 2023. Initial results have shown a decrease of approximately 15% in building energy use following the retrofits. Bus Átha Cliath added sub metering with real-time usage monitoring capacity in key depots in 2023, with final works to be completed in 2024. 	13 LULIA LOCAL DESCRIPTION IN EXCLUSION CONTRACTOR AND COMPLETE IN EXCLUSION CONTRACTOR IN EXCLUSION IN EXCLUSION IN EXCLUSION IN EXCLUSION IN EXCLUSION IN EXCLU	

Commitment	Progress	SDG Contribution
Action Area: Circular Economy		
Deliver water saving initiatives across our operations in areas of high water usage	 Bus Átha Cliath added a rainwater harvesting system in their Summerhill bus depot in 2023, which demonstrated more than an 8% reduction in mains water usage compared to 2022 water bills. Installation of additional rainwater harvesting systems is planned to commence in 2024. Bus Éireann and larnród Éireann carried out a series of water use audits to ensure accurate data capture and identify opportunities in for water use reduction. 	12 ESPONSIE COCONFITM AND PRODUCTION COCO 6 ELEAN WATEP COCO ELEAN WATEP
 Increase the recycling rate across ClÉ Group Bus Éireann and larnród Éireann target a 70% recycling rate by 2030 	 Bus Éireann installed recycling cardboard waste balers at several depots in 2022 to ensure proper waste segregation and recycling of cardboard materials, which resulted in a 15.5% increase in Bus Éireann's recycling rate in 2023 compared to 2019. Expansion of this initiative to additional sites is planned in 2024. The ClÉ Group Operating Companies have developed waste and circular economy programmes as part of their overall waste management plans. Waste segregation infrastructure and staff training will be rolled out to depots, offices and stations to help improve recycling rates. 	12 ESPONSIE INCLAPTION AN INCLUCTOR
Action Area: Biodiversity		
Plant 40 hectares of native trees on non- operational lands by 2030	 In 2023, larnród Éireann planted 300 native trees on 0.1 hectares of landbank, bring the total planted area to 4.35 hectares of native woodlands. This planting initiative will be expanded in 2024 and beyond. larnród Éireann and the CIÉ Holding Company have commenced the development of a biodiversity strategy for larnród Éireann and CIÉ Landholdings. 	15 Hituna
Install pollinator plans at every larnród Éireann station by 2030	 Iarnród Éireann installed pollinator plans at six rail stations in 2023, bringing the total up to 53 stations with pollinator plans out of 147 total stations. 	15 arun

Commitment	Progress	SDG Contribution		
Action Area: Diversity and	Action Area: Diversity and Equal Opportunity			
Continue to strive towards a gender balance in our workforce	 Bus Éireann, Bus Átha Cliath, and Iarnród Éireann have each published updated 2023 Gender Pay Gap Reports outlining their progress and commitments to promote gender equality in the workforce. Iarnród Éireann aim to double the number of women in their workforce by 2030. Bus Éireann targets an increase in the proportion of women in Driver and Supervisor roles to 10% by 2030. 	5 GOURT		
Action Area: Sustainabilit	Action Area: Sustainability Reporting and Compliance			
Report under CSRD requirements by 2026	 ClÉ Group completed a gap analysis on the CSRD reporting requirements, identifying a detailed action plan to prepare the Group for full compliance with the CSRD. 			
Demonstrate alignment with the EU Taxonomy Framework by 2024	 In 2023, CIÉ Group commenced a preparatory financial analysis for reporting under the EU Taxonomy requirements. 			
Validate our science- based GHG emission targets	 In 2023, CIÉ Group committed to the Science Based Targets Initiative (SBTi). The SBTi will validate the CIÉ Group's climate targets, confirming they align with the goals of the Paris Agreement to limit global warming to below 1.5C. 	13 demarts		
Complete an intensive Scope 3 emission inventory by 2024	 The ClÉ Group is developing a methodology to measure and improve the accuracy of our Scope 3 emissions, which include indirect emissions from our value chain. Iarnród Éireann is a founding member of the Sustainability Supply Chain School Ireland, and are working with them to help calculate Scope 3 emissions from the supply chain. 	13 CLIMATE		

Non-Financial Performance Indicator (KPI) Highlights

Measures to meet public sector climate targets and reduce the carbon footprint of the ClÉ Group Operating Companies have delivered improvements. The figures below highlight each Operating Company's improvements in CO₂ efficiencies and waste recycling from each operating company's base year up to the end of 2023.



* These figures may differ from the KPIs published by Operating Companies due to different conversion factors used in calculations, as the SEAI conversion factors are updated frequently throughout the year. A list of the conversion factors used to calculate these figures is included further down in this report.



Action Area: Low Carbon Transition



Achieving modal shift is critical to tackling emissions from the transport sector. ClÉ Group is working closely with our stakeholders to deliver increased services and electrification of our public transport system. These largescale programmes and infrastructure improvements, in conjunction with the NTA, form the basis of a national redesign of the public transport network to help encourage modal shift and reduce reliance on private car use. As part of this journey, the ClÉ Group Operating Companies are preparing their stations and depots for the introduction of electric vehicles.



CIÉ Group Scope 1 and 2 Emissions

Figure 1. ClÉ Group cumulative Scope 1 and Scope 2 carbon emissions. Scope 1 (direct) emissions are generated by the combustion of fuel. Scope 2 (indirect) emissions are generated by the consumption of electricity. The Scope 2 emissions in this figure represent the consumption of electricity in Ireland.





Figure 2. Group Scope 1 and 2 emissions trend plotted against the emissions trajectory in line with the target of decreasing emissions by 51% by 2030. The emission reduction represented in the graph for 'target' and 'actual' are calculated against the baseline year of 2018.

In 2021, Ireland published its first Climate Action Plan, setting out a roadmap to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and reach net-zero emissions by no later than 2050, as set out in the Climate Act 2021. ClÉ Group set Group-wide targets in line with the CAP to reduce total Scope 1 and 2 carbon emissions by 51% by 2030, using a baseline year of 2018.

If ClÉ Group were to reduce our emissions at a constant rate until the target year of 2030, the Group should have seen a decrease of 21.25% by 2023 compared to the 2018 baseline. Instead, we reduced our overall emissions by 7.56% between 2018 and 2023 (Figure 2).

Despite a significant increase in passenger journeys in 2023, the Group's overall emissions decreased by 1.04% between 2022 and 2023. The decrease in emissions was largely enabled by the introduction of biodiesel across the Operating Companies. This means that the Group has not yet achieved the desired rate of reduction and will need to reduce our emissions at an accelerated rate until 2030 in order to achieve our climate targets.

The challenge in reaching our climate targets arises from the complex dynamics of our operations, particularly as we simultaneously expand our public transport network to meet growing demand while also striving to decrease our absolute carbon emissions. This represents a significant challenge, as increased service provision inherently leads to higher energy consumption and associated emissions. Nevertheless, we are actively pursuing measures to accelerate emission reductions, including the use of biofuels and low carbon technology. As part of the Group's strategy, larnród Éireann is preparing to integrate additional electric train carriages into the rail fleet and Bus Átha Cliath and Bus Éireann have commenced the transition of the bus fleets to battery electric vehicles. The Operating Companies have also introduced the use of biofuels across the Group to comply with the requirements of the Renewable Transport Fuel Obligation. These measures will assist in reducing the Group's overall emissions but progress across the fleet transition will not follow a linear trajectory, involving substantial lead times for implementing zero emission technology and developing infrastructure necessary for transitioning the fleets over the next several years.

The emissions intensity of passenger journeys delivered by ClÉ Group is presented in Figure 3. Emissions intensity is measured in kgCO₂e per passenger journey and serves as a key indicator of the energy efficiency and environmental impact of the ClÉ Group's transportation activities. The emissions intensity metric depends on several factors, including the energy sources used for transportation, the efficiency of vehicles, the distance travelled, and the number of passengers carried. A lower intensity metric indicates a more efficient and sustainable level of operations.

Following the COVID-19 pandemic, which led to a significant disruption of ClÉ Group's services, passenger numbers gradually recovered to a high of approximately 299.70 million passenger journeys in 2023. This has led to a decrease in emissions intensity to approximately 0.95 kg CO_2e per passenger journey, a record low over the past six years. The ClÉ Group's plans to electrify the bus and rail fleets, coupled with investments in energy-efficient and low-carbon technologies, is expected to further reduce our carbon emissions and the emissions intensity for each passenger journey.

Each passenger journey with ClÉ Group represents a potential private car taken off the road, reducing congestion, air pollution, energy consumption, and carbon emissions.



ClÉ Group Emissions Intensity

Figure 3. Total passenger journeys plotted against carbon intensity (kg CO₂e per journey). Total carbon intensity figures in this graph do not include ClÉ Tours or the ClÉ Holding Company. ClÉ Tours and the ClÉ Holding Company together contribute less than 0.1% of total ClÉ Group emissions.



CIÉ Group Operating Company Passenger Journeys

Figure 4. Passenger journeys (millions) delivered by Bus Átha Cliath, Bus Éireann, and Iarnród Éireann.

During the first year of service, the 11 electric vehicles in the town service completed 530,000 emissionfree kilometres, eliminating over 400,000 kg of tailpipe C0₂ emissions compared to the previously used diesel engine vehicles.

In 2023, CIÉ Group achieved a significant milestone by delivering 299.7 million passenger journeys, marking a record high in recent years (Figure 4). This achievement marks a full recovery in our services since the onset of the COVID-19 pandemic. Despite a gradual increase in CIÉ Group's carbon emissions since 2020, there has been a noteworthy decrease in carbon intensity, measured in kg CO₂ per passenger journey. This reduction can be attributed to the expansion of services and the corresponding increase in passenger numbers, indicating a more sustainable approach to transportation on a national scale. Each passenger journey with ClÉ Group represents a potential private car taken off the road, reducing congestion, air pollution, energy consumption, and carbon emissions.

Bus Fleet Transition

In January 2023, Bus Éireann achieved a major milestone in successfully launching Ireland's first all-electric zero tailpipe bus service in Athlone town. The Athlone fleet conversion required an extensive depot upgrade to install new charging infrastructure, including a substation, chargers, charging stations and a new depot charge management system, representing a €10 million investment by the NTA and significant engineering works by Bus Éireann. During the first year of service, the 11 electric vehicles in the town service completed 530,000 emission-free kilometres, eliminating over 400,000 kg of tailpipe C02 emissions compared to the previously used diesel engine vehicles. The response of the local community to the new services was hugely encouraging, with passenger growth of 25% during the year. The learnings from Athlone will now inform a wider launch in Limerick and other regional cities from 2024 onwards.



