



Córas Iompair Éireann

# CIÉ Group Sustainability Annual Review 2021



December 2021





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## 1 List of Abbreviations

ARC	Audit and Risk Committee
BOS	Biofuel Obligation Scheme
CAP	Climate Action Plan
CDP	Carbon Disclosure Project
CEO	Chief Executive Officer
COP26	26th UN Climate Change Conference
CE	Circular economy
CO <sub>2</sub>	Carbon dioxide
CSRD	Corporate Sustainability Reporting Directive
DAA	Dublin Airport Authority
DAFM	Department of Agriculture, Food, and the Marine
DCU	Dublin City University
DoT	Department of Transport
ECRIPP	East Coast Railway Infrastructure Protection Project
EPA	Environmental Protection Agency
ESB	Electricity Supply Board
ESG	Environment, social and governance
EV	Electric vehicle
FCEV	Fuel Cell Electric Vehicle
G2H2	Galway Hydrogen Hub
GAP	Global Action Plan
GDA	Greater Dublin Area
GHG	Greenhouse gas
GPP	Green Public Procurement
HMI	Hydrogen Mobility Ireland
HSE	Health Service Executive
IBEC	Irish Business and Employers Confederation
ICR	Intercity rail
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organisation for Standardisation
KPI	Key performance indicator
kt	Kilotonne
LPA	Land Development Agency
Mt CO <sub>2</sub> eq	Mega tonnes of carbon dioxide equivalent
MWh	Megawatt hour

NDP	National Development Plan
NewEra	New Economy and Recovery Authority
NOx	Nitrous oxides
NPWS	National Parks and Wildlife Service
NTA	National Transport Agency
NUIG	National University of Ireland, Galway
OGP	Office of Government Procurement
SAG	Sustainability Advisory Group
SDGs	Sustainable Development Goals
SEAI	Sustainable Energy Authority of Ireland
SSG	Sustainability Steering Group
STEM	Science, Technology, Engineering and Mathematics
SUPs	Single-use plastics
TCFD	Taskforce for Climate-Related Disclosures
tCO <sub>2</sub>	Tonnes of carbon dioxide
TOD	Transport orientated development
UCD	University College Dublin
UN	United Nations
UNEP FI	United Nations Environment Programme Finance Initiative

### The CIÉ Group Three Pillars of Sustainability

#### Pillar One: Economic

**Goal:** Provide a high-quality transport service to stimulate economic activity, tackle congestion and connect communities, businesses and organisations.

#### Pillar Two: Social

**Goal:** Foster a diverse and inclusive society, ensuring opportunity for all.

#### Pillar 3: Environmental

**Goal:** Work with partners to lead the transition to a low emissions transport network and protect our natural capital and infrastructure at risk of climate-related disruption.



## 2 Foreword



### *Transporting Ireland towards a sustainable future*

Along with the global response to the pandemic, climate change presents the most significant challenge facing the world. With the [Intergovernmental Panel on Climate Change \(IPCC\) report](#) confirming human induced climate change, it is incumbent on us all to do what we can to limit warming to 1.5 degrees.

The Environmental pillar of CIÉ Group's Sustainability Strategy is designed to reduce emissions within the transportation sector. Our Strategy is also designed to meet economic and social goals.

This report sets out the progress made in implementing the Group's Sustainability Strategy in its first year of operation. It is testament to the hard work and commitment of staff across the Group that we can

already report on significant achievements under our Strategy. The report also highlights dozens of programmes in their early stages which will produce meaningful results over the coming months and years.

With the opportunity of unprecedented investment in public transport, the CIÉ Group together with our partners are working to deliver a step change in public transport provision.

Throughout the pandemic our 10,500 employees have shown dedication and resilience, providing a much-valued contribution to the Group. In 2020, we set out a plan to become a fully circular, sustainable business and though we are only beginning our journey of sustainability, we are fully committed to accelerating progress.

To achieve our goals, it is essential to embed sustainability strategy across functions and operations and to define a role for all. There is a clear appetite and commitment from our people in playing a part in achieving our sustainability goals.

Looking to the future, our focus is to achieve our climate targets and transform our business. We are seeking to understand climate related risks and opportunities, and consider the balance is tipped towards opportunities for the Group.

**Lorcan O'Connor**

*Group CEO*

### 3 Executive Summary

The CIÉ Group sustainability strategy is a plan of action being delivered by the CIÉ Group of Companies, including Dublin Bus, Iarnród Éireann and Bus Éireann. Our overarching goal is to meet national targets, set out in the [Climate Action Plan 2021](#) and to support achievement of the [U.N. Sustainable Development Goals \(SDGs\)](#). Framed within three pillars of sustainability; economic, social and environmental, our strategy is aligned with the 17 SDGs. The strategic objectives are in keeping with the investment priorities of the [National Development Plan 2018-2027](#) and [National Development Plan 2021-2030](#), the [National Planning Framework \(Project Ireland 2040\)](#) and regional development plans. It sets out a vision to provide a high-quality, accessible, and environmentally sustainable transport service; and a course of action to meet our climate targets and direct our social and environmental performance.

#### 3.1 Purpose

Our purpose is to transport Ireland to a sustainable future, valuing the role of public transport in achieving sustainable, inclusive communities, as highlighted in SDG 11 ‘Sustainable Cities and Communities’, which has the target of:



*“providing access to safe, affordable, accessible, and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.”*



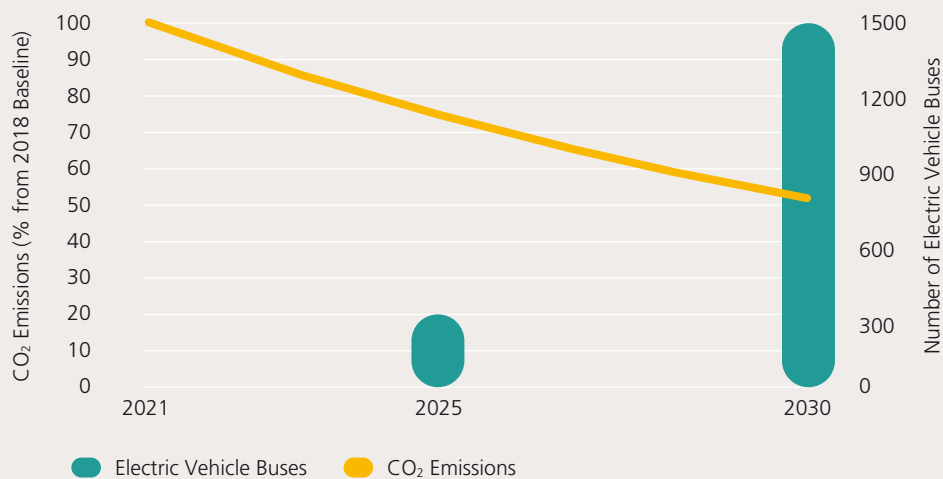


Our mission is to offer a low-carbon transport option, connecting communities; maximising accessibility; protecting biodiversity and supporting compact growth. We have committed to becoming a fully sustainable, circular business and to work closely with our partners, as part of a national integrated approach. We hold a unique portfolio of assets and resources which we are strategically leveraging, to maximise the intersection between the SDG's and our operations. A year on from our Strategy (June 2020 to June 2021) we are reviewing progress and looking to plans for the coming year.

Since our first sustainability strategy in 2020, we have worked to use our scale, resources and expertise to progress our sustainability objectives. In addition to supporting a vibrant economy and connecting communities, our priority is to work with partners to address challenges such as climate change, congestion, air quality and sustainable urban development. Along with our stakeholders, the National Transport Authority (NTA) and the Department of Transport (DoT), CIÉ Group is working to provide a low carbon transport option, offering high quality, frequent services to stimulate modal shift to service a growing population. With the support of our partners, we are working to deliver the [Programme for Government](#); the [National Development Plan 2021-2030](#); the [Climate Action Plan \(CAP\) 2021](#); and [Project Ireland 2040](#), to tackle climate change, reduce congestion and support sustainable economic growth. The [Connecting Ireland](#) project will enhance rural access to public transport services across the country, and major Irish cities will develop highly efficient public bus systems through the [BusConnects](#) project. We continue to deliver a school transport service, ensuring children were transported safely during the Covid-19 pandemic.

Our sustainability strategy has a strong focus on meeting Ireland's national climate targets, transitioning to a low carbon and zero emissions fleet, reducing consumption of fossil fuels, and improving energy efficiency across operations. This means reducing our carbon emissions by 51% by 2030, with an average annual reduction of 7% as a carbon budget. The CAP has set a target for the industry of deploying 300 Electric Vehicle (EV) buses by 2025 and 1,500 by 2030. We are working to achieve this target by transitioning our bus fleets to low and zero emission vehicles, and planning for business and systems transformation. A suite of solutions for carbon management, such as increased biofuels and fleet energy savings initiatives, will mitigating fossil fuel use across our rail and bus network.

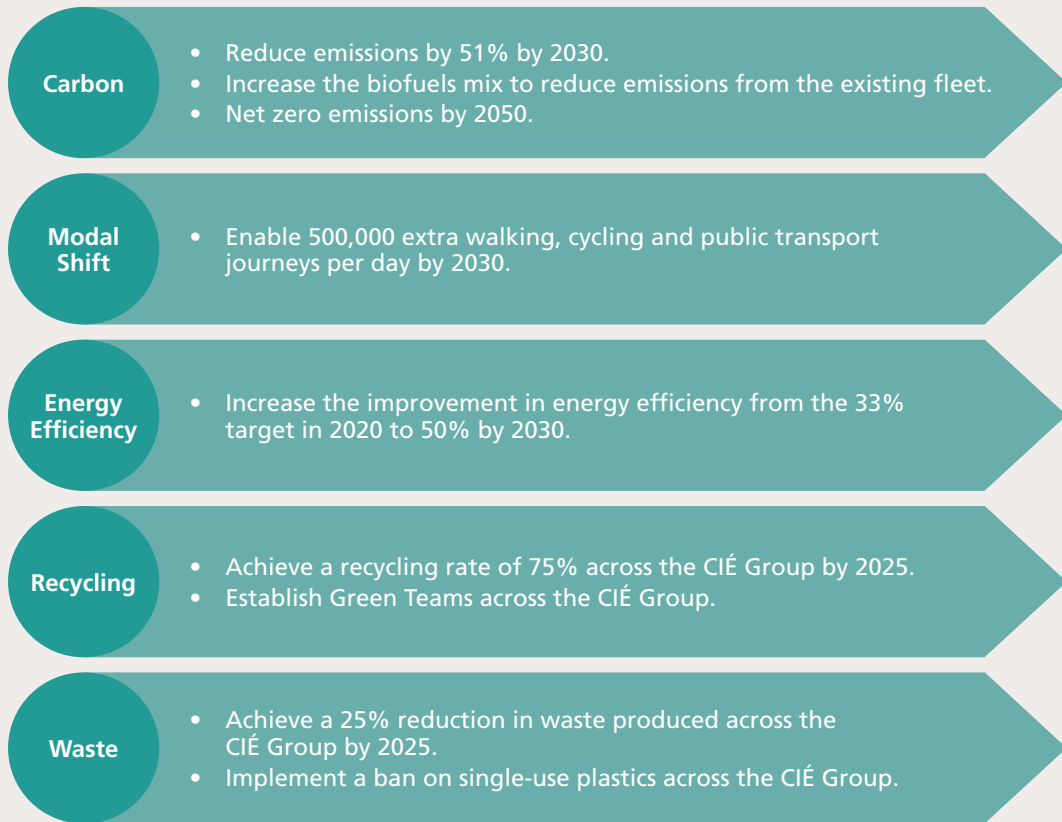
### Climate Action Plan 2021 EV Bus and Emission Targets



Delivery of DART+, the introduction of plug-in hybrid bus vehicles and preparatory work for the arrival of all electric vehicles is set to make a significant impact on Group emissions. In the year to June 2021, we saw the introduction of over 135 hybrid bus vehicles in the Bus Átha Cliath and Bus Éireann fleet, an increase of Euro VI fleet to 63% for Bus Éireann and 58% for Bus Átha Cliath, and in 2022 we will see the arrival of a fully electric fleet in Athlone in 2022.