To help deliver the NTA regional city electrification programme, Bus Éireann completed preparatory work in 2023 to **equip the Limerick depot** with EV charging infrastructure to accommodate new EV buses. There are plans for 34 battery-electric buses to be deployed in Limerick in 2024 and they will save an estimated 1,800 tonnes of tailpipe carbon emissions per year.

Bus Átha Cliath completed the installation of **charging infrastructure** in their Summerhill depot in November 2023, adding 56 new charging points capable of charging buses in three to five hours. An additional twenty new double deck battery-electric buses were deployed by Bus Átha Cliath, with over 360 drivers taking part in an extensive testing, piloting and training programme using the new buses. With a further 80 charging points commissioned for their Phibsboro depot, Bus Átha Cliath will have capacity to operate 136 electric buses by the end of 2024. This EV conversion programme will support the decarbonisation of Dublin's bus service and contribute to a quieter and cleaner city centre.



Rail Fleet Transition

In 2023, larnród Éireann launched their **corporate**

Climate Action Plan 2023 to 2030, which outlines their ambition and pathway to reducing their GHG emissions by 51% by 2030. The reduction will be addressed through the potential introduction of alternative fuels (HVO) across diesel-powered fleets, transitioning to an electric-powered fleet, on-site renewable energy generation, greening of the overall electrical supply through a Corporate Purchasing Power Agreement, and fleet enhancements and building retrofits to improve energy efficiency.



The **DART+ Programme** is a large-scale network rail expansion project that will transform rail travel in the Greater Dublin Area (GDA). DART+ is being implemented by larnród Éireann, with funding from the NTA as part of the National Development Plan, Project Ireland 2040 and the NTA's Transport Strategy for the GDA (2016-2035). It will see the DART network grow from its current 50 km in length to over 150 km, helping to boost regional connectivity and making public transport the preferred option for more people.

In 2023, public consultations, detailed design, procurement, railway order applications, and manufacture of fleet were progressed by larnród Éireann across the five DART+ rail workstreams. Details of progress made across the five workstreams can be found on the **DART+ website**.

Alternative Fuels (Renewable Transport Fuels)

ClÉ Group is trialling alternative transport fuels for the hard-to-decarbonise routes, where the transition to electrification may face additional challenges, due to range restrictions or other limitations. In 2023, ClÉ Group introduced a diesel biofuel blend to be used across the bus and rail fleets, which will support compliance with the Renewable Transport Fuel Obligation.

Bus Éireann Iarnród Éireann, and ClÉ Tours are each planning trials to test the use of hydrotreated vegetable oil (HVO) across their fleets. HVO is a nonpetroleum alternative to diesel fuel that, when made from sustainably-sourced waste products, is classified as a carbon-neutral fuel source.

larnród Éireann tested the use of HVO in their on-track machinery and transitioned to 100% HVO use in this machinery in 2023. Switching to the use of 100% HVO in their on-track machinery is projected to result in emission savings of up to 148,500 kg CO_2e annually compared to continued use of diesel. larnród Éireann also completed the first phase testing trial of HVO on a 071 class freight locomotive in 2023. The results of the trial were favourable, showing cleaner engine burn and CO_2 reductions. A tender for larger volumes of HVO is underway. ClÉ Tours has partnered with their coach transport provider to offer a tour programme on coaches powered by 100% HVO for the 2024 season. The sevenday tour will stop in Dublin, Galway, Killarney, and Waterford.

larnród Éireann has signed a contract with DIGAS to trial Europe's first retrofitted hydrogen freight locomotive. The €1.5m project will see a locomotive diesel engine converted to a hydrogen internal combustion engine, which will allow the locomotive to run on renewable, zero emission hydrogen fuel instead of diesel. This project will showcase a unique approach where hydrogen will be used in the locomotive's current internal combustion engine rather than fitting it with a separate fuel cell or hydrogen engine. The results of the project will be used to demonstrate the feasibility of introducing hydrogen as a transport fuel in Ireland's rail sector.

In 2021, Bus Éireann and the NTA deployed three hydrogen-fuelled buses in Ireland, providing insights into the use of hydrogen fuel cells as a complementary technology to battery electric vehicles under operating conditions. The three buses have collectively completed 156,000 zero emissions kilometres since they entered service in mid-2021, equating to a reduction of almost 150 tonnes of tailpipe CO₂ emissions compared to the conventional diesel buses that they replaced. ClÉ Group is also part of the **SH2AMROCK consortium**, a group of partners working to create Ireland's first hydrogen valley.

Action Area: Energy Management



The reduction of carbon emissions required by Ireland's CAP will be supported through energy efficiency measures, demand reduction, and the use of on-site renewables. By improving energy efficiency and incorporating renewable energy sources, ClÉ Group is actively working towards a low-carbon pathway that aligns with our long-term climate and energy targets.

Energy Consumption

ClÉ Group prioritises the accuracy and reliability of our sustainability data and works with our partners to ensure its validity. The ClÉ Group Operating Companies are obliged to report their annual energy use metrics to the SEAI, which verifies the reported data and publishes it on their public Monitoring and Reporting (M&R) system.



CIÉ Group Energy Consumption

Figure 5. Total energy consumption (kWh) plotted against energy use intensity (kWh per journey). Total energy consumption figures in this graph do not include ClÉ Tours or the ClÉ Holding Company. ClÉ Tours and the ClÉ Holding Company together contribute less than 0.1% of total emissions.

The ClÉ Group predominantly uses diesel fuel as its main source of energy, as indicated in Figure 5. However, a significant shift in energy efficiency is anticipated with the planned switch to electric and battery electric technologies for the Group's fleets. This change is expected to alter the Group's energy consumption profile in the medium to long term as we move away from diesel and increasingly towards electricity as a primary energy source. This shift in energy source will rebalance the proportion of emissions, seeing a decrease in Scope 1 emissions and an increase in Scope 2 emissions. In 2023, the ClÉ Group's Scope 1 emissions represented 92% of the Group's combined Scope 1 and Scope 2 emissions. As the ClÉ Group increasingly deploys electric vehicle technologies across the fleet, the proportion of Scope 2 emissions is expected to increase over time.



ClÉ Group Energy Consumption Per Passenger Journey

Figure 6. Total energy consumption (1000s MWh) plotted against energy use intensity (MWh per 1 million journeys). Total energy consumption figures in this graph do not include ClÉ Holding Company and ClÉ Tours. ClÉ Holding Company and ClÉ Tours together comprise less than 0.1% of total emissions.

The ClÉ Group total energy consumption can be plotted against the number of passenger journeys delivered to obtain an energy intensity figure (Figure 6). The energy intensity metric provides insights into the Group' energy efficiency performance, with a lower intensity metric indicating a higher degree of energy efficiency.

Between 2012 and 2019, ClÉ Group experienced a consistent decline in energy intensity, despite an overall increase in energy consumption. This demonstrates a constant increase in energy efficiency through fleet upgrades and the use of energy efficient technology. In 2020 and 2021, ClÉ Group's energy use decreased while energy intensity increased. This was mainly due to the travel restrictions imposed by COVID-19, which limited the capacity of vehicles to carry passengers. As a result, the energy consumption per million passenger journeys increased during this period. However, as passenger journeys recovered to pre-pandemic levels, the energy use per million passenger journeys decreased significantly once again, seeing a record low of 3.71 kWh per journey (Figure 6).

As ClÉ Group continues to invest in energy efficient technology in our operations, including behind-the meter renewable energy generation and technology upgrades, we aim to maintain a decreased energy intensity metric.

Energy Efficiency Initiatives

Supported by the ClÉ sustainability fund, energy audits and feasibility studies have been conducted across key depots for Bus Éireann and Bus Átha Cliath, and three office buildings for ClÉ Holding Company, including the historic Heuston Station. The results of these studies will inform future retrofit works to improve building energy performance and assess opportunities for on-site renewable energy generation across these sites. Iarnród Éireann also aims to complete BER rating assessments across their buildings commencing in 2024.



larnród Éireann installed a 50 m² solar PV system panels on the roof of Heuston station in 2023. This pilot programme will assess the potential energy generated by solar panels in this location, with initial assessments indicating potential to extend the programme to the rest of the extensive roof space available, subject to feasibility. From August to December 2023, the solar PV system generated approximately 4.7 MWh of energy for the site.

A pilot solar PV installation was carried out at Bus Éireann Skibbereen depot in early 2023, and the site is now 72% energy self-sufficient. A rollout has been approved for six additional locations in Bus Éireann from 2024-2025, supported by the ClÉ Sustainability Fund. There will be an estimated average site self-sufficiency of 43% across the six new locations, and it is projected to yield an annual electrical consumption saving in the region of 389,415 kWh/annum across these locations.

Supported by the ClÉ sustainability fund, Bus Átha Cliath fitted sub-metering and energy monitoring technology to ten depots in 2023, with further works to be completed in 2024 for full installation across electricity, water and gas meters. This will allow for more precise monitoring of energy and water use across the depots. Bus Éireann also plan to roll out sub metering and monitoring to three sites as an initial pilot scheme in 2024. An energy policy for the Group is being developed to plan, manage, procure, fund and manage risk across a mix of alternative fuels. The working group overseeing the development of the policy has identified three key areas of focus: renewable fuels policy development, alternative fuels and energy transition, and energy supply cost management. This energy policy will ensure ClÉ Group's energy supply throughout the transition to zero emission and low carbon vehicles and will assist us in assessing our future energy needs.

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Action Area: Biodiversity



ClÉ Group, one of the largest landowners in Ireland, is taking action to safeguard the well-being of our natural environment by investing in biodiversity initiatives, such as planting native species across the network and implementing biodiversity and pollinator plans. The efforts that ClÉ Group has made to conserve local biodiversity are in line with the objectives and targets of the **National Biodiversity Action Plan 2023-2030**, which strives to foster collective responsibility for the protection of biodiversity in Ireland.

All Ireland Pollinator Plan

The **All-Ireland Pollinator Plan 2021-2025** (AIPP) is a shared plan of action uniting multiple sectors to establish a pollinator-friendly landscape across Ireland and prevent the loss of natural and semi-natural habitats. As a partner organisation of the AIPP, one of the key actions of plan is for "larnród Éireann to promote pollinator-friendly management of the national rail network in the Republic of Ireland" through measures that include trialing alternatives to glyphosate herbicide, controlling the spread of invasive plant species, and improving grassland management and pollinator friendly planting across all stations. In 2023, larnród Éireann completed pollinator plans for six additional stations, taking the total up to 53 by the end of 2023.

In October 2022, Bus Éireann became a supporter of the AIPP, formally endorsing the Plan and agreeing to take specific actions themselves to assist. Bus Éireann supports a number of sites for pollinator species as part of their overall biodiversity action plan.

Managing Our Impact

The larnród Éireann network spans approximately 2,200 km of rail corridor across a range of landscapes and ecosystems. The network requires regular maintenance of tracks, stations, bridges, signalling and electrical equipment, located in close proximity to the dynamic and biodiverse environments of the rail corridor. To manage their impact during capital works and maintenance projects, larnród Éireann developed a set of **Biodiversity Guidelines** for staff to follow when working near ecologically sensitive sites. The guidelines set out the proper procedures to ensure that protected species, hedgerows, and water bodies are preserved.

Case Study: Iarnród Éireann Biodiversity Guidelines in Action



Mining bee habitat in the Castlebar station carpark

A possible habitat site for mining solitary bees, a native pollinator species, was discovered at Castlebar Station by larnród Éireann. These bees dig holes in the ground to make their nests, and they require areas of bare gravel or soil for this purpose. The station carpark has some areas that meet their needs, and a draft plan is being developed to improve the site for their conservation. The plan includes clearing ivy and other plants that cover the soil, sowing wildflower seeds to provide a food source for the pollinators and putting up signs to educate the public about the project. The site will need annual maintenance, but no pesticides should be applied to it. This project is part of larnród Éireann's collaboration with the All-Ireland Pollinator Plan, which aims to protect and promote pollinators across the country.

Enriching Our Local Ecosystems

ClÉ Group is supporting a range of projects that invest in our biodiversity and natural capital. Between 2022 and 2023, Bus Átha Cliath installed biodiversity and wellbeing gardens across multiple locations, supported by the ClÉ Sustainability Fund. Bus Átha Cliath plan to expand this initiative to additional sites in 2024. These gardens will improve biodiversity in Dublin city, while also providing employees with natural outdoor spaces for them to enjoy during breaks, lunchtime, or after work. To date, larnród Éireann have planted 4.35 hectares (total) of native woodland. In 2023, 300 trees on 0.1 hectares of landbank were planted. This planting initiative will be continued in 2024 and subsequent years.

In 2023, larnród Éireann and ClÉ commenced developing a biodiversity strategy for larnród Éireann and ClÉ landholdings. Key elements of the strategy will include the mapping of ClÉ/larnród Éireann land and property, including the 2,200 km of biodiversity-rich corridors along the rail network; mapping of biodiversity assets across Group land and property; and identification of at-risk areas for protection and restoration.

Action Area: Circular Economy



ClÉ Group is working to maximise circularity across our operations and value chain by minimising the waste of plastics, packaging, electronics, construction and building materials, and water, and increasing the recycling rate across each Operating Company. The ClÉ Group's circular economy initiatives also help to support the aims of Irish and European environmental legislation, including the 2021 Circular Economy Strategy and the 2022 Circular Economy Act.

Waste Management

ClÉ Group generates three primary waste streams in our operations: general waste, recyclable waste, and hazardous waste. The hazardous waste stream is comprised of the by-products of operating and servicing heavy-duty vehicles, such as engine coolant, motor oil, batteries, and oily rags.
To help guide their operations to be more resourceefficient, larnród Éireann developed a comprehensive waste management and circular economy strategy in 2023. The strategy outlines larnród Éireann's plans to move from a linear 'Take-Make-Use' focus towards a more circular approach where consideration is made for other options such as rethinking the need for the material at design stage, purchasing longer lasting products, and repairing items where possible. They also aim to focus on improving waste segregation across the network and plan to install additional waste segregation infrastructure across twenty stations to improve recycling rates. This project is supported by the CIÉ Sustainability Fund and will commence in early 2024.

Bus Éireann developed a circular economy and materials management plan in 2023 which outlines waste reduction and recycling targets, environmental improvement initiatives and progress on implementing green procurement principles. Supported by the ClÉ Sustainability Fund, Bus Éireann installed recycling cardboard waste balers at several depots in 2022 to ensure proper waste segregation and recycling of cardboard materials. The installation of the waste balers resulted in a 15.5% increase in their recycling rate in 2023 compared to 2019, and Bus Éireann will expand this initiative to additional sites in 2024 following the success of the initial project.

In 2023, Bus Átha Cliath developed a waste and circular economy programme as part of their overall waste management plan. Supported by the ClÉ sustainability fund, in 2024 waste segregation infrastructure and staff training will be rolled out to depots, offices and stations to help improve recycling rates.

	2022	2023	2030 Target	Change since previous year
Bus Átha Cliath	73%	74%	75%	
Bus Éireann	20%	25.5%	70%	
larnród Éireann	52%	51%	70%	
ClÉ Holding Company	33%	39.5%	Not yet in place	
ClÉ Tours	29%	35.3	Not yet in place	

CIÉ Group Recycling Rates

Table 1. Recycling rates are calculated by the proportion of waste sent for recycling out of the total amount of general waste. Hazardous waste is not included in the recycling rate.



Water Management

ClÉ Group relies heavily on water for our daily operations, particularly for vehicle maintenance and washing (Figure 7). To deliver on our commitment to sustainable resource management, the ClÉ Group Operating Companies are undergoing water use audits, installing smart meters, and installing water saving technologies to allow us to use water more efficiently across our operations. In 2023, Bus Éireann set a target of reducing their water use by 40% by 2030 from a 2019 baseline year. To help achieve this goal, Bus Éireann completed water efficiency audits and installed smart meters in seven of their depots. The improved accuracy and available of water usage data combined with the findings of the water audits, led to a reduction in water use across sites in 2023 compared to 2019. This initiative will be expanded to additional sites commencing in 2024 and is supported by the ClÉ Sustainability Fund.



ClÉ Group Water Use 2023 (m³)

Figure 7. ClÉ Group waster use consumption in 2022, reported in cubic metres of water.



As part of their efforts to reduce their water usage, Bus Átha Cliath installed a rainwater harvesting system at their Summerhill depot in 2023. Water savings were monitored post implementation, which demonstrated more than an 8% reduction in mains water usage compared to 2022 water bills. Rainwater harvesting systems will also be installed in the Ringsend and Donnybrook depots commencing in 2024. The installation of each rainwater harvesting system is supported by the ClÉ Sustainability Fund.

Green Public Procurement and Value Chain Engagement

Green public procurement (GPP) is a strategic means for CIÉ Group to leverage our purchasing power to foster a more sustainable supply chain. Through GPP, we seek to source goods, services, or works with a reduced environmental impact throughout their lifecycle. The ClÉ Group Operating Companies have targets and strategies in place to ensure that the appropriate GPP criteria is included in their contracts and tenders, with the goal of increasing the number of contracts and tenders with sustainability criteria. This process aligns with Ireland's commitment to resource efficiency and a circular economy. Bus Éireann's target of including sustainability criteria in 75% of tenders by 2030 was raised to a target of 95%, reflecting the material progress made by the company to date in this regard. Iarnród Éireann also has a Responsible Purchasing Policy in place with a target of incorporating sustainability selection criteria in 100% of their tenders by 2030, and Bus Átha Cliath include sustainability criteria in tenders.

Greening school transport services presents a very significant challenge to Bus Éireann and the Department of Education, which rely on 1,300 third-party contractors. In 2023, a life cycle assessment of Bus Éireann's school bus fleet and city buses was completed.

ClÉ Tours, in working to reduce their carbon footprint and GHG emissions, engaged with their coach supplier to operate one of their tours using a coach powered by HVO. The seven-day tour will operate throughout the 2024 season with approximately 60 departures. These strategic partnerships are essential in driving industry-wide change, as they encourage suppliers to develop and offer more eco-friendly options, aligning with the global push for sustainability. As ClÉ Group continues to invest in energy efficient technology in our operations, including behind-the meter renewable energy generation and technology upgrades, we aim to maintain a decreased energy intensity metric.

Through GPP, we seek to source goods and services with a reduced environmental impact throughout their lifecycle.

Action Area: Climate Resilience



The physical impacts of climate change - changing rainfall patterns, increased intensity of extreme weather events, sea level rise, and a warming global temperate - are already being felt in Ireland. Climate adaptation is the development of proactive measures and strategies to anticipate, prepare for, and respond to changing climate conditions and associated impacts. This is a fundamental element of climate action and is outlined in the National Adaptation Framework, where the Commercial Semi-State Sector called to safeguard their own operations and services as well as support the wider implementation of adaptation actions. To increase climate resilience through adaptation, CIÉ Group is working to ensure that our infrastructure and critical assets can withstand and recover from the impacts of climate change.

East Coast Railway Infrastructure Protection Project (ECRIPP)

Spanning the coastal railway south of Dublin to Wicklow, certain sections of the coastal areas are vulnerable to the impacts of coastal erosion, coastal flooding, wave overtopping and cliff instability. These impacts are expected to increase both in frequency and severity in future years as a result of climate change.

The East Coast Railway Infrastructure Protection Projects (ECRIPP) was established to deliver the necessary enhanced coastal protection to the existing railway infrastructure in affected areas of the rail network.

East Coast Railway Infrastructure Protection Projects Coastal Cell Areas



The project team is currently undertaking physical assessments and evaluating the environmental constraints of each of the five coastal cell areas. They have developed appropriate measures and have considered the risks and opportunities associated with each option in terms of addressing coastal erosion.

The team has carried out several surveys to inform Phase 2 of the project, including non-intrusive ecological surveys, topographic surveys, and a ground investigation to inform the design.

Additional detail on ECRIPP and the steps being taken to protect the Dublin to Wicklow rail line can found on the **ECRIPP website**.

Action Area: Community Engagement and Heritage



ClÉ Group values engaging with charities and community organisations as a meaningful way of fostering strong partnerships that support local investment and community development.