We are working with the NTA and DoT to test alternative zero emission technologies such as hydrogen fuel cell vehicles (FCEVs), providing a complementary technology for certain journeys. With our partners, we delivered a trial of the first FCEV in Ireland in 2020, followed by the deployment of three double deck FCEVs into service in Bus Éireann.

### CIÉ Group CAP and Internal Targets



Across the rail network a suite of measures is being introduced to ensure 80% of Iarnród Éireann journeys are free of direct emissions by 2027. The DART+ programme will see the electrification and expansion of the DART system, expanding from 50km of electrified track to 150km and doubling the passenger capacity, which will significantly lower direct emissions and increase the efficiency of the Dublin passenger rail commuter network.

Energy efficiency measures have now been tested on the intercity rail (ICR) fleet, showing potential fuel savings of 20% and service trials are due to commence in 2022. Over the next ten years this could see avoidance of 18,000 tonnes of carbon each year, in addition to reduced air and noise pollution. EV chargers for taxis have been installed at rail stations.

These measures accompanied by the investment in both the bus and rail network should enable improved carbon performance and transform transport sector emissions.

With the scale of our operations, there is a significant challenge to improve building energy efficiency, but this also provides an opportunity to make an impact on Government climate targets and create a better working environment for our people. In parallel, we have commenced behind the meter, micro-generation of electricity and have taken measures to introduce resource efficiency solutions such as rainwater harvesting across the Group. On-site generation of renewable electricity is being explored by Iarnród Éireann, and Bus Átha Cliath has installed photo-voltaic panels on the roof of the Phibsboro depot with the view of assessing this pilot project for additional sites.

CIÉ Group has a significant property portfolio, where surplus lands exist, we seek to deliver transport orientated development (TOD). In the year to June 2021, CIÉ Group advanced planning for TOD in key regional and city locations, promoting high quality urban development around major transportation hubs. Projects included preparations for the launch of the [Heuston Station Masterplan](#) and working with the Land Development Agency (LDA) on a Spatial Framework Study for [Colbert Station Limerick](#).

We made progress in the first steps towards improved circularity, collating a Group wide audit of waste and resource management, which has provided a roadmap for driving out waste and meeting our circular targets. There are challenges to improving resource efficiency across supply chains however, early evidence suggests environmental, financial and efficiency benefits. We have ambitious Group targets of reducing waste by 25% and increasing recycling by 75% by 2025 and we plan to implement a Group wide data management and reporting system, which can monitor and evaluate performance. We have embraced a ban on single-use plastics (SUPs) and adopted green procurement principles. We plan to use green procurement to improve our circularity goals and to introduce the use of life cycle assessment for a holistic analysis of the value chain. We look forward to working with suppliers and to delivering an impact of scale.

Ireland's climate adaptation strategy necessitates preparation for a changing climate, environment and biodiversity loss. Iarnród Éireann and the NTA have advancing the protection of our coastline with the East Coast Railway Infrastructure Protection project (ECRIPP) with substantial works commenced at Rosslare and interim works at Killiney and Bray Head. The Group continues to invest in biodiversity as part of our climate and environmental mitigation, by investing in native planting across the network and biodiversity programmes and pollinator plans. Iarnród Éireann has pollinator plans across 33 stations and are planning on implementing a Bee Corporate Sponsorship programme in 2022. Additionally, Bus Átha Cliath and Bus Éireann have planned a biodiversity investment and community garden for Broadstone Depot.

We are committed to greater transparency and accountability in climate disclosure and while carbon management and energy efficiency has been reported to the Sustainable Energy Authority of Ireland (SEAI) annually, the CIÉ Group set out a public commitment to disclose under the [Carbon Disclosure Project \(CDP\)](#) and to make changes to implement best practice reporting. In 2020 the CIÉ Group was highlighted as a best first-time responder for 2019, outperforming the industry norm for a first-time respondent, as featured in the [CDP Ireland Network Annual Report 2020](#). Taking on board CDP recommendations, the CIÉ Group enhanced governance oversight, with the introduction of the Sustainability Advisory Group (SAG), a sub-committee of the CIÉ Board. This progress was recognised in the CDP evaluation in 2021, which also highlighted much needed engagement with our value chain and Scope 3 emissions. We are investing resource to assess climate related risk and opportunities and plan to stress-test our long term climate strategy with climate scenario planning. We became a supporter of the [Taskforce on Climate-related Financial Disclosures \(TCFD\)](#) and we are preparing to scale up our non-financial reporting and accountability, in particular to meet our obligations under the [Corporate Sustainability Reporting Directive \(CSRD\)](#).

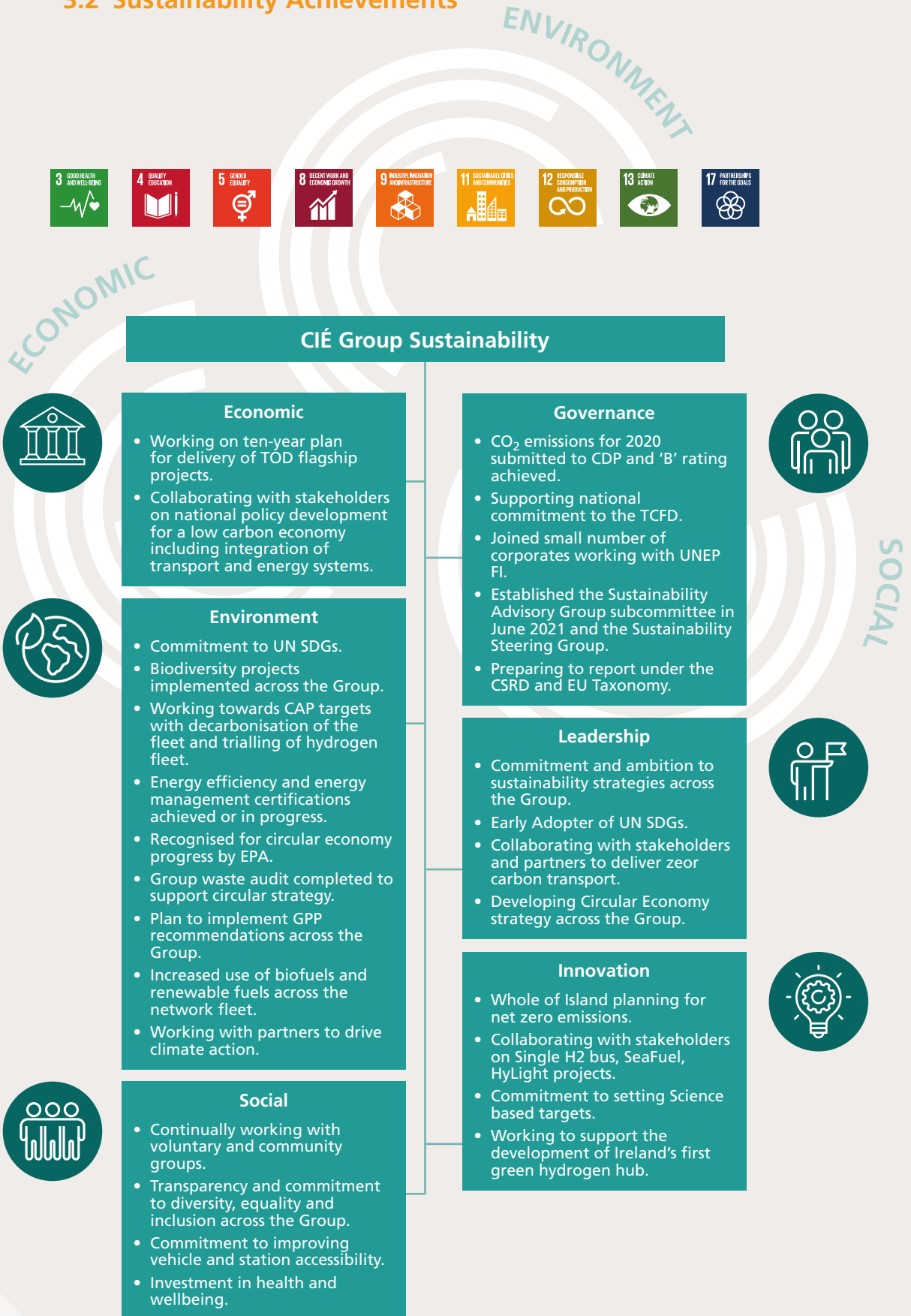
At CIÉ Group, we intend on providing finance and support for sustainability objectives and will engage in responsible investment management, including oversight of human rights due diligence.

The complexity of economic, environmental and social challenges necessitates a collaborative, integrated approach to deliver solutions. Our people are our business, and our sustainability strategy commits to enhanced employee well-being and to ensure a role for all in achieving sustainability objectives. Having completed our first stakeholder engagement for employees, we intend building a strategy where everyone's input is counted.

In addition, in 2022 CIÉ Tours intends to set out a vision for a sustainability strategy and to define its position in the emerging market of sustainable tourism.

CIÉ Group is committed to making a valuable contribution to sustainability by supporting strategic and national planning to a zero carbon future. To that end we are working to develop a multi-disciplinary, evidence-led approach to mapping a pathway to a zero carbon transport sector. We are working with the leading research and development institutions and policy makers, including University College Dublin (UCD) Energy Institute, NUI Galway and Dublin City University (DCU) to pool resources and expertise, to enable the energy transition.

## 3.2 Sustainability Achievements



Further details on the milestones and projects underway are described in section 5.2.1.

We are committed to accelerating transformation, by using Group assets to support climate innovation. Rosslare Europort is exploring and developing opportunities to support the offshore wind industry and see a long-term opportunity for freight transport of hydrogen. We are supporting the development of the hydrogen economy, working with partners to develop Ireland's first hydrogen transport hub in Galway.