ClÉ Group is also leading several initiatives aimed at preserving our cultural heritage. As a historic provider of bus and rail transport in Ireland, we are well placed to create access to buildings and document archives of historical significance.

Archive Heritage Programme



The ClÉ offices house an extensive collection of documents, maps, and reports that trace the history of Ireland's bus and rail networks over several centuries. In 2023, ClÉ appointed a Group Archivist to lead an archival service project and implement the required infrastructure to establish an archives service at ClÉ Group.

The focus of the archive programme, which is supported by the ClÉ sustainability fund, has been to catalogue the statutory records of ClÉ and its predecessor companies stored at Heuston Station. To date, over half of these records have been catalogued, cleaned and boxed, and storage conditions have been upgraded. Books in poor condition have been sent for professional conservation, and a programme of digitisation will begin in the summer of 2024.

The catalogued records are uploaded into a collections management system. In 2025, a new website will be developed for the ClÉ Archives, and the catalogue and digitised minute books will be made available to the public. It is planned that all the statutory records of all the predecessor railway companies will be catalogued by the end of 2024.

In addition to this work, a series of surveys has been undertaken of archival material stored in locations outside of Heuston Station, including at Athlone, Limerick Junction, Pearse Station, Rosslare Europort, Broadstone Depot. The goal of this work is to accurately quantify the archival material owned by ClÉ Group, with a view to its eventual centralisation in one location to allow preservation and cataloguing work to be undertaken.

Busáras 70 Year Anniversary



In 2023, Bus Éireann celebrated the 70th anniversary of the iconic bus terminal at Busáras in Dublin city, just one of many protected buildings that the Company operate from. Bus Éireann has recently announced plans to redevelop Busáras in the coming years. Central to the redevelopment will be the preservation of the building's historic legacy and a renewed vision for Ireland's public transport infrastructure for the next 70 years.

Grow It Yourself Initiative

In 2023, ClÉ Group partnered with GIY "Grow it Yourself" for "Get Ireland Growing Day", a national campaign engaging communities across Ireland in sustainable gardening practices and transforming their gardens, groups, balconies, backyards, communal spaces and workplaces into green spaces. ClÉ Group became a flagship partner in 2023, nominating 100 employees and over 40 community groups to take part in the Get Ireland Growing initiative. Each employee and community group received a growing kit from GIY containing seeds and instructions on how to grow salads and herbs from home. The campaign aimed to highlight the environmental and health benefits of cultivating food locally.





Action Area: Decent Work and Wellbeing



Employee Wellbeing

Employee health and wellbeing are essential aspects of ClÉ Group's sustainability strategy. By investing in the physical, mental and emotional wellness of our staff, we can create a positive and productive work environment that fosters innovation, collaboration and engagement. A variety of initiatives and programs have been implemented across ClÉ Group to promote employee health and wellbeing, including employee assistance programmes, fitness challenges, expert webinars on various health topics, first aid courses, stop smoking courses, mental health resources, and a Group-wide network of Wellbeing Champions.

ClÉ Group has adopted a tailored approach to employee health, with larnród Éireann launching the Ignition Go app based on initial research done from the Diabetes Department with transport workers. Given that specific employee groups, particularly drivers and shift workers, may face a higher risk of health impacts associated with sedentary lifestyles, the Ignition Go programme is designed to offer personal health coaching, educational resources, and live events aimed at promoting a healthy lifestyle.

Well on Track Online Platform

Throughout 2023, the ClÉ Group Health and Wellbeing Departments developed an online wellness hub aimed at providing employees with wellbeing information, guidance, and support. Launched in early 2024, the online platform helps employees to learn and improve their overall health and wellbeing by providing them with resources and webinars on various health-related topics. The platform gathers information from a growing network of charities, non-profits, and government agencies that cover different aspects of wellbeing, including financial, social, environmental, lifestyle, diversity and inclusion. This online wellbeing hub is funded by the ClÉ Sustainability Fund.

KeepWell Mark Certification

ClÉ Group is committed to fostering a safe and healthy working environment for our employees, contractors and customers. As part of this commitment, several ClÉ Group Operating Companies have registered to the IBEC KeepWell Mark, a national accreditation that recognises organisations that invest in workplace health and wellbeing.

KeepWell Mark Certification



Workplace Safety

ClÉ Group is committed to providing a safe and healthy work environment for our employees and passengers. Each Operating Company implements their own health and safety policies that are regularly reviewed and updated as required. All staff work to ensure that processes are in place to allow for best practice in workplace safety and security, and that those processes are put into practice across their stations, depots, on vehicles, and on ClÉ Group property. The policies aim to ensure that ClÉ Group complies with all relevant legislation and regulations and fosters a culture of safety and well-being among our staff and customers.

Business Conduct

ClÉ Group's publicly stated commitments regarding anticorruption, protected disclosures and anti-discrimination are available on the ClÉ **Corporate Governance webpage**. These commitments reflect the ClÉ Group's values and principles, as well as our legal and ethical obligations in conducting business activities. ClÉ Group expects all employees, contractors, suppliers and partners to adhere to these commitments and to uphold the highest standards of integrity, fairness and respect in their dealings with the ClÉ Group and our stakeholders.

Collective Bargaining

ClÉ Group negotiates with our employees through the process of collective bargaining. ClÉ Group, on a voluntary basis, agrees to engage with the unions to discuss collective bargaining issues. The practice within ClÉ Group is to work with trade unions that represent a wide range of categories of staff. ClÉ Group has a long history of negotiating with trade unions and there are agreements in place that date past decades. These agreements reflect a mutual understanding and respect for the rights and responsibilities of all parties. They serve as a testament to the constructive dialogue that has been maintained over the years, fostering a stable and productive working environment.

Action Area: Diversity and Equal Opportunity



Equality, Diversity and Inclusion

The ClÉ Group Operating Companies each have Equality & Diversity statements or policies in place, underscoring our ongoing dedication to promoting equality, diversity, and non-discrimination. This commitment extends to our employees, customers, and the broader communities that we aim to serve.

Bus Éireann Diversity Statement

Bus Átha Cliath Diversity and Inclusion Policy

Iarnród Éireann Equality and Diversity Statement

CIÉ Diversity and Inclusion Policy

ClÉ Group offers training on equality, diversity and inclusion to employees depending on their role. In 2023, employees with hiring authority were provided with training on unconscious bias, focusing on how bias plays a role in everyday decisions and steps that employees can undertake to manage this. The unconscious bias training was supported by the Sustainability Fund.

Gender Pay Gap Reports

Following the implementation of the Gender Pay Gap Information Act 2021, each Operating Company published their first annual gender pay gap report in 2022. The reports outline the gender representation across each Operating Company, the gender pay gap (if present), and initiatives in place to narrow the gender pay gap and/or the gender representation gap. ClÉ Group is committed to not only to ensuring that the gender pay gap does not disadvantage any gender, but also to increase female representation across the Operating Companies in the historically male-dominated transport sector.

Bus Átha Cliath Gender Pay Gap Report 2023

Bus Éireann Gender Pay Gap Report 2023

larnród Éireann Gender Pay Gap Report 2023

CIÉ Group Sustainability Annual Review 2023

By investing in the physical, mental and emotional wellness of our staff, we can create a positive and productive work environment that fosters innovation, collaboration and engagement.

CIÉ Group Pay Gap Metrics

	Mean Gender Pay	Mean gender pay gap for part-time employees	Mean gender pay gap for temporary employees
Bus Átha Cliath	-4.1%	-0.9%	-7.4%
Bus Éireann	-11.8%	-10.4%	9.0%
larnród Éireann	-7.72%	-	-

A negative figure represents a gender pay gap in favour of women. The three Operating Companies each have an average gender pay gap slightly in favour of women. Although women make up a smaller proportion of the overall workforce, they are more highly represented in the upper pay quartiles, resulting in a gender pay gap favourable to women.

CIÉ Group Gender Diversity Metrics

	Female employees 2022 (%)	Female employees 2023 (%)	Change since previous year	Female employees in management 2022 (%)	Female employees in management 2023 (%)	Change since previous year
Bus Átha Cliath	8%	8%		21%	20%	
Bus Éireann	10%	11%		39%	34%	
larnród Éireann	11%	12%		35%	44%	
CIÉ Holding Company	43%	48%		40%	40%	
CIÉ Tours	64%	69%		67%	68%	

Action Area: Transit Oriented Development



Transit-Oriented Development (TOD) embodies an urban design concept aimed at establishing compact, walkable, mixed-use communities centred around efficient public transportation networks. ClÉ is dedicated to incorporating TOD principles wherever possible, leveraging the extensive and strategically situated property assets within the ClÉ Group's portfolio. This approach offers the opportunity to enhance the accessibility of housing, employment, and urban amenities in close proximity to frequent and high-quality transport services essential for supporting TOD. ClÉ is currently developing plans to execute flagship Masterplan projects nationwide.



Heuston Station, Dublin

The Heuston Station Masterplan will oversee the development of a largely brownfield site into a destination for living, working, exercising, and socialising. The 10-hectare site will offer mixed-use commercial, residential and leisure facilities with potential for over 1,000 new residential units, access to one kilometre of riverfront space, and new pedestrian and active transport infrastructure. The proposed Masterplan will align with planned expansions to public transport infrastructure, including the DART+ and BusConnects projects, delivering accessible and convenient transportation across Dublin.

Consultants have been appointed to progress preliminary designs for the stakeholder relocation project, including a new office building alongside St John's Road and for the preliminary design of green access infrastructure.



Connolly Station, Dublin

Development of the Dublin Arch project at Connolly Station has commenced. The development will comprise of extensive office space, 187 apartments and a 200+ bedroom hotel. The site developer has been granted Planning Approval for development of the entire site.



Ceannt Station, Galway

Planning permission was recently granted for the Augustine Hill development at Ceannt Station Quarter, Galway which will incorporate circa 400 residential units, retail, hotel and office space together with quality public realm areas and facilities for cyclists over 3.3 hectares. It is anticipated that development works will commence later in 2024.

Kent Station, Cork

Horgan's Quay, Cork is an ongoing mixed-use development including a circa 300 unit apartment building due to commence in 2024. New areas of public realm including a hotel and office block have been opened with further areas to be completed as construction works progress.



Colbert Station Quarter, Limerick

ClÉ is working alongside the Land Development Agency on the Colbert Station Quarter development, which will deliver several thousand affordable residential units.

CIÉ is dedicated to incorporating TOD principles wherever possible, leveraging the extensive and strategically situated property assets within the CIÉ Group's portfolio.

Action Area: Partnerships and Knowledge Sharing



UCD NexSys



ClÉ Group is working with the UCD Energy Institute, a leading research centre in the field of energy systems, to form the NexSys (Next Generation Energy System) strategic research partnership. This multi-disciplinary initiative aims to deliver a zero-emission transport network based on scientific evidence. NexSys involves studying the energy demand and the potential of low or zero emissions fleet technology across the entire transport network, including rail, bus and road vehicles. ClÉ Group, as an industry partner in NexSys, will use the research findings to inform our strategic planning and key investment decisions, such as choosing fleet technology, optimising energy efficiency and reducing the environmental impact of our transport services.

SH2AMROCK SH2AMRSCK Ireland's Emerald Hydrogen Valley

ClÉ is a member of the SH2AMROCK consortium, which aims to create Ireland's first renewable hydrogen transport hub in Galway. Renewable hydrogen offers a renewable and versatile energy solution with the potential to decarbonise various sectors, including transportation. The hub is designed to use excess renewable energy to generate green hydrogen, powering zero-carbon transportation modes including buses, heavy-duty vehicles, industry, maritime ships, and aviation in the Galway area. Supported by funding from the EU Clean Hydrogen Partnership, the consortium also aligns with Ireland's National Hydrogen Strategy and the EU Hydrogen Strategy, marking a significant step towards sustainable energy solutions.

Supply Chain Sustainability School



The Supply Chain Sustainability School Ireland is a new initiative that aims to provide free training and resources on sustainability issues for the built environment sector in Ireland. As a founding partner, larnród Éireann is committed to supporting the development of the organisation and its members, as well as improving its own sustainability performance. The Supply Chain Sustainability School is a collaboration between clients, contractors and suppliers who have a mutual interest in building the skills of their supply chain, offering online learning materials, webinars, workshops and conferences on topics such as carbon and climate change, community and social impact, workforce issues, and sustainable procurement.

Our Partners



Roinn Cumarsáide, Gníomhaithe ar son na hAeráide & Comhshaoil Department of Communications, Climate Action & Environment



An Roinn Iompair, Turasóireachta agus Spóirt Department of Transport, Tourism and Sport















Údarás Náisiúnta Iompair National Transport Authority

SUPPLY CHAIN SUSTAINABILITY

Action Area: Embedding a Culture of Sustainability



At ClÉ Group, we recognise that our employees play an instrumental role in our future as a sustainable business. By providing our employees with the skills and knowledge to understand climate change and sustainability, we can work together to achieve our sustainability goals. To develop skills and expertise, we are supporting training in sustainability, climate and green procurement.

Employee Skill Development



In 2023, ClÉ Group continued our partnership with 20FiftyPartners and Climate Ready Academy to offer sustainability training to employees across the Group. Supported by the sustainability fund:

- A 90 minute online foundational level 'Sustainability Pass' training programme was provided to employees across ClÉ Group across 2022-2023. Approximately 1,000 employees across the Group have now availed of this sustainability programme.
- A total of 83 participants across ClÉ Group enrolled in the NFQ Level 7 Sustainable Resource Management certificate programme, which was facilitated across three modules in 2022-2023. Each participant developed a charter for a sustainability initiative within their company. Following the programme, many participants have since implemented sustainability projects within their teams and locations, leveraging the knowledge

gained from the programme. An additional cohort of the Sustainable Resource Use NFQ Level 7 programme commenced in September 2023 with 10 Bus Éireann employees taking part.

- An NFQ level 8 Sustainability Lean course also commenced in October, with 12 Bus Éireann employees participating.
- Two cohorts of 15 Iarnród Éireann employees completed a Biodiversity Leadership and Energy Leadership course respectively, and specialised sustainability training for operational staff was delivered to 11 Bus Átha Cliath employees in late 2023.
- A Circular Economy course facilitated by Cambridge University and 20Fifty partners was rolled out to 20 employees across ClÉ Group in late 2023.
- A one-day Certified Water Steward Programme provided by 20Fifty Partners and the Lean & Green Skillnet on behalf of Uisce Éireann was delivered in summer 2023.

Go Green Climate Action Challenge



Approximately 1,000 employees across the Group have now availed of the sustainability training programme.

In 2023, ClÉ Group collaborated with Global Action Plan Ireland to roll out an employee climate action challenge across the Group – the "GO GREEN Challenge". There were 253 participating employees from larnród Éireann, Bus Éireann and ClÉ Holding Company. During the two week challenge, participants tracked their climate-friendly actions, which saved approximately 23,300 total kgCO₂e. The challenge highlighted to participants the impact that their habits and daily activities can have on the climate.

Executive and Board Training

Sustainability and ESG seminars have been delivered to ClÉ's Board and senior management teams, providing insights on sustainability strategy and ESG and reporting and legislation. The training programmes delivered have included covered topics including the CSRD reporting requirements, EU Taxonomy regulations, and a carbon abatement.



Plans for 2024

As we look ahead to 2024, ClÉ Group remains steadfast in our commitment to sustainability and environmental stewardship. To support the aims of the Group, we have outlined key initiatives and objectives that will guide our actions and shape our impact in the coming year.

Accelerated Rollout of Electric Buses

In 2024, the ClÉ Group will focus on the accelerated rollout of charging infrastructure and the increased adoption of electric buses across our fleet. As we work with the NTA to procure and deploy electric vehicles, we will reduce our reliance on fossil fuels and minimise our carbon footprint. This initiative aligns with our commitment to foster sustainable mobility solutions that benefit both our passengers and the environment.

Support for Alternative Fuels

The ClÉ Group acknowledges the growing potential of renewable hydrogen as a component of our future energy mix alongside HVO as an interim solution. In 2024, we will continue to actively support the development of the green hydrogen sector, leveraging our influence and resources to drive innovation and investment in this promising technology. By collaborating with industry partners and advocating for supportive policies, ClÉ seeks to accelerate the adoption of renewable hydrogen and contribute to the transition towards a more sustainable energy landscape.

SBTi and Scope 3 Emissions Inventory

One of our objectives for 2024 is to validate our existing climate targets through the SBTi and set additional GHG emission reduction targets for our Scope 3 emissions. This will involve the challenging work of creating a detailed inventory of our Scope 3 emissions for the baseline year, developing an updated methodology for calculating each GHG emission category, and setting out a process for regular value chain engagement as part of our Scope 3 emission targets. This process will also include compiling the Group's key supply chain partners and setting out a roadmap for consistent supply chain engagement and emission reduction from our value chain.

Continued Development of CSRD Reporting Capacity

ClÉ Group is building on our current capacity for sustainability reporting as we prepare to disclose under the CSRD. Informed by the findings of the recent gap analysis carried out across the Group, we are now working to implement the necessary improvements, policies and procedures to ensure compliance and effectiveness in our reporting processes.

Identification of CIÉ-Owned Lands for Biodiversity Management

In line with our commitment to biodiversity conservation and ecosystem restoration, we are developing a biodiversity strategy to conserve our natural capital across ClÉ-owned lands. This strategy aims to map the various ecosystems, located primarily along the rail network, that would be most suitable for biodiversity conservation. larnród Éireann will then develop and implement specialised management plans to ensure that natural capital is being preserved and enhanced across our most biodiversity-sensitive areas. The biodiversity strategy will also include plans for afforestation on ClÉ-owned lands using native broadleaf trees.

Cross-Company Employee Wellbeing Initiatives

ClÉ Group is implementing employee wellbeing initiatives designed to nurture the health and wellness of our workforce. These initiatives are organised under the four pillars: health screening, wellbeing training, financial wellbeing, and wellbeing events. Through these programmes, we aim to empower employees to proactively manage their physical health, provide resources and support to promote mental and emotional wellbeing, offer initiatives to enhance financial literacy and stability, and cultivate a sense of community and wellbeing across the Group.

Building Energy Efficiency

ClÉ recognises the pivotal role that buildings play in our environmental footprint and is committed to optimising their efficiency to reduce energy consumption and GHG emissions. Following a series of detailed energy audits and building surveys carried out across multiple ClÉ Group buildings in 2023, we will identify areas for improvement and opportunities for targeted building upgrades to enhance energy efficiency our facilities. Any building upgrades will be carried out in consultation with relevant local authorities and the Department of Housing, Local Government and Heritage. By investing in these upgrades, ClÉ Group aims to not only minimise our environmental impact but also improve the comfort and well-being of our employees.

Our Sustainability KPIs

larnród Éireann Key Performance Indicators

Scope 1,2 and 3 emissions are calculated using emissions factors from UK Department for Environment, Food and Rural Affairs (DEFRA) and the Sustainable Energy Authority of Ireland (SEAI). See Carbon Emissions Conversion Factors table for the conversion factors used.