Partnering with stakeholders, industry and policy makers will enable CIÉ Group to deliver on our climate targets and support progress on the Sustainable Development Goals. Over the coming year we are committed to collaborating to deliver the energy transition and to make an impact at scale.

### 3.3 Alignment with TCFD Framework

Initiated in 2015, the Financial Stability Board established the TCFD, to develop recommendations for more effective climate-related disclosures, and to promote informed investment decisions and climate adapted strategic development. Although the TCFD is a voluntary framework, there is international regulatory support for TCFD alignment, in financial and non-financial reporting. In Ireland, the Government now promotes the adoption of the TCFD across business and industry as part of their transition to a low carbon economy. In 2021, CIÉ Group became a supporter of the TCFD framework and is aligning climate-related reporting to the recommendations including: governance, strategy, risk management, and metrics and targets. This review takes on board the TCFD recommendations and outlines CIÉ Group's sustainability progress to date as of June 2021, the sustainability initiatives in place, and our plans to continue working across the Group to ensure that our reporting standards meet TCFD best practice standards.

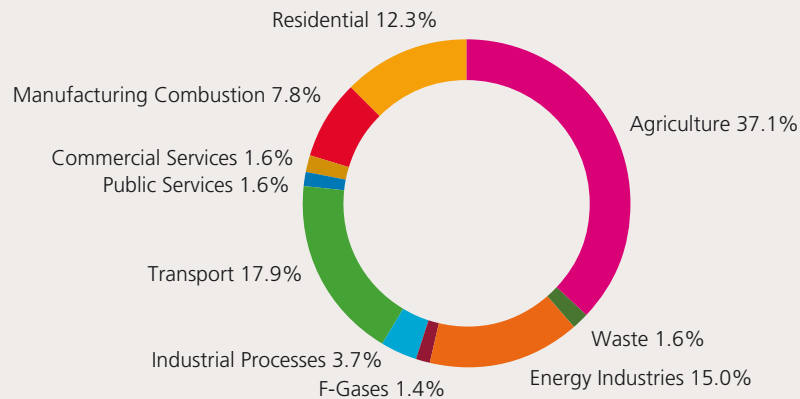
### 3.4 A Time for Action

Public focus on climate change has been at an all-time high following the recent sixth IPCC report and the 26th UN Climate Change Conference (COP26) in Glasgow. The IPCC report, published in August 2021, confirmed that climate change is caused by human activity and that global warming must be limited to 1.5 degrees Celsius to avoid the catastrophic impacts of climate change. The critical pathway to achieving this is by reducing greenhouse gas emissions (GHGs) by 50% by 2030 to reach net zero emissions by 2050.

The publication of the IPCC report was followed by COP26 in November 2021 and the urgency of the report informed the policy decisions made at the conference. A principal aim of COP26 was to ensure that the annual GHG emissions and reductions targets set by COP member countries are in line with the goal of net zero emissions by 2050. For the EU this equates to a 55% reduction by 2030, and for Ireland, the target is to achieve a 51% reduction. CIÉ Group's sustainability strategy is consistent with this target and includes the goal of a 51% reduction in carbon dioxide (CO<sub>2</sub>) emissions.

In Ireland, emissions across all sectors are being tracked in order to support this 51% target reduction by 2030. The transport sector accounted for 17.9% of emissions in 2020, which is a 15.7% reduction when compared to 2019 emissions. However, much of this reduction can be attributed to the limits on travel due to COVID-19 restrictions. With the gradual lifting of COVID-19 restrictions from 2021 onward, passenger journeys are expected to increase once more, which in turn will cause an increase in transport emissions.

### Share of Ireland's GHG Emissions in 2020 Attributed to the Transport Sector



Source: EPA.

In order to reduce Ireland's CO<sub>2</sub> emissions, the Government outlined a roadmap for delivering and financing national climate targets and sustainable economic and social growth in the [2020 Programme for Government](#). This summarised the targets and ambitions for transport in Ireland, emphasising the continued investment in public transport to improve Ireland's bus, light rail, commuter, and ICR network across the country. This vision outlines a critical role of public transport, sustainable mobility and compact growth to underpin sustainable national development.

This was followed by the adoption of [The Climate Action and Low Carbon Development \(Amendment\) Act 2021](#), which enshrines the Government's commitment to achieving its National Climate Targets.

In November 2021, the updated CAP was published by the government. The CAP is a sectoral roadmap for meeting Ireland's national objective of achieving climate neutrality by 2050, in line with the targets of the Climate Action and Low Carbon Development (Amendment) Act 2021. The CAP sets emission reduction objectives for major sectors, including a target of reducing transport-related emissions by 51% by 2030.

The Government recognises the key role of public transport in taking carbon out of transport and set a further objective of increasing daily public transport and active travel journeys by 14% by 2030, a daily increase of 500,000 trips.

Additional transport sector measures in the CAP are the [BusConnects](#) project in Dublin, Cork, Galway, Waterford and Limerick, the [Connecting Ireland Rural Mobility Plan](#) and the [DART+](#) programme. Many of the actions in the CAP are supported by budget allocations in the €165 billion [National Development Plan 2021-2030](#).

The CIÉ Group is working to deliver the investment in national transport and expansion of services. In parallel, we are working with the NTA to transition to a low-carbon transport fleet and drive energy efficiency improvements to meet our climate targets.

The [Housing for All: A New Housing Plan for Ireland](#) was introduced by Government in 2021, with the overall objective of improving Ireland's housing system and delivering more homes of all types to suit people with different housing needs. The Government intends to create a steady supply of housing and provide an average of 33,000 new homes each year from 2021 to 2030. CIÉ Group aims to support this national housing target by leveraging its TOD plans to supply residential housing units on CIÉ Group-owned land.

### 3.5 Sustainability Disclosure

Requirements for enhanced corporate governance in sustainability reporting is now mandated in the CSRD and the [EU Taxonomy Regulations](#) published in 2021 and coming into force in January 2022. The CSRD introduces mandated EU Sustainability Reporting Standards for disclosure of non-financial information.

The first set of draft standards will be released mid-2022 and will take into account global standard-setting initiatives such as the TCFD. The EU Taxonomy requires companies that fall under the scope of the CSRD to report on the extent to which their activities are sustainable as defined by the EU Taxonomy Regulations. Companies must state their contributions towards six environmental objectives: climate change mitigation; climate change adaptation; protection of water and marine resources; transition to a circular economy; pollution prevention and control; and protection of healthy ecosystems. CIÉ Group will be required to report under both regulations and is preparing to monitor and report on our performance.

In Ireland, the initial reporting and governance requirements surrounding the CAP have also been released. NewERA has designed a Climate Action Framework for commercial semi-state bodies, reflecting the exemplar role they are to play in decarbonisation.

The SEAI and the Environmental Protection Agency (EPA) are also collaborating to publish guidance for preparing Climate Action Roadmaps. Use of the [SEAI 'Gap to Target' tool](#) will allow organisations to understand the steps and investments required to meet their targets. CIÉ Group is preparing to report based on NewEra, EPA and SEAI guidance in 2022, once the expectations have been formally communicated.




















The CIÉ Group will need to ensure our reporting mechanisms and processes are in place in order to provide transparent, accurate and timely information for reporting. This will assist in tracking against our targets as set out by the CAP and reporting against the frameworks published by NewEra, SEAI and the EPA.

The appendix summarises additional relevant environmental and housing policies in more detail. These policies inform the targets, projects, and climate-related opportunities outlined in the CIÉ Group sustainability strategy.



## 4 Overview of CIÉ Group Sustainability Achievements

The CIÉ Group has made important progress in reaching our sustainability milestones. Projects carried out in 2020 and the first half of 2021 have contributed to energy efficiency, carbon management, sustainability reporting, and environmental protection.

Iarnród Éireann	Bus Átha Cliath	Bus Éireann	CIÉ Holding Company
 <p>Commenced its GPP practices by reaching out to vendors to enquire on alternatives to plastics, with positive results with cleaning products and paper tickets.</p>	 <p>Received a delivery of 74 hybrid vehicles and charging infrastructure in Q1 2021 and is working with the NTA and ESB to install charging infrastructure for full battery electric vehicles.</p>	 <p>Three double deck hydrogen fuel cell buses entered service in 2021.</p>	 <p>Working to explore options for the integration of biofuels, hydrogen and renewable fuels across the network fleet, and are supporting the development of Ireland's first green hydrogen hub.</p>
 <p>Launched Sustainability Strategy "SustainabiTE" at the end of 2021.</p>	 <p>ISO 50001 certification is in place for Bus Átha Cliath, and are working towards ISO 14001 certification.</p>	 <p>Bus Éireann's waste management partner recycles almost 1,000 of Bus Éireann's tyres annually.</p>	 <p>In November 2021, launched the ambitious Heuston Station Masterplan which will deliver sustainable urban development in Dublin.</p>
 <p>Over 30 railway stations have pollinator plans, and they plan to implement a Bee Corporate Sponsorship Programme in 2022.</p>	 <p>A formal Sustainability strategy is currently under development by Bus Átha Cliath.</p>	 <p>Improved Vehicle Accessibility to 100% with a number of infrastructure projects throughout the year.</p>	 <p>Achieved a CDP 'B' rating across the Group in 2021 for second year in a row.</p>
 <p>Trialling the use of a 7% biofuel blend to power its train engines to ensure engine compatibility with biodiesel.</p>	 <p>A pilot rainwater harvesting system is in development at the Summerhill Bus Garage, and plans are in place to roll this out to other bus depots.</p>	 <p>Launched Sustainability Strategy "Driving Change Sustainability Strategy 2021-2030".</p>	<p><b>TCFD</b></p> <p>Became a supporter of the TCFD in 2021 and are adopting the TCFD recommendations in our reporting standards in 2022.</p>
 <p>Commenced the introduction of electric vehicles service fleet from 13 to 28 in 2021 in conjunction with the Department of Transport.</p>	 <p>There is a planned biodiversity investment for Broadstone Garage.</p>	 <p>The deployment of the first fully electric bus fleet in Athlone is in progress for 2022.</p>	 <p>Pursuing accreditation across the Group in the KeepWell programme developed by the Irish Business and Employers Confederation (IBEC).</p>









## 4.1 Non-Financial KPI Highlights

### 4.1.1 Sustainability Performance

Measures to meet public sector climate targets and reduce the carbon footprint of the CIÉ Group operating companies has delivered year on year improvements from baselines.

The figures below highlight each operating company's improvements in CO<sub>2</sub> efficiencies and waste recycling from each operating company's base year up to the end of 2020.