Pillar 1: Economic

Generating Economic Value						
Connecting People	2023	2022	2021	2020	2019	2018
Passenger journeys (millions)	46.1	35.8	17.4	17.9	50.2	47.9

Pillar 2: Social

Sustainable cities and communities							
Accessibility	2023	2022	2021	2020	2019	2018	
Accessible stations (%)	80	79	79	76	76	76	

Wellbeing, Gender Equality and Inclusivity in our Workforce								
Investing in our employees	2023	2022	2021	2020	2019	2018		
Number of employees	4,559	4,339	4,176	4,085	3,897	3,782		
Gender equality	2023	2022	2021	2020	2019	2018		
Female employees (%)	12%	11%	11%	11%	11%	10%		
Women in senior management roles (%)	44%	35%	29%	19%	20%	18%		
Female Board members (%)	50%	44%	43%	56%	56%	50%		

Pillar 3: Environment*

Climate Action						
Greenhouse Gas** (GHG) Emissions	2023	2022	2021	2020	2019	2018
Scope 1 - Direct emissions (tonnes CO ₂ e) **	124,528	125,643	126,153	104,761	126,700	129,293
Scope 2 - Indirect emissions from purchased electricity (tonnes CO ₂ e) **	18,942	20,293	20,578	17,609	21,583	24,238

Climate Action						
Energy Use**	2023	2022	2021	2020	2019	2018
B0 diesel fuel (L)	43,746,696	44,342,632	44,919,986	36,968,720	45,150,836	46,050,500
100% biodiesel FAME fuel (L)	2,165,569	0	0	0	0	0
Forecourt diesel fuel (L)	1,513,330	1,494,763	1,442,759	1,442,826	1,445,885	1,478,286
B0 diesel fuel (MWh)**	444,860	450,920	456,791	375,935	459,139	468,288
100% biodiesel FAME (MWh)**	19,727	0	0	0	0	0
Forecourt diesel fuel (MWh)**	15,272	15,095	14,580	14,577	14,617	14,962
Grid electricity for traction (MWh)	26,103	26,034	23,453	23,235	27,695	26,222
Grid electricity for fixed assets (MWh)	33,287	33,797	34,413	35,910	37,275	38,021
Natural gas (MWh)	11,052	8,822	9,673	9,448	9,213	9,470
Self-generated renewable energy	4.7	0	0	0	0	0
Total energy consumption (MWh)**	550,305	534,668	538,910	459,104	547,939	556,964
Fleet Proportions	2023	2022	2021	2020	2019	2018
Diesel train kilometres (% of total)	86.7	85.1	86.3	85.8	86.4	87.4
Electric train kilometres (% of total)	13.6	14.9	13.7	14.2	13.6	12.6
Road fleet cars with hybrid engine	20	15	6	4	0	0
Fleet that are fully powered by electricity (%) (DART cars as % of total cars / carriages)	24%	24%	24%	24%	24%	24%

* Some figures have been updated since the 2022 CIÉ Group Sustainability Strategy Annual Review due to an updated calculation methodology. All energy and GHG emission calculations are carried out in accordance with the GHG Protocol and the SEAI established values.

** Some figures may differ from the KPIs published by larnród Éireann due to different conversion factors used in calculations, as the SEAI conversion factors are updated frequently throughout the year. A list of the conversion factors used to calculate these figures is included further down in this report.

Responsible consumption and production								
Waste management	2023	2022	2021	2020	2019	2018		
Total waste generated (tonnes)	2,132	2,084	1,580	1,512	2,314	2,337		
Waste recycled (tonnes)	1,093	1,091	769	726	1,221	1,272		
Recycling rate	51%	52%	49%	48%	53%	54%		
Hazardous waste (tonnes)	912	707	853	1,132	765	909		
Water management	2023	2022	2021	2020	2019	2018		
Water consumption (cubic metres)	288,721	365,603	220,461	-	-	-		

Bus Éireann Key Performance Indicators

Scope 1,2 and 3 emissions are calculated using emissions factors from UK Department for Environment, Food and Rural Affairs (DEFRA) and the Sustainable Energy Authority of Ireland (SEAI). See Carbon Emissions Conversion Factors table for the conversion factors used.

Pillar 1: Economic

Generating Economic Value						
Connecting People	2023	2022	2021	2020	2019	2018
Passenger journeys (millions)	107	90	58	51	89	84
Number of buses in operation	1,104	1,099	1,178	1,047	1,138	1,148

Pillar 2: Social

Sustainable cities and communities								
Accessibility	2023	2022	2021	2020	2019	2018		
Accessible service buses and coaches %	100%	100%	100%	90%	75%	65%		
Accessible bus stations to standard %	84%	84%	70%		60%			
Schools transport	2023	2022	2021	2020	2019	2018		
No. of students transported under the School Transport Scheme per school day	162,500	151,000	122,000	114,000	120,800	117,800		
No. of students transported per school day with special education needs	19,900	17,500	16,000	14,500	14,300	13,400		

Wellbeing, Gender Equality and Inclusivity in our Workforce									
Investing in our workforce	2023	2022	2021	2020	2019	2018			
Number of employees	2,932	2,827	2,761	2,702	2,727	2,562			
Gender equality	2023	2022	2021						
Female employees (%)	11%	10%	10%	10%	9%	9%			
Women in senior management roles (%)	34%	39%	34%	33%	30%	32%			
Female Board members (%)	29%	29%	33%	17%	25%	25%			

Pillar 3: Environmental*

Climate Action						
Greenhouse Gas (GHG) Emissions **	2023	2022	2021	2020	2019	2018
Scope 1 -Direct emissions (tonnes CO ₂ e)	72,911	73,696	70,274	70,229	83,816	77,275
Scope 2 -Indirect emissions from electricity purchased (tonnes CO ₂ e)	1,487	1,363	1,616	1,497	1,790	1,975
Energy Efficiency	2023	2022	2021	2020	2019	2018
B0 diesel fuel (L)	7,301,230	22,672,770	22,036,318	22,440,412	26,160,568	23,726,638
B7 blended diesel fuel (L)***	16,230,999	22,672,770	0	0	0	0
Forecourt diesel fuel (L)	4,323,316	4,212,624	3,956,682	3,428,287	4,831,374	4,764,592
B0 diesel fuel (MWh)	74,323	230,779	224,087	228,197	266,027	241,276
B7 blended diesel fuel (MWh)***	163,852	0	0	0	0	0
Forecourt diesel fuel (MWh)	43,628	42,541	39,984	34,635	48,842	48,224
Grid electricity for other (MWh)	4,047	4,017	4,543	5,029	5,389	5,236
Grid electricity for fleet (MWh)	616	0	0	0	0	0
Natural gas (MWh)	5,496	5,084	5,683	6,041	6,100	6,189
Kerosene (MWh)	694	638	-	602	529	519
Self-generated renewable energy (MWh)	14.5	0	0	0	0	0
Total energy consumption (MWh)	292,670	283,593	274,298	274,504	326,888	301,444
Fleet Proportions	2023	2022	2021	2020	2019	2018
Service fleet with Euro VI standard engine (%)	58.3%	79.7%	68%	55%	53%	43%
Service fleet with Euro V standard engine or older (%)	34.6%	12.3%	22.9%	45%	47%	57%
Service fleet with hybrid engine (%)	5.5%	7.6%	8.7%	0%	0%	0%
Service fleet that are zero tailpipe emissions (fully powered by electricity or hydrogen) (%)	1.6%	0.4%	0.4%	0%	0%	0%

* Some figures have been updated since the 2022 CIÉ Group Sustainability Strategy Annual Review due to an updated calculation methodology. All energy and GHG emission calculations are carried out in accordance with the GHG Protocol and the SEAI established values.

** Some figures may differ from the KPIs published by Bus Éireann due to different conversion factors used in calculations, as the SEAI conversion factors are updated frequently throughout the year. A list of the conversion factors used to calculate these figures is included further down in this report.

*** The figure for B7 diesel fuel is reported by Bus Éireann as a blend comprised of B0 diesel fuel and 100% FAME biodiesel. Bus Átha Cliath and larnród Éireann track their diesel fuel as separate quantities of B0 diesel fuel and 100% FAME biodiesel.

Responsible Consumption and Production							
Waste management	2023	2022	2021	2020	2019	2018	
Non-recyclable total waste generated (tonnes)	500	620	623	681	782	745	
Waste recycled (tonnes)	117	121	94	48	76	45	
Recycling rate	25.5%	20%	15%	7%	9.7%	6%	
Hazardous waste (tonnes)	124	583	398	-	-	-	
Water management	2023	2022	2021	2020	2019	2018	
Water consumption (cubic metres)	44,412	43,768	48,719	-	-	-	

Bus Átha Cliath Key Performance Indicators

Scope 1,2 and 3 emissions are calculated using emissions factors from UK Department for Environment, Food and Rural Affairs (DEFRA) and the Sustainable Energy Authority of Ireland (SEAI). See Carbon Emissions Conversion Factors table for the conversion factors used.

Pillar 1: Economic

Generating Economic Value						
Connecting People	2023	2022	2021	2020	2019	2018
Passenger journeys (million)	147	121	70	69	142	143
Number of buses in operation	1,090	1,056	1,034	994	1,016	1,010

Pillar 2: Social

Sustainable cities and communities						
Accessibility	2023	2022	2021	2020	2019	2018
Fully accessible stations/stops (%)	100%	100%	100%	100%	100%	100%

Wellbeing, Gender Equality and Inclusivity in our Workforce							
Investing in our workforce	2023	2022	2021	2020	2019	2018	
Number of employees	3,940	3,771	3,642	3,573	3,475	3,424	
Gender equality	2023	2022	2021	2020	2019	2018	
Female employees (%)	8%	8%	8%	7%	7%	7%	
Women in senior management roles (%)	20%	21%	22%	22%	22%	22%	
Female Board members (%)	44%	38%	50%	44%	44%	44%	

Pillar 3: Environmental*

Climate Action							
Greenhouse Gas (GHG) Emissions**	2023	2022	2021	2020	2019	2018	
Scope 1 – Direct emissions (tonnes CO ₂ e)	66,542	66,577	61,416	62,330	69,393	74,077	
Scope 2 – Indirect emissions from electricity purchased (tonnes CO ₂ e)	1,424	1,451	1,564	1,316	1,520	1,684	
Energy Efficiency**	2023	2022	2021	2020	2019	2018	
B0 diesel fuel (L)	24,180,191	24,116,025	22,148,154	22,439,511	25,028,838	26,759,294	
100% biodiesel FAME (L)	1,115,620	0	0	0	0	0	
B0 diesel fuel (MWh)	245,888	245,236	225,225	228,187	254,518	272,115	
100% biodiesel FAME (MWh)	10,163	0	0	0	0	0	
Grid electricity for other (MWh)	4,402	4,324	4,401	4,423	4,576	4,463	
Grid electricity for fleet (MWh)	63	0	0	0	0	0	
Gas usage (MWh)	7,848	9,036	9,189	10,020	10,785	11,111	
Self-generated renewable energy (MWh)	42.370	46.511	0	0	0	0	
Total energy consumption (MWh)	268,407	258,641	238,814	242,630	269,880	287,689	
Fleet Proportions	2023	2022	2021	2020	2019	2018	
Fleet with Euro IV standard engine (%)	11%	9%	15%	14%	14%	14%	
Fleet with Euro V standard engine (%)	13%	14%	7%	7%	15%	15%	
Fleet with Euro VI standard engine (%)	50%	53%	60%	57%	56%	46%	
Fleet with hybrid engine (%)	21%	22%	15%	1%	1%	0%	
Fleet that are fully powered by electricity (%)	2%	0%	0%	0%	0%	0%	
Average age of bus fleet (years)	7.6	6.34	6.8	7	7	6	

* Some figures have been updated since the 2022 ClÉ Group Sustainability Strategy Annual Review due to an updated calculation methodology. All energy and GHG emission calculations are carried out in accordance with the GHG Protocol and the SEAI established values.