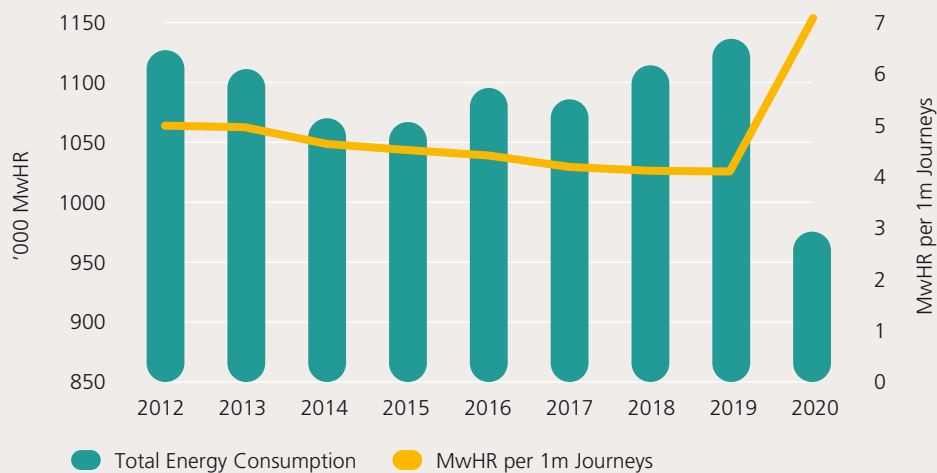
Operating Company	Bus Éireann	Bus Átha Cliath	Iarnród Éireann
			
	2030 Target	% change 2009-2020	% change 2008-2020
 CO <sub>2</sub> Reductions	↓ 51.00%	↓ 16.16%	↓ 42.41%
 Energy Consumption Reduction	↓ 50.00%	↓ 16.02%	↓ 39.23%
 Waste Recycling Increase	↑ 75.00%	↑ 15.00%	↑ 48.00%

### 4.1.2 Energy Consumption

Operating through the COVID-19 pandemic led to a reduction in energy consumption and carbon emissions in 2020, and this followed a general downward trend in CO<sub>2</sub> emissions.

This reduction in energy consumption can be seen in the tables below, with a 15% reduction in energy consumption across the Group from 2019 to 2020.

#### CIÉ Group Energy Consumption 2012-2020

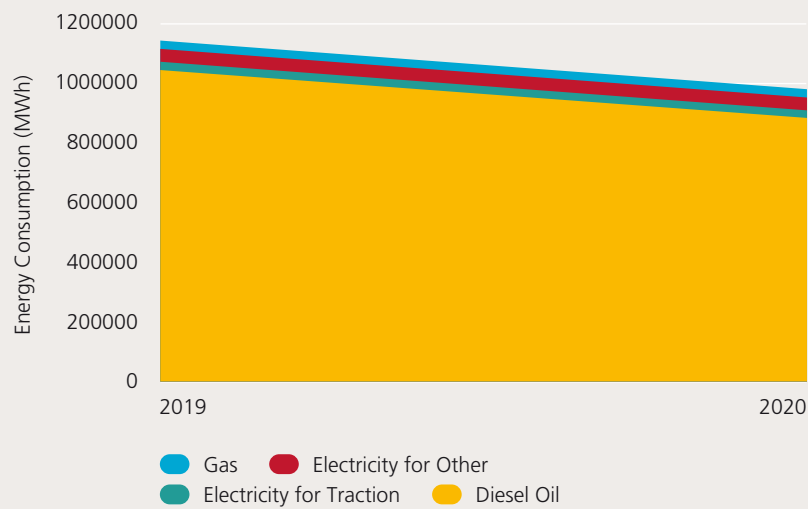


In 2020, due to COVID capacity restrictions, passenger numbers reduced significantly. However, CIÉ Group maintained normal services, therefore the emissions per passenger is higher compared to previous years.

CIÉ Group Energy Consumption Breakdown 2019-2020 (MWhR)

Energy Consumption	2020	2019
Diesel Oil	880,426	1,034,781
Electricity for traction	23,235	27,695
Electricity for other	44,987	45,440
Gas	25,854	27,259
<b>Total</b>	<b>974,502</b>	<b>1,135,175</b>

CIÉ Group Energy Consumption Breakdown



With the gradual lifting of social distancing measures in 2021, the Group welcomed back passengers and worked to maintain health and safety measures on board our services.

Increased services may cause an upward trend in CO<sub>2</sub> emissions and energy consumption when compared to 2020 figures, however CIÉ Group is working on an effective carbon management strategy across the Group in line with the targets set out in the CAP.

The table below illustrates the energy consumption across the Group for the first six months of 2021.

CIÉ Group Energy Consumption Breakdown Jan-Jun 2021 (MWhR)

Energy Consumption	2021
Diesel Oil	397,232
Electricity for traction	9,139
Electricity for other	24,765
Gas	15,431
<b>Total</b>	<b>446,567</b>

### 4.1.3 Passenger Journeys 2021

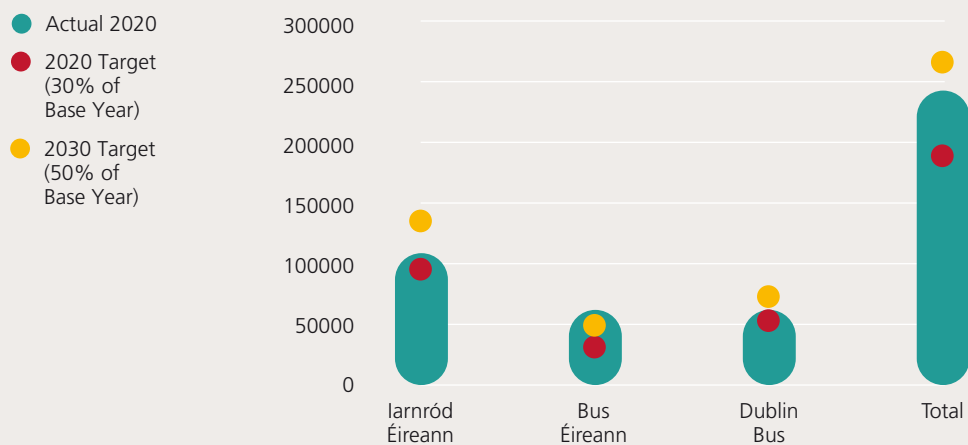
#### CIÉ Group Passenger Journeys Jan-Jun 2021

Operating Company	Passenger Journeys
Iarnród Éireann	4.8 million
Bus Átha Cliath	25 million
Bus Éireann	23 million
<b>Total</b>	<b>52.8 million</b>

Passenger numbers for the first half of 2021 were lower when compared to pre-pandemic numbers.

### 4.1.4 CO<sub>2</sub> Emissions Against Targets 2020 and 2030, with Base Year of 2018

#### CIÉ Group CO<sub>2</sub> Emissions vs Target 2020 vs 2030 (tons CO<sub>2</sub>)



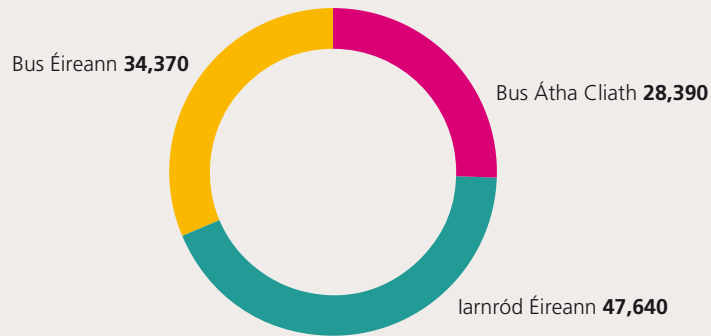
	Iarnród Éireann	Bus Éireann	Bus Átha Cliath	Total
Actual 2020	112,230	72,980	63,400	<b>248,610</b>
2020 Target (30% of Base Year)	138,348	58,628	75,391	<b>272,367</b>
2030 Target (50% of Base Year)	98,820	39,900	53,851	<b>192,571</b>

CIÉ Group has achieved a reduction in carbon emissions in 2020, with a 15% reduction of CO<sub>2</sub> emissions from 2019 to 2020. We are continually working towards the CAP targets of 7% year on year emissions reductions and a 51% reduction in emissions by 2030 (from the base year of 2018) with an effective and robust energy efficiency and carbon management plan. CIÉ Group is taking measures to ensure that direct emissions and emissions per passenger journey remain as low as possible in order to meet our targets. See below emissions across the Group for the first half of 2021.

#### CIÉ Group CO<sub>2</sub> Emissions Jan-Jun 2021 (tons CO<sub>2</sub>)

Iarnród Éireann	Bus Éireann	Bus Átha Cliath	Total
47,640	34,370	28,390	<b>110,400</b>

CIÉ Group Emissions as of Jan-Jun 21 (tons CO<sub>2</sub>)



## 4.2 Sustainability Achievements

The sustainability achievements of the CIÉ Group are summarised below.

### 4.2.1 Energy and Environmental Management

The CIÉ Group operating companies have achieved ISO certification across a variety of management systems. These certification standards outline the best-practice management systems for regulating the provision of high-quality services, the minimisation of environmental impact, the efficient use of energy, and the health and well-being of workers.

All operating companies received ISO 50001 certification through the National Standards Authority of Ireland, and Bus Átha Cliath is currently working towards their ISO 14001 certification. The CIÉ Holding Company is also preparing to carry out their first ISO 14001 audit in 2022.

Certifications and Management Standards		
	Achieved	In progress
Bus Átha Cliath	<ul style="list-style-type: none"> <li>ISO 50001 Energy Management</li> <li>ISO 9001 Quality Management</li> <li>ISO 45001 Occupational Health &amp; Safety</li> </ul>	<ul style="list-style-type: none"> <li>ISO 14001 Environmental Management</li> </ul>
Iarnród Éireann	<ul style="list-style-type: none"> <li>ISO 14001 Environmental Management</li> <li>ISO 50001 Energy Management</li> <li>ISO 9001 Quality Management</li> <li>ISO 45001 Occupational Health &amp; Safety</li> </ul>	
Bus Éireann	<ul style="list-style-type: none"> <li>ISO 14001 Environmental Management</li> <li>ISO 50001 Energy Management</li> </ul>	

### 4.2.2 Fleet Composition

The CIÉ Group is committed to reducing our GHG emissions by 51% by 2030 and net zero by 2050.

The EU’s Clean Vehicle Directive sets out targets on public-sector heavy-duty fleets to achieve 45% low or zero emissions fleet by 2026 and 65% by 2030. With support from the NTA we are accelerating the deployment of low and zero carbon vehicles and making operational preparations for battery electric vehicles in both the Bus Éireann and Bus Átha Cliath fleet.

With current technical challenges for battery electric for long-distance and high frequency journeys, we are trialling new technologies such as Hydrogen FCEV to provide solutions for a fully zero emissions bus fleet.