** Some figures may differ from the KPIs published by Bus Átha Cliath due to different conversion factors used in calculations. A list of the conversion factors used to calculate these figures is included further down in this report.

Responsible Consumption and Production							
Waste management	2023	2022	2021	2020	2019	2018	
Total waste generated (tonnes)	662	640	733	817	821	912	
Waste recycled (tonnes)	491	478	463	563	627	658	
Recycling rate	74%	73%	63%	69%	64%	72%	
Hazardous Waste	930	1102	-	-	-	-	
Water management	2023	2022	2021	2020	2019	2018	
Water consumption (cubic metres)	51,640	85,567	75,185	61,221	56,754	-	





Appendix I: ClÉ Group Carbon Emissions Conversion Factors

Emissions Category	CO ₂ e Emissions Source	Conversion Factor	Unit	Source
Scope 1	Natural Gas	0.000204741	tonnes CO ₂ e/kWh	SEAI conversion factor 'Natural Gas'
	Kerosene	0.000257004	tonnes CO ₂ e/kWh	SEAI conversion factor 'Kerosene'
	BioLPG	0	tCO ₂ e/kWh	SEAI conversion factor 'BioLPG'
	Diesel B7 blend	0.000246425	tonnes CO ₂ e/kWh	SEAI conversion factor 'Diesel B7 blend'
	Biofuel (100% FAME)	0	tonnes CO ₂ e/kWh	SEAI conversion factor 'Biodiesel ME' from biomass sources considered to be sustainable
	Diesel (fossil)	0.000263868	tonnes CO ₂ e/kWh	SEAI conversion factor 'Diesel (fossil)'
	Diesel (blend 2023)	0.000245289	tonnes CO ₂ e/kWh	SEAI conversion factor 'Diesel (blend 2023)'
	Diesel (blend 2022)	0.000246893	tonnes CO ₂ e/kWh	SEAI conversion factor 'Diesel (blend 2022)'
	Diesel (blend 2021)	0.000249628	tonnes CO ₂ e/kWh	SEAI conversion factor 'Diesel (blend 2021)'
	Diesel (blend 2020)	0.000248997	tonnes CO ₂ e/kWh	SEAI conversion factor 'Diesel (blend 2020)'
	Diesel (blend 2019)	0.000250494	tonnes CO ₂ e/kWh	SEAI conversion factor 'Diesel (blend 2019)'
	Diesel (blend 2018)	0.000253186	tonnes CO ₂ e/kWh	SEAI conversion factor 'Diesel (blend 2018)'
	R410A gas	2.088	tonnes CO ₂ e/kg	DEFRA conversion factor 'R410A'
	HFC32 gas	0.675	tonnes CO ₂ e/kg	DEFRA conversion factor 'HFC32'
	R134A/HFC134A gas	1.10	tonnes CO ₂ e/kg	DEFRA conversion factor 'HFC134A'
	R407C gas	1.774	tonnes CO ₂ e/kg	DEFRA conversion factor 'R407A'
	HCFC22 gas	1.760	tonnes CO ₂ e/kg	DEFRA conversion factor 'HCFC-22/ R22 = chlorodifluoromethane'
	Kerosene (L) to Kerosene (kWh)	10.18	kWh/L	SEAI conversion factor 'calorific values – kerosene'
	Diesel (L) to Diesel (kWh) (B7 blend)	10.095	kWh/L	ClÉ estimate for calorific value – B7 diesel blend

Emissions Category	CO ₂ e Emissions Source	Conversion Factor	Unit	Source
Scope 1 (cont)	Diesel (L) to Diesel (kWh) (100% biodiesel)	9.10936	kWh/L	SEAI calorific value 'pure biodiesel'
	Diesel (L) to Diesel (kWh) (forecourt blend 2023)	10.0914	kWh/L	ClÉ estimate for calorific value using SEAI national biofuel blend average of 7.323% biodiesel by volume
	Diesel (L) to Diesel (kWh) (forecourt blend 2022)	10.0985	kWh/L	ClÉ estimate for calorific value using SEAI national biofuel blend average of 6.655% biodiesel by volume
	Diesel (L) to Diesel (kWh) (forecourt blend 2021)	10.1056	kWh/L	ClÉ estimate for calorific value using SEAI national biofuel blend average of 5.987% biodiesel by volume
	Diesel (L) to Diesel (kWh) (forecourt blend 2020)	10.1028	kWh/L	ClÉ estimate for calorific value using SEAI national biofuel blend average of 6.250% biodiesel by volume
	Diesel (L) to Diesel (kWh) (forecourt blend 2019)	10.1094	kWh/L	ClÉ estimate for calorific value using SEAI national biofuel blend average of 5.625% biodiesel by volume
	Diesel (L) to Diesel (kWh) (forecourt blend 2018)	10.1213	kWh/L	ClÉ estimate for calorific value using SEAI national biofuel blend average of 4.498% biodiesel by volume
	Diesel (L) to Diesel (kWh) (100% fossil)	10.169	kWh/L	SEAl conversion factor 'calorific values – diesel (100% fossil)'
Scope 2	Supplier electricity – Electric Ireland 2021	0.000179	tonnes CO ₂ e/kWh	Electric Ireland fuel mix disclosure – January 2021 to December 2021
	Grid electricity – Ireland 2023	0.000318951	tonnes CO ₂ e/kWh	SEAI conversion factor 'Grid electricity – Ireland 2023'
	Grid electricity – Ireland 2022	0.00033917	tonnes CO ₂ e/kWh	SEAl conversion factor 'Grid electricity – Ireland 2022'
	Grid electricity – Ireland 2021	0.000355612	tonnes CO ₂ e/kWh	SEAI conversion factor 'Grid electricity – Ireland 2021'
	Grid electricity – Ireland 2020	0.000297723	tonnes CO ₂ e/kWh	SEAI conversion factor 'Grid electricity – Ireland 2020'
	Grid electricity – Ireland 2019	0.000332194	tonnes CO ₂ e/kWh	SEAI conversion factor 'Grid electricity – Ireland 2019'
	Grid electricity – Ireland 2018	0.000377286	tonnes CO ₂ e/kWh	SEAI conversion factor 'Grid electricity – Ireland 2018'

Appendix II: Sustainability Reporting Frameworks

ClÉ Group is committed to managing our strategic decisions with a focus on double materiality and sustainability disclosure. We recognise the importance of measuring, monitoring, and disclosing our sustainability performance to our stakeholders, and we are preparing to report to the European Commission through the CSRD in 2026. To ensure that ClÉ Group meets the highest standards in managing sustainability issues, we are seeking to increase our transparency and accountability around sustainability objectives.



Corporate Sustainability Reporting Directive

CSRD Compliance Statement

The Corporate Sustainability Reporting Directive (CSRD) is a new EU regulation that requires large companies to disclose information on their environmental, social and governance performance. ClÉ Group is committed to complying with the CSRD and will report in accordance with the European Sustainability Reporting Standards (ESRS). These standards encompass both financial and non-financial information, using a double materiality perspective that considers the impacts of the company on sustainability matters and the impacts of sustainability matters on the company. We will prepare our first CSRD report for the financial year 2025, reporting on our sustainability impacts and initiatives. The CSRD report will be verified by an independent third-party auditor and made publicly available.

In 2023, ClÉ Group completed a gap analysis of our current ESG policies and reporting procedures to assess our reporting readiness and compliance with the CSRD requirements, to identify the strengths and weaknesses of our current reporting practices, and to prioritise the actions and resources needed to close the gaps. ClÉ Group is currently developing a plan to address the gaps, including improving data quality and availability, developing and implementing additional ESG-related policies, enhancing stakeholder engagement, and disclosing relevant and reliable information.

The next step for ClÉ Group will be to carry out a double materiality assessment to fulfill the CSRD requirements. A double materiality assessment involves identifying and prioritising the sustainability topics that are material from both an impact perspective (how ClÉ Group affects people and the environment) and a financial perspective (how sustainability issues create risks and opportunities for ClÉ Group). By conducting a double materiality assessment, we can ensure that our sustainability reporting focuses on the topics that are most relevant for its business and its stakeholders.



EU Taxonomy Regulations

The **EU Taxonomy Framework was established by the European Commission** as a classification system to establish a list of environmentally sustainable economic activities. To comply with the EU Taxonomy Regulation, eligible companies will be required to identify and report on how, and to what extent, their business activities align with the Taxonomy Regulation.

In 2023, ClÉ Group commenced a Group-wide effort to help prepare for reporting under the EU Taxonomy requirements. Using financial information for reporting year 2022, ClÉ Group will identify the areas of revenue, OpEx, and CapEx that could be classified as environmentally sustainable according to the EU Taxonomy requirements. This exercise will set out a reporting methodology and help prepare ClÉ Group for mandatory disclosure in the future.



Carbon Disclosure Project

The **Carbon Disclosure Project** is a reporting platform for organisations to measure, disclose, and share information on their carbon emissions and management strategy. ClÉ Group has been reporting on the CDP platform on an annual basis since 2020. In 2023, ClÉ Group was awarded a score of 'B', recognising that ClÉ Group is taking steps to manage our energy and climaterelated performance.

ClÉ Group will continue to take on board the recommendations from CDP and will aim to achieve an 'A' score on our carbon emissions management strategy.

CDP Response	Reporting Year	Score
Climate Change 2020	2019	В
Climate Change 2021	2020	В
Climate Change 2022	2021	A-
Climate Change 2023	2022	В



UN Global Compact

The UN Global Compact is based on ten pillars that promote human rights, labour rights, environmental protection, and anti-corruption in businesses. ClÉ Group joined the UN Global Compact in 2022 to ensure that we follow best practice in adopting sustainable and socially responsible practices. ClÉ submitted an annual public Communication on Progress to the UN Global Compact 2023 to detail our work in implementing the ten pillars in our business.



Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta National Treasury Management Agency

NewERA Framework for the Commercial Semi-State Sector

ClÉ Group reports under the NewERA reporting framework for the commercial semi-State sector to address climate action objectives. ClÉ Group reports on a biannual basis, updating our progress against the five commitments of the framework:

- Governance of Climate Action Objectives
- Emissions Measurement & Reduction Target
- Measuring and Valuing Emissions in Investment Appraisals
- Circular Economy and Green Procurement
- Climate-Related Disclosures in Financial Reporting



Taskforce on Climate Related Financial Disclosures

The TCFD makes recommendations for more effective climate-related disclosures and to promote informed investment decisions and strategic development. The TCFD structures climate-related disclosure around four pillars:

- Governance
- Strategy (including scenario analysis)
- Metrics and Targets
- Risks and Opportunities

In 2021, ClÉ Group became a supporter of the TCFD framework and is working to align our climate-related reporting to the recommendations. In 2022, our focus was to further develop our climate risk management framework and prepare to carry out climate scenario analysis across the Operating Companies to help identify, define, and quantify our climate-related risks and opportunities.

With the International Sustainability Standards Board's inaugural standards having released in 2023, the TCFD's work was completed. Though the Task Force has now disbanded, ClÉ will continue to follow the general TCFD disclosure recommendations until mandatory reporting under the CSRD.



Science Based Targets Initiative

The SBTi helps companies and organisations to set and achieve ambitious science-based GHG emission reduction targets (SBTs). SBTs are designed to ensure that companies do their fair share in reducing global emissions and help prevent the worst impacts of climate change. ClÉ Group recognises the urgent need to address climate change and mitigate its impact on the planet. Therefore, in 2023 we committed to setting science-based targets for reducing our GHG emissions and submit them for validation by the SBTi.

ClÉ Group aims to set science-based targets and have them validated by the SBTi by 2025.

Appendix III: ClÉ Group Sustainability Governance

ClÉ Group recognises the significant impact of climate change on our business operations and the environment. In response to this, we have developed our governance structure to prioritise climate-related risks and opportunities. The ClÉ Board and Executive teams are fully committed to overseeing climate-related initiatives and ensuring that we invest in sustainable projects to achieve our climate targets. With a dedicated focus on sustainability, we will continue to drive our business forward while contributing positively to the environment and society.



CIÉ Group Governance	
Board of Directors	 The ClÉ Board has responsibility for the Group strategy and sustainability performance.
Sustainability Advisory Group (SAG)	 A sub-committee of the ClÉ Group Board which reports quarterly to the ClÉ Board on progress of sustainability initiatives. The SAG has oversight of delivery of the Group sustainability strategy and climate action performance.
Audit and Risk Committee (ARC)	 The ClÉ Board ARC regularly reviews the principal risks of ClÉ Group and makes recommendations to the Board of ClÉ on their treatment. Climate related risks come under the same governance structure as all other risks and are reported to the Board via the ARC. A review of the risks presented by the ARC is a standing agenda item at all ClÉ Board meetings.
Chief Executive Officer (CEO)	 The ClÉ Group CEO has overall responsibility for climate-related issues. The Group CEO reports to the Group shareholder, the DoT, on climate related performance on a quarterly basis. The Group CEO liaises with the CEOs of the Operating Companies in relation to climate and sustainability issues and strategy at the Executive Board. The Executive Board oversaw the establishment and terms of reference of the Group SSG.
Chief Sustainability Officer (CSO)	 The Group CSO works with the Group CEO to oversee the delivery of the Group sustainability strategy and has oversight and sign-off on sustainability strategy development. The CSO leads the SSG and coordinates the implementation of the CIÉ sustainability strategy across the Operating Companies.
Sustainability Steering Group (SSG)	 The SSG is comprised of members from ClÉ Holding Company and each Operating Company who have oversight of sustainability and climate-related issues within their respective companies and work across Group to develop and deliver a Group sustainability strategy. Membership of the SSG includes the CSO, energy managers, engineers, environmental executives, health and safety representatives, and additional members. The function of the SSG, which operates at a senior manager level, is to create a platform for sharing best practices and collaborate on Group-wide sustainability initiatives and strategy development.

Appendix IV: Climate Risk Analysis



CSRD Alignment ESRS – E1 Climate Change

Climate Scenario Analysis

ClÉ Group is committed to making our business strategy climate resilient. By using climate scenario analysis, we can better understand and manage the risks associated with climate change, as well as to identify potential opportunities for innovation and growth. In 2023, we carried out a comprehensive scenario analysis process to enhance our climate risk management framework. The risk identification process distinguishes between two risk categories: physical risks from climate-related events such as storms, floods, heatwaves, droughts, and sea-level rise, and transitional risks arising from the transition to a low-carbon economy and the associated policy changes, technological advancements, and shifts in market preferences.

ClÉ Group has developed three climate scenarios to help identify climate-related risks and opportunities: a transitional climate scenario aligned with limiting global warming to 1.5°C, a scenario showing increased physical climate risks aligned with 4°C of global warming, and a 'middle of the road' scenario combining both transitional and physical risks. A detailed summary of the climate scenarios is available on page 41-42 of the **ClÉ Group 2022 Sustainability Strategy Annual Review**.

1 Net Zero 2050 – "The low carbon route"	2 Delayed transition – "The middle road"	3 Delayed transition – "The middle road"
Net Zero 2050 is an ambitious scenario that limits global warming to 1.5°C by 2100 through stringent and immediately introduced climate policies and innovation, reaching net zero GHG emissions around 2050. This scenario involves more transition risks early on but manages to limit physical risks to a minimum.	This climate scenario follows a path in which social, economic and technological trends do not shift markedly from historical patterns. The world takes action to limit emission growth but fails to cut emissions in the short term, resulting in >2°C warming by 2050. This scenario involves several physical risks and additional transition risks after 2030.	This scenario assumes that only currently implemented climate policies are preserved. The world does not cut emission and climate change accelerates causes 2.5°C of warming by 2050 and >4°C of warming by 2100 bringing irreversible changes to the Earth's climate. This scenario involves little to no transition risks early on by results in irreversible and globally disrupting physical risks.
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Climate Risks and Opportunities

The ClÉ Operating Companies each identify their climate-related risks and manage them through a Risk Management Information System (RMIS). As we further establish our scenario analysis process, additional risks are expected to emerge and be included in the RMIS along with any mitigating actions to help reduce the risk. Several climate-related risks that have been identified for ClÉ Group are detailed below. Additional climate-related risks and opportunities are summarised in page 43-46 of the **ClÉ Group 2022 Sustainability Strategy Annual Review**.

Risk	Description	Risk Category
Climate change/ increasing volatility of weather	Some of larnród Éireann's network runs adjacent to the coast. Over time, the continued viability of these routes may be threatened by coastal erosion, which could cause damage to the track infrastructure. larnród Éireann is carrying out the East Coast Railway Infrastructure Protection Project (ECRIPP) Programme to mitigate against the effects of coastal erosion.	Physical risk – Chronic
	The physical impacts of climate change are expected to cause an increase in the frequency and intensity of extreme weather events in Ireland. There is an increased risk of a major service disruption or incident due to a severe weather event.	Physical risk – Acute
New Technologies	The planned bus and rail fleet transition to zero emission vehicles and low carbon alternative fuels carries a risk associated with the installation of new charging infrastructure, depot upgrades, increased costs, training requirements, and safety risk. There is also uncertainty around the availability of low emission technology required to meet the demand.	Transition risk – Technological
Resource Security	As Ireland shifts towards a decarbonised energy system, the power sector faces new challenges due to increased reliance on electricity. With the proportion of variable renewables in electricity generation set to increase, there's a need for substantial investment and overhaul of the power infrastructure to effectively manage the demands on the electric grid. The greater share of renewable electricity may lead to challenges in grid stability and reliability, which represents a risk given CIÉ Group's significant energy requirements.	Transition risk – Technological
Delays in Achieving Sustainability Targets	Ireland has committed to ambitious national climate targets and public sector energy efficiency targets. There is a risk of failing to achieve these Government targets which would expose CIÉ Group to possible reputational impacts.	Transition risk – Reputational

List of Abbreviations

AIPP	All Ireland Pollinator Plan	
ARC	Audit and Risk Committee	
BER	Building Energy Rating	
BEV	Battery Electric Vehicle	
CAP	Climate Action Plan	
CCAC	Climate Change Advisory Council	
CDP	Carbon Disclosure Project	
CEO	Chief Executive Officer	
CO ₂	Carbon dioxide	
CO ₂ e	Carbon dioxide equivalent	
CSO	Chief Sustainability Officer	
CSRD	Corporate Sustainability Reporting Directive	
DECC	Department of Environment, Climate and Communications	
DoT	Department of Transport	
ECRIPP	East Coast Railway Infrastructure Protection Project	
EPA	Environmental Protection Agency	
ESG	Environmental, Social and Governance	
ESRS	European Sustainability Reporting Standards	
EU	European Union	
EV	Electric vehicle	
FCEV	Fuel cell electric vehicle	
GDA	Greater Dublin Area	
GHG	Greenhouse gas	
НМІ	Hydrogen Mobility Ireland	
ICR	Intercity rail	
IPCC	Intergovernmental Panel on Climate Change	
Km	Kilometres	
КРІ	Key performance indicator	
kWh	Kilowatt hour	
LDA	Land Development Agency	
LED	Light Emitting Diode	
M&R	Monitoring and Reporting	
M ³	Cubic metres	
MWh	Megawatt hour	

CIÉ Group Sustainability Annual Review 2023

NDP	National Development Plan
NewEra	New Economy and Recovery Authority
NGFS	Network for Greening the Financial System
NPF	National Planning Framework
NTA	National Transport Authority
OECD	Organisation for Economic Co-operation and Development
OPW	Office of Public Works
PV	Photovoltaic
PPA	Power Purchase Agreement
PSO	Public Service Obligation
RCP	Representative Concentration Pathway
RMIS	Risk Management Information System
RVM	Reverse Vending Machine
SAG	Sustainability Advisory Group
SBT	Science Based Targets
SBTi	Science Based Targets Initiative
SDGs	Sustainable Development Goals
SEAI	Sustainable Energy Authority of Ireland
SSG	Sustainability Steering Group
TCFD	Taskforce on Climate-Related Financial Disclosures
tCO ₂ e	Tonnes of carbon dioxide equivalent
TOD	Transit oriented development
UCD	University College Dublin
UN	United Nations



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