Fleet – Euro VI Emission Standard Engine (Euro VI), Hybrid Electric Vehicles (Hybrid) and Fully-Electric Vehicles (Electric)			
	Bus Éireann	Bus Átha Cliath	Iarnród Éireann
Percentage of Fleet – Euro VI	63%	58%	–
Percentage of Fleet – Hybrid	4%	6%	4%
Percentage of Fleet – Electric	0%	0%	15%

### 4.2.3 Transition to a Zero Emissions Transport

Transition to a zero emissions transport fleet – This was accelerated in 2020 with progress on DART+; deployment of hybrid fleet in both Bus Átha Cliath and Bus Éireann and operational preparation for the NTA procurement of battery electric vehicles over 2021.

CIÉ Group, along with Bus Átha Cliath and Bus Éireann and stakeholders delivered the trialling of the first hydrogen FCEV on the roads in Ireland. This was the first step in the trialling of the potential zero emissions fuel cell technology

The trial provided a test case for the technology in our services and provided valuable performance data. The trial was the result of collaboration between members of HMI including, Caetano Bus; Toyota Ireland; DCU; BOC; ESB and the Dublin Airport Authority (DAA). The results of the trial demonstrated the viability of the hydrogen fuel cell technology, which provides fleet options for long distance and high frequency journeys.

Following on from the initial hydrogen bus trial, three double deck hydrogen fuel cell buses entered service in the Greater Dublin Area (GDA) in mid-July 2021 as part of an alternative fuels technology pilot being undertaken by the NTA in conjunction with Bus Éireann. While battery electric buses are well suited to bus services in urban areas, on longer commuter and inter-urban services, hydrogen fuel cell technology may prove to be an appropriate alternative technology to provide a zero tailpipe emission alternative to diesel. The technology pilot will provide valuable insight into the use of this vehicle type in full customer operation over an extended period of time, which will be critical in advancing the roll out of further zero emission projects.

To-date, the three buses have collectively completed over 30,000 kilometres in operation with Bus Éireann, having initially been deployed on the R105X/103 corridor between Dublin City Centre and County Meath. This equates to an abatement of approximately 25 tonnes of CO<sub>2</sub> by virtue of these services being operated by zero emission, as opposed to diesel-only, buses. In addition, hydrogen consumption has remained consistently at the lower end of the expected consumption profile.



Passenger and driver feedback has been extremely positive, acknowledging the environmental benefits of these zero emission buses, lower noise levels and similarities to diesel-only buses in terms of safety, performance, and accessibility.

**The Biofuel Obligation Scheme (BOS)** – The BOS has been used to stimulate the uptake of biofuel to increase the share of renewable energy in the transport sector and reduce GHG emissions. The DoT calculated that in 2020, 239 million litres of biofuels replaced c.209 million litres of fossil fuels and avoided approximately 520kt CO<sub>2</sub>eq transport emissions.

The recently published **Renewable Fuels Policy Statement** increases targets for the use of biofuels across the transport sector. The CIÉ Group is working to explore long term options for the integration of increased biofuels and renewable fuels across the network fleet. A trial for integration of biodiesel in the rail fleet started in December 2021 and will test the robustness of using biofuels in rail, providing options for integration across the Group network services.

#### 4.2.4 Evidence-Based Strategy

The CIÉ Group is working to play its role in the shaping a low carbon transport and energy system. A zero emissions public transport fleet will depend heavily on a resilient and secure, low emission energy system. The development of an integrated, planned transport and energy system is key to decarbonising both sectors.

To ensure evidence-based research supports the delivery of a zero emission transport network, we are working with the UCD Energy Institute on a cross-sectoral research programme to develop a pathway for delivering decarbonisation of transport.

Our research will address key issues related to transition to a net zero carbon energy future by 2050 and the interdependencies between transport and energy. With an expanding transport service to 2040, we will explore stimulus for large scale and localised modal shift through behavioural change insights.

#### 4.2.5 Hydrogen

Hydrogen offers potential solutions for decarbonisation objectives and has been recognised in the EU's Hydrogen Strategy for a **Climate Neutral Europe**. CIÉ Group is working with leading research bodies to understand the potential for hydrogen in the transport sector and a pathway to develop a hydrogen economy. Transport is considered to be a route to market for a nascent low-carbon technology, playing a role in stimulating market production.



We are participating in the DCU **HyLIGHT** programme which is leading research on Ireland's green hydrogen transition. The aim of HyLIGHT is to guide a cost-effective and sustainable, large-scale implementation of hydrogen technologies in Ireland. The programme is a collaboration of leading national and international companies, universities and stakeholders, working to facilitate the delivery of hydrogen to all energy sectors – heat, transport and electricity.

Innovation in hydrogen in transport is being pioneered in a number of inter-regional European projects including **SeaFuel**. CIÉ Group has become an associate partner on the SeaFuel hydrogen project to learn and observe from a well advanced hydrogen transport deployment project. SeaFuel is an EU funded research project which aims to use the renewable resources across the Atlantic Area to power a local transport fleet and support the shift towards a low-carbon economy.

We are committed to using our resources to facilitate market innovation in clean technology. We are working with a consortium of partners to investigate the feasibility of rolling out Ireland's first hydrogen transport hub in Galway. G2H2 is a partnership between NUI Galway; Aer Arann Islands; Aran Island Ferries; CIÉ Group; Galway Harbour Company; Lasta na Mara; and SSE Airtricity. The partnership is exploring the use of excess renewable electricity to produce green hydrogen for use as a zero-carbon transport fuel for buses, ships and planes in Galway.

Planned development of an off-shore wind-hub is being led by [Rosslare Europort](#) in partnership with Dutch company XELLZ. This is set to establish an offshore wind supply base adjacent to Rosslare Europort, with the Port becoming a hub for the delivery of turbines and other components for wind farm developments in the Irish and Celtic Sea.

#### 4.2.6 Transport Orientated Development

In November 2021, CIÉ Group launched the ambitious [Heuston Station Masterplan](#). This proposed development of a largely brownfield site will see it transformed 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 development will create a high-quality urban public space and will support compact urban growth, providing access to sustainable transport modes and lowering reliance on the private car. 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.

Consultation around plans for lands at [Colbert Station Limerick](#) is nearing completion. This study has been prepared by the Land Development Agency, in conjunction with CIÉ Group, Limerick City and County Council and the Health Service Executive (HSE). These Bodies have substantial land ownership in the area surrounding Colbert Station and the Framework Study will provide a chart for future development.

#### 4.2.7 Greenway Cycling Infrastructure

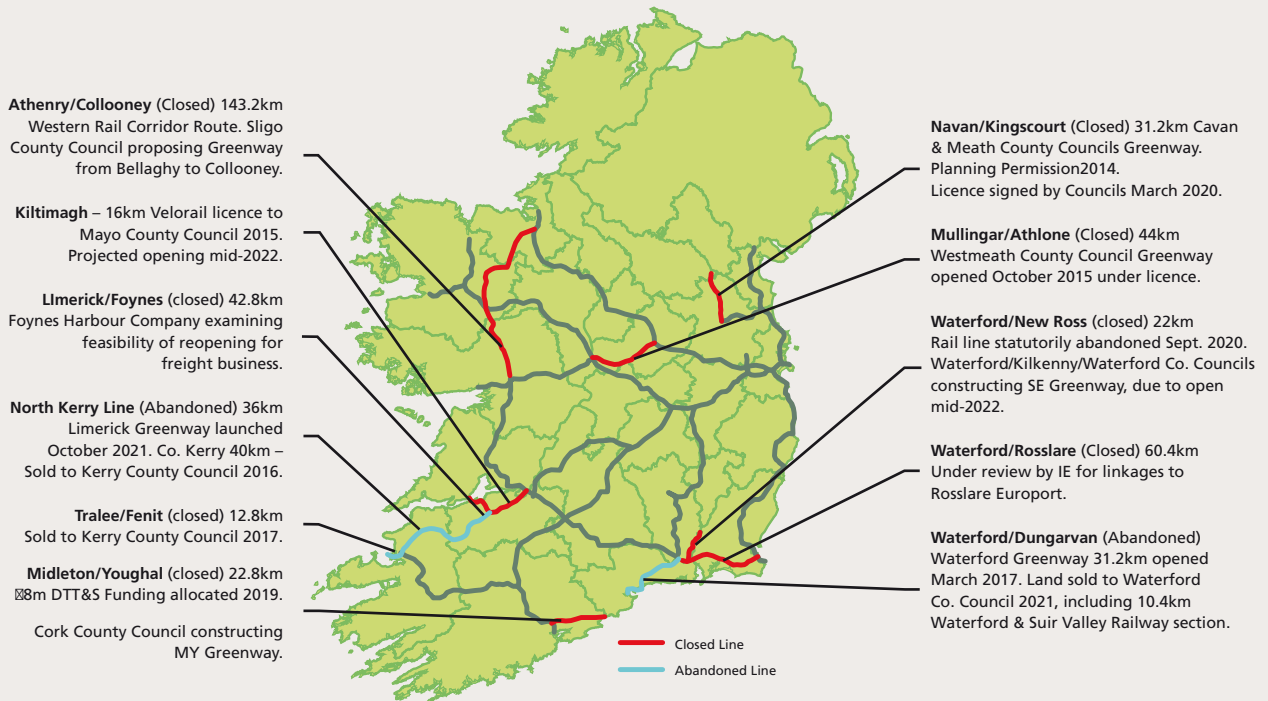
CIÉ Group and Iarnród Éireann continue to support the development of new Greenway trails on closed and abandoned railway lines, in accordance with the [Strategy for the Future Development of National and Regional Greenways 2018](#).

CIÉ Group has been involved in the development of Greenways from Waterford to Dungarvan; in North Kerry and from Mullingar to Athlone. We also plan to facilitate Greenway developments from Waterford to New Ross; Midleton to Youghal and Navan to Kingscourt, as well as supporting any developments in the future.

The provision of disused rail track and CIÉ Group property underpins our commitment to using our assets and scale to invest in sustainable tourism and country-wide natural capital.



### Closed and Abandoned Railway Lines in the Ownership of CIÉ Group/Iarnród Éireann



**Closed Lines:** Services terminated, remains operational property. No disposal without Abandonment Order (running line) or Declaration as surplus (ancillary Property).  
**Abandoned Lines:** Can sell in accordance with legislation, auction, adjoining owners, Local Authorities.  
**ALL STATUTORY OBLIGATIONS REMAIN.** e.g. maintenance of fences, drains, bridges & structures etc.

#### 4.2.8 Circular Economy

In support of the [EU Circular Economy Action Plan](#) and the [National Waste Action Plan for a Circular Economy](#), the CIÉ Group is putting into action a circular economy (CE) strategy. In 2020, the start of a circular plan came into effect with a comprehensive waste audit for the Group. The audit identified major categories, locations and sources of waste providing the basis for a comprehensive CE action plan. The strategy will tackle resource management across our value chain, including the management of material inputs, hazardous and non-hazardous waste; food waste; water; and energy. We will work in partnership with the EPA, taking into account direction from the [EPA's National Waste Prevention Programme](#), [EPA Circular Economy guidance](#) and the draft [Circular Economy Bill 2021](#).

The Group is committed to achieving a 25% reduction in waste produced Group-wide and a Group recycling rate of 75% by 2025. This will include a ban on the use of SUPs, which was adopted by the CIÉ Group of companies starting from 2019. We plan to launch a public campaign for waste awareness for rail commuters when normal commuter patterns emerge.

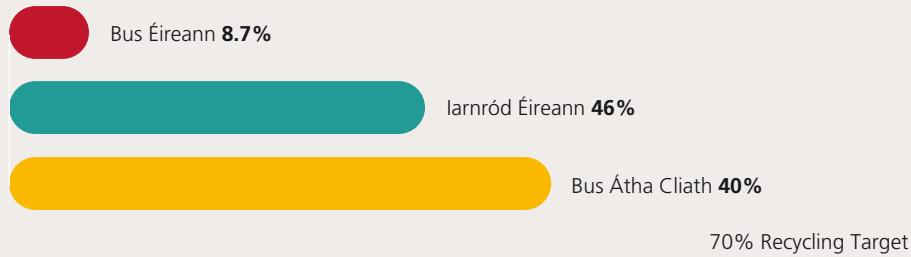


The circular economy strategies will help achieve these waste targets, as well as implementing a behavioural change strategy and enforcing green public procurement (GPP) across the Group. CIÉ Group has partnered with [Global Action Plan \(GAP\)](#) to deliver a 'FoodTalks' food waste programme across a select number of sites for each operating company. The FoodTalks programme is aimed at helping participants be more prepared to make more environmentally friendly decisions regarding the food they purchase and consume.

CIÉ Group Waste recycled/recovered figure up to June 2021			
	Bus Éireann	Bus Átha Cliath	Iarnród Éireann
Waste recycled/recovered	8.7%	60%	46%



### CIÉ Group waste recycling and recover rates against the Group-wide target



#### 4.2.9 Green Public Procurement

The CIÉ Group is one of the largest purchasers in the state and is committed to adopting GPP practices across the Group.

In 2021 the CIÉ Board updated its procurement policy in line with the Office of Government Procurement (OGP) Guidelines, [Guidance for Public Sector](#) to integrate sustainable and green practices into procurement procedures, achieving balance between sustainability and value for money.

CIÉ Group have also been in discussions with the OGP on the implementation of the OGP Guidelines on GPP, as they are interested in reviewing and tracking the implementation of policy across business and industry.

Over the past 18 months, CIÉ Group, led by Iarnród Éireann, implemented trials for adopting GPP principles to existing supplier contracts in order to tackle SUPs. Iarnród Éireann commenced its GPP practices by reaching out to vendors to enquire on alternatives to plastics, with positive results with cleaning products and paper tickets.

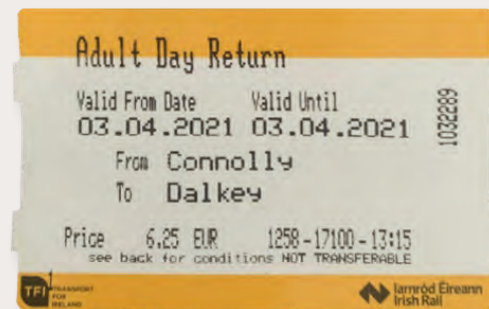
In one location in Iarnród Éireann, the team switched to sachet cleaning products. This reduced plastic usage by 91% and reduced chemical storage by 93%.

Iarnród Éireann also switched from plastic laminate tickets to paper tickets. This saved 420kg plastic annually and reduced the cost of creating the tickets by 54%.

The recent refurbishment of Connolly Station Head Quarters presented an opportunity to apply green procurement principles to the project which involved renovation and improved building energy efficiency. Iarnród Éireann used circularity assessment for all materials and inputs. All office furniture including desks and pedestal components used are recyclable, ensuring a “cradle to cradle” philosophy.

Results showed that aesthetics are comparable to previous products and durability is being monitored. Higher costs were incurred in comparison to conventional, non-recyclable products, but these were largely offset compared to future land fill cost.

The trials of applying green procurement principles demonstrated a willingness of market players to offer sustainable solutions, often with financial, environmental and performance benefits.



### 4.2.10 Sustainability Reporting

**Carbon Disclosure Project** – CIÉ Group submitted our first carbon emissions report to the CDP in 2020 and were awarded a ‘B’ rating. The CIÉ Group was highlighted as a best first-time responder, outperforming the industry norm for a first-time respondent. The Group approach to achieving our climate targets was featured in the [CDP Ireland Network Annual Report 2020](#).

The second annual carbon emissions report was submitted in 2021, and the Group received a ‘B’ rating at the end of the year.

#### CDP Response for 2020 and 2021

Name	Response	Year	Status	Score
Córas Iompair Éireann Group (CIÉ Group)	Climate Change 2021	2021	Submitted	<b>B</b>
Córas Iompair Éireann Group (CIÉ Group)	Climate Change 2020	2020	Submitted	<b>B</b>

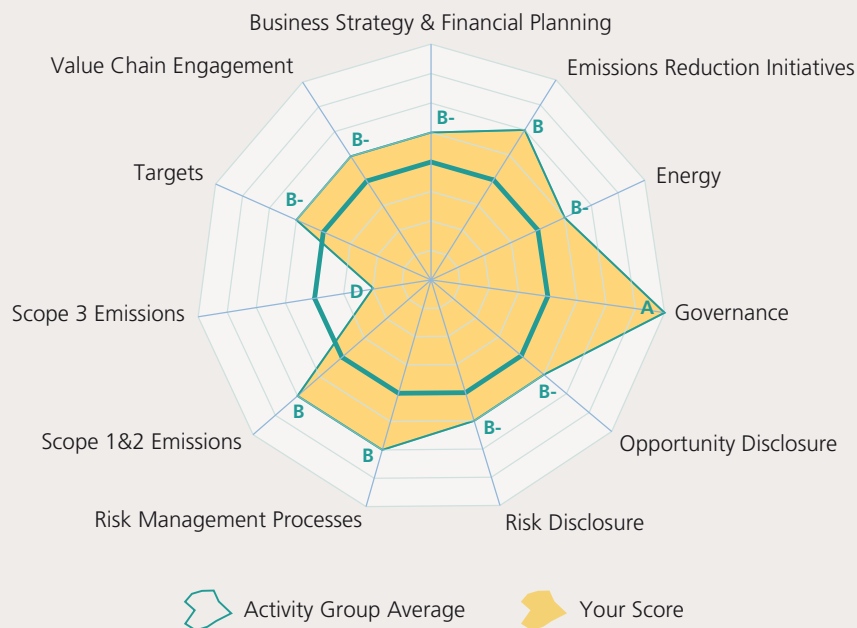
Source: CDP.

Since we commenced reporting through the CDP in early 2020, the CIÉ Group has worked to enhance governance structures and Board and Executive oversight of carbon and energy management and climate risks and opportunities. This progress was recognised in the scoring of governance and risk oversight in the 2020 response.

The CDP response from the 2021 submission outlined areas where CIÉ Group can work to align our sustainability strategy and reporting more closely with the CDP criteria. The response recommended that CIÉ Group focus on the areas of:

- Target-setting
- Climate risk disclosure
- Scope 3 emissions
- Value chain engagement
- Business strategy and financial planning

#### Category Scores



In 2021, CIÉ Group made progress in several areas mentioned in the CDP recommendations. The CO<sub>2</sub> emissions targets in the CAP are in line with the latest scientific consensus on limiting global warming to 1.5 degrees. CIÉ Group has adopted these targets and will work to reduce our emissions as per the CAP.

Additionally, CIÉ Group expanded our sustainability related governance structures to ensure that sustainability issues receive oversight at all levels (see section 4.1 for further detail). In 2022, we will work to incorporate the CDP’s recommendations in our sustainability strategy and continue to strive for best practice in our emissions reporting.

**Taskforce for Climate Related Disclosures** – CIÉ Group became a supporter of the TCFD in 2021 and we are adopting the TCFD recommendations in our reporting standards in 2022. Over 30 Irish based firms have now adopted the TCFD framework, including ESB, Coillte and Bord na Móna, alongside several financial services sector firms.

Adoption of the TCFD recommendations is supported by the Sustainable Finance Ireland’s Skillnet training and CIÉ Group is benefiting from the provision of the technical training and expertise.



Lorcan O’Connor, Group CEO said: *“As the largest transport provider in Ireland, the CIÉ Group plays a critical role in reducing emissions in the transport sector. Our support of the TCFD demonstrates our commitment to playing a part in delivering a low carbon economy and is aligned with our strategy to address the climate challenge. We are proud to support the Irish TCFD collective and look forward to working with Sustainable Finance Ireland during phase two of the TCFD campaign.”*

**NewERA** – NewERA has designed a Climate Action Framework for commercial semi-state bodies, reflecting the exemplar role they are to play in decarbonisation. The SEAI and the EPA are collaborating to publish guidance for preparing Climate Action Roadmaps. Use of the SEAI ‘Gap to Target’ tool will allow organisations to understand the steps and investments required to meet their targets. CIÉ Group is reviewing best practise and guidelines for these reporting standards and are preparing to commence reporting on these regulatory reporting requirements in 2022.

**17 PARTNERSHIPS FOR THE GOALS**

**4.2.11 Partnerships**

This year, CIÉ Group has developed partnerships with organisations that have common sustainability goals and are pivotal in offering opportunity for impact.

Supporting SDG 17: Partnerships, we are working closely with our partners on a range of sustainability challenges, pooling resources, expertise, and strategic assets, in order to deliver impact at scale. In 2022 CIÉ Group will participate again in the Organisation for Economic Co-operation and Development (OECD) review of national climate progress. The review, entitled *The Well-being lens applied to the Irish Transport Sector*, is designed to support governments in thinking innovatively about their climate actions and deliver the transformational change needed to achieve international climate goals while improving wider well-being outcomes.



#### 4.2.11.1 UNEP FI Corporate Impact Analysis Tool

In 2021, CIÉ Group partnered with the United Nations Environment Program Finance Initiative (UNEP FI) as part of their stakeholder Working Group to develop the corporate analysis process.



This year, the UNEP FI published the [Corporate Impact Analysis Tool](#), which is intended to help companies assess their impacts across different sectors and countries, set and meet impact targets, and identify their material contributions to the SDGs.

The Corporate Impact Analysis Tool is in its first version, so the UNEP FI formed a Working Group comprised of large international corporations to help collect feedback on the tool and support participants in completing the tool and interpreting the findings.

CIÉ Group, as the only Irish organisation in the Working Group, participated alongside corporations such as Repsol, a Spanish energy company, and Ravensdowne, an agrochemical supplier based in New Zealand.

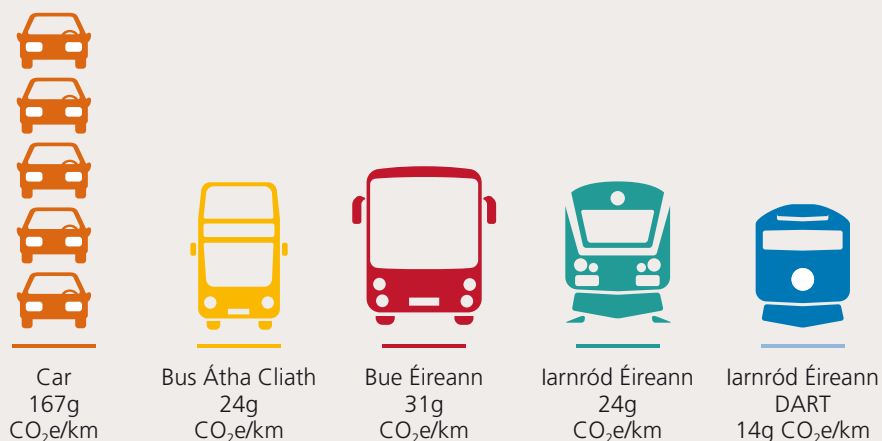
The Working Group carried out several meetings in 2021, during which participants discussed issues in incorporating the SDGs into reporting and different approaches to implementation. Participants were also encouraged to adopt the Corporate Impact Analysis Tool and apply this in their identification of their material contributions to the SDGs. The UNEP FI will collect feedback on the tool methodology and incorporate this in the new iteration of the Corporate Impact Analysis Tool in 2022. CIÉ Group has also joined a world-wide Value Reporting Foundation Group to track, analyse and discuss the methods and results of the UNEPFI tool and to view and discuss our progress against the SDGs.

The Corporate Impact Analysis tool estimates an organisation’s significant impact areas based on their sectors of activity and countries of operation. The tool identifies 22 environmental, social, and economic impact areas (SDG-aligned) that can interact with an organisation’s activities. Initial use of the tool by CIÉ Group provided a list of the positive and negative impacts generally associated with the bus and passenger rail transport sectors across the 22 impact areas.

However, it should be noted that the sector impact associations are identified from global trends and may not fully reflect the impacts of CIÉ Group’s operations.

According to the UNEP FI tool, passenger bus and rail transport is generally understood to have significant positive impacts to mobility, economic convergence, and a healthy economy, as well as negative impacts to climate (due to CO<sub>2</sub> emissions), air quality, and waste. It is important to consider that, although the bus and rail sectors emits CO<sub>2</sub> from diesel fuel combustion, public transport is a significantly less carbon-intensive travel option compared to the private car. The average CO<sub>2</sub> emissions from the average CIÉ Group transport options are provided below, however, the Bus Éireann and Bus Átha Cliath figures are for their diesel fleet and will lower as we transition to hybrid and electric alternatives.

#### Carbon Emissions Compared between CIÉ Group Transport Options and Private Cars



A separate section of the UNEP FI tool includes a country needs assessment for the countries in which the organisation operates. This is done in order to identify the level of social, environmental, and economic needs of the countries in which the organisation has influence in. The needs assessment for Ireland revealed that waste reduction is an important need, as Ireland is a major producer of waste on a per capita basis and produces the **most packaging waste per capita** in the EU.

The feedback from the tool can help shape CIÉ Group’s sustainability strategy development by outlining the priority areas where CIÉ Group has the most influence in creating substantial change and highlighting the areas in which CIÉ Group should collect metrics on.

These initial results suggest that CIÉ Group has the potential to make the most impact by reducing its production of waste, by minimising negative impacts to climate and air quality, and by maximising its positive contributions to the economy and mobility. As the results from the tool reflect global trends, it is important to assess which of the tool’s recommendations most accurately reflect our operations.

Once the initial results of the tool are finalised, CIÉ Group may incorporate the recommendations in future sustainability strategy planning. CIÉ Group will also liaise with the UNEP FI and members of the Working Group to provide feedback and suggestions on the functionality and findings of the tool.

#### 4.2.12 Vehicle Accessibility

Ensuring services and the work environment are fully accessible is a priority for the CIÉ Group and the NTA. Progress has been made to ensure that public transport services is accessible, easy to use and safe for those with disabilities.

Across services the CIÉ Group of companies has worked to deliver full accessibility to both bus and rail services and accommodation.

Vehicle Accessibility at June 2021			
	Bus Éireann	Bus Átha Cliath	Iarnród Éireann
Percentage Accessibility	100%	100%	100%

#### 4.2.13 Social – Diversity and Inclusion

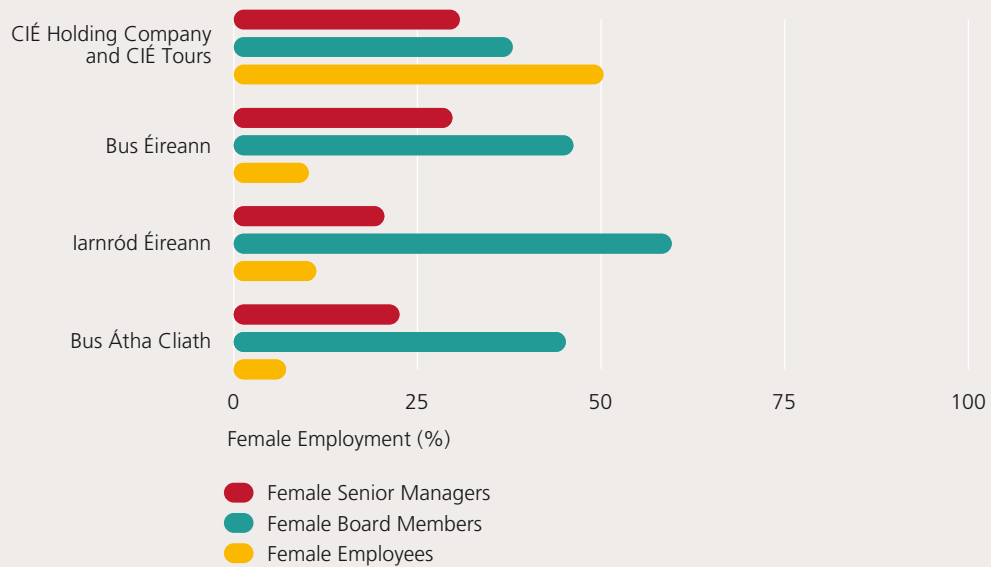
The CIÉ Group works to foster diversity in the workforce and prioritise equal access to services for our customer base. Within our workforce of over 10,500 employees, we seek to ensure inclusive conditions that produce a productive, open and effective culture, and that our diverse staff reflect our population and customer base.

CIÉ Group has achieved close to parity in terms of gender representation across the Boards of each operating company, with Bus Átha Cliath having 44% female board members, Iarnród Éireann 57% and Bus Éireann 29%.

In 2020, the launch of a female driver recruitment programme commenced in both Bus Átha Cliath and Bus Éireann, with Bus Átha Cliath aiming to double their number of female drivers over the coming years, and Bus Éireann setting a target of a 50% increase in female drivers and an increase in the number of female supervisors. Iarnród Éireann is a large recruiter of Science Technology Engineering and Maths (STEM) graduates and has also been actively pursuing recruitment of female graduates.

Gender Equality at June 2021				
	Bus Éireann	Bus Átha Cliath	Iarnród Éireann	CIÉ Holding Company & CIÉ Tours
Female Employees	10%	7.5%	11%	48%
Women in Senior Management Roles	45%	22%	20%	30%
Female Board Members	29%	44%	57%	36%

CIÉ Group Gender Parity Statistics as of June 2021



#### 4.2.14 Employee Health and Wellbeing

CIÉ Group prioritises the health and wellness of its employees. In 2020, The CIÉ Group Health Promotion Officer and Chief Medical Officer partnered with the Diabetes Department and Trinity College Dublin to carry out a study on bus drivers and their risk of Type 2 Diabetes.

Based on the results of the study, CIÉ Group developed a proposal for a cross-company wellbeing pilot initiative to be carried out in 2022. The initiative will provide online health coaching and educational support to participants over a six-month period. Following the results and feedback from the initial pilot program, the health initiative will then be offered to additional staff across the CIÉ Group.



The CIÉ Group is also pursuing accreditation in the KeepWell Mark programme developed by the Irish Business and Employers Confederation (IBEC). The KeepWell Mark is a framework that provides businesses with a set of standards for key areas of workplace wellbeing including leadership, mental health and absence management, physical activity, and healthy eating.

As of 2021, the CIÉ Holding Company and Bus Átha Cliath achieved Keepwell Mark accreditation, Bus Éireann has applied for accreditation, and Iarnród Éireann is researching other accreditation bodies for employee health and wellbeing.

#### 4.2.15 Human Rights and Environmental Due Diligence

The European Union is addressing social and environmental stewardship, with the development of rules on sustainable corporate governance and supply chain due diligence obligations, in relation to environmental issues and human rights.

To date, due-diligence standards have been on a self-regulation basis, with international initiatives, such as the [United Nations Guiding Principles on Business and Human Rights](#) promoting responsible business conduct and prevention of businesses' violations of human rights. In the EU, this voluntary system is set to change, as seen on the 10 March 2021, when the European Parliament passed a [resolution](#) «with recommendations to the Commission on corporate due diligence and corporate accountability».

The CIÉ Group is committed to supporting corporate accountability and supply chain due diligence and will examine the Group's role and responsibilities, in overseeing supply chain business conduct, in line with developing EU and national legislation and standards.



## 5 Sustainability Strategy Review

This review of the sustainability strategy aims to highlight and showcase the work that has been completed across the group on sustainability initiatives, up to the end of June 2021. This Annual Review of CIÉ Group’s sustainability strategy is designed to take on board the recommendations of the TCFD recommended structure. The strategy is reviewed under the headings of: Governance; strategy; risk management; and metrics, in line with the TCFD guidelines.

### 5.1 Governance

CIÉ Group has Board-level oversight of climate-related issues within the organisation. The governance structure is designed to lead strategic focus and ensure sustainability is embedded across all functions of the organisation to achieve sustainability goals.

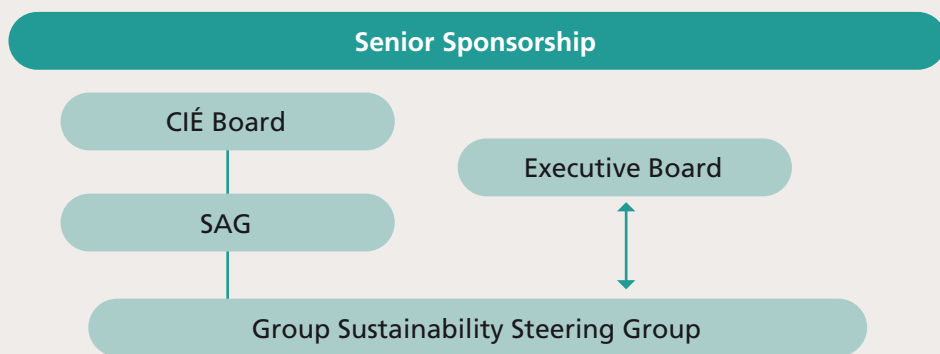
#### Sustainability embedded across CIÉ Group’s departmental structure



#### 5.1.1 Governance Structure

Over the course of 2021, CIÉ Group introduced changes to its governance structure to ensure that sustainability issues enjoy oversight and sponsorship at all levels. The CIÉ Board established the Sustainability Advisory Group (SAG) subcommittee in June 2021. The Sustainability Steering Group (SSG), a cross-company working group, with responsibility for overseeing and reporting on the sustainability strategy, reports to the SAG and to the CIÉ Executive Board.

#### CIÉ Group Senior Sustainability Governance Structure



The Chairperson of the CIÉ Board is a member and Chairperson of the SAG, ensuring oversight of sustainability and climate action performance at the highest level.

The SAG meets on a quarterly basis and is responsible for making recommendations to the CIÉ Board on the appropriate sustainability strategy for the Group, and for ensuring that sustainability strategies across the operating companies are aligned with the CIÉ Group Sustainability Strategy.



The SAG reports on updates that can potentially impact the sustainability strategy, including regulatory policy implications, climate-related reporting and disclosure, key performance indicator (KPI) updates and sustainability project budgets.

Membership of the Sustainability Advisory Group is as follows:

- CIÉ Chairperson
- External industry expert
- Worker Director
- CIÉ Chief Executive
- CIÉ Chief Sustainability Officer
- Bus Éireann, Chief Safety and Sustainability Officer
- Bus Éireann, Director
- Iarnród Éireann, Director, Infrastructure Manager
- Bus Átha Cliath, Head of Environmental, Health & Safety

The SAG also receives reports from the CIÉ Group SSG. The SSG was established to report on and make recommendations to the CIÉ Executive Board about the CIÉ Group Sustainability Strategy and those of each operating company.

It includes representatives across each of the CIÉ Group of companies who are responsible for overseeing the delivery of the coordinated sustainability strategy. The SSG meets monthly, and members report on Group-wide sustainability issues including strategy development, compliance and reporting frameworks, communications and training requirements, risk management, and budget setting.

The SSG includes a representative of each of the functions listed below:

- Head of Sustainability within each operating company
- Senior managers responsible for sustainability strategy
- Environmental officer/manager
- Energy officer/manager
- Health and Wellbeing
- Communications
- Finance
- Legal
- Property
- Risk

The CIÉ Group Chief Executive Officer (CEO) has overall responsibility for climate-related issues and sustainability. The CIÉ Group CEO collaborates closely with the Group Chief Sustainability Officer to oversee Group activity in this area and has had oversight and sign-off on sustainability strategy development.

The Group CEO reports to our primary shareholder, the Minister for Transport on Climate Related Performance, on a quarterly basis.

The CIÉ Group operating companies oversee the development of their specific sustainability strategies and are responsible for implementing the sustainability projects that fall under this sphere. Bus Éireann, Bus Átha Cliath, and Iarnród Éireann have each published a sustainability strategy that is carried out and periodically reviewed by their individual sustainability teams. CIÉ Tours plans to develop their own sustainability strategy in 2022.



The Bus Éireann sustainability strategy “Driving Change” was launched in May 2021 and outlines a roadmap to achieving climate and sustainability related targets by 2025 and 2030.

The first annual sustainability report is due for publication in Q1 2022. Internally, a sustainability report is prepared for the Board on a quarterly basis and there is an internal sustainability team with stakeholders from energy, finance, internal and external communications, IT, engineering, schools, operations and facilities in attendance.



A formal sustainability strategy is currently under development by Bus Átha Cliath, which will expand and further clarify sustainability governance roles relevant to Bus Átha Cliath.

The focus of this project is to capture the wide range of existing work processes and reporting mechanisms within Bus Átha Cliath in areas of environmental, social and corporate governance (ESG), while also considering existing and upcoming legislative requirements, regulatory obligations and industry best practice. The strategy will be finalised and launched in 2022 following consultation with relevant internal and external stakeholders.



Iarnród Éireann’s Sustainability strategy “SustainabilITÉ” was launched in 2021. This sets out a roadmap to achieving a more sustainable railway across the three pillars: economic, social and environment.

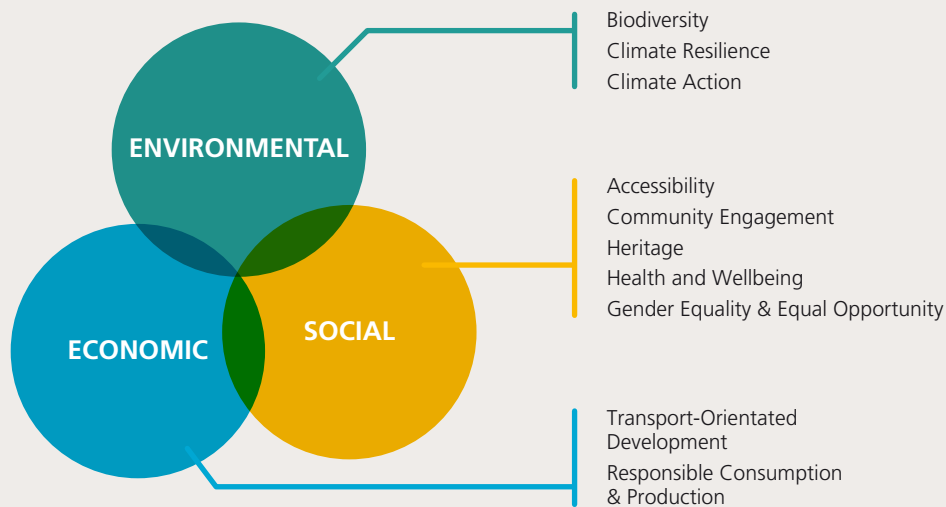
The first annual sustainability report was prepared in 2020 documenting the progress throughout the year across a wide range of KPIs. Internally, a sustainability report is prepared for the Board on an annual basis and there are on-going internal meetings held with a sustainability team. Included on this team are stakeholders from the environmental team, energy manager, procurement, internal and external communications, HR, health and wellbeing officer and the capital investments team.

## 5.2 Strategy

The CIÉ Group Sustainability Strategy is designed to align with the principles of the 17 UN SDGs and the Paris Climate Agreement of limiting global temperature rise to 1.5 degrees Celsius. Along with national and EU legislation, these policies provide a framework to apply to our strategy, operations, people and network.

The targets and initiatives outlined across the three pillars of sustainability have been further categorised under ten SDG-aligned action areas. The progress made against these targets from 2020 until June 2021 is detailed in section 5.2.1.

The Three Pillars and Ten Action Areas of the CIÉ Group Sustainability Strategy



CIÉ Group’s sustainability strategy takes into account that our operations and business strategy carry a different level of impact across the various SDGs.

CIÉ Group recognises that our operations and resources have the strongest potential to make a **direct impact** and add value to these SDGs.

These SDGs have been identified as the Goals where CIÉ Group can, in conjunction with other organisations and sectors, make a **meaningful contribution**.

CIÉ Group recognises that the scope of our operations limits to the extent to which we can directly impact these Goals. However, CIÉ Group **supports the delivery** of all SDGs and aim to contribute where the opportunity arises.

### 5.2.1 The CIÉ Group Sustainability Targets and Ambitions

The below tables detail CIÉ Group’s sustainability targets and ambitions across the ten action areas, as outlined in the Sustainability Strategy 2020. Each action area is aligned to several SDGs, of which CIÉ Group’s Sustainability Strategy is based on.

This Annual Review 2021 provides updates and next steps for each of these targets and ambitions from each of the operating companies and CIÉ Holding Company.

## BIODIVERSITY

**Vision: Enhance native biodiversity on CIÉ Group lands**



### Targets for Promoting Biodiversity

- Annually, roll out biodiversity/pollinator plans for at least five bus and train stations across the CIÉ Group network.
- Implement actions outlined in the [Pollinator Friendly Management of Transport Corridors](#) guidelines by 2025.

### Achievements and Next Steps

- Over 30 stations now have pollinator plans.
- Iarnród Éireann will implement a Bee Corporate Sponsorship programme in 2022, which will place inactive beehives in key station locations and the sponsor an active beehive at an apiary.
- Bus Átha Cliath has planned a biodiversity investment for Broadstone bus depot in Q1 2022, which will include the planting of a wildflower meadow and bird feeders. The bus depot also has swift nesting-boxes on site.
- Bus Éireann have planned a community garden with a focus on biodiversity in Broadstone depot, in collaboration with Phibsboro Tidy Towns.

### Delivering on Policies: All-Ireland Pollinator Plan

### Targets for Planting Native Woodland

- Commence planting of 4.15 hectares of native woodland on CIÉ Group land in partnership with the Department of Agriculture, Food and the Marine (DAFM) and the National Parks and Wildlife Service (NPWS). This equates to 25 tonnes of carbon sequestered per annum over the next hundred years.
- Implement and expand native planting on CIÉ Group lands where appropriate, by 2030.

### Achievements and Next Steps

- CIÉ Group is working with DAFM and the NPWS to identify CIÉ Group lands which are suitable for native planting (with a goal of 4.15 hectares of native woodland planted).
- In 2021, 14,000 trees were planted in Carrick on Shannon on CIÉ Group land adjacent to the Dublin Sligo Line, and the project launched the “Creation of Woodlands on Public Lands Scheme”.
- CIÉ Group grants Birdwatch Ireland access across the Dublin-Wexford railway line every summer to their “Little Tern Protection Scheme” at Kilcoole, Co. Wicklow.

### Delivering on Policies: Climate Action Plan

## CLIMATE RESILIENCE

Vision: Provide a transportation system resilient to climate-related impacts



### Targets for Climate Resilience Assessment

- Adopt risk modelling and vulnerability assessment tools, to assess climate risk of assets against impacts of coastal erosion and flooding.
- Collaborate with stakeholders, government departments and local authorities to plan for adaptation to coastal erosion and climate related weather conditions.
- Deliver mitigation measures in collaboration with stakeholders to ensure at risk infrastructure and natural capital is protected from climate related risk
- Publish a CIÉ Group Climate Adaptation Plan by 2021 guided by vulnerability assessments.

### Achievements and Next Steps

- The East Coastal Erosion Study commissioned by Iarnród Éireann and Wicklow County Council to investigate options to manage risks associated with coastal erosion was completed in 2020.
- Iarnród Éireann and the NTA are advancing the East Coast Railway Infrastructure Protection project with substantial works commenced at Rosslare and interim works at Killiney and Bray Head. A tender pack will be issued for the design consultants to commence design in Q4 2021.

### Delivering on Policies: Climate Action Plan



## CLIMATE ACTION

Vision: Deliver a low-carbon and energy efficient transportation system



### Targets for Carbon and Sustainability Reporting

- Complete a review of CIÉ Group carbon management performance for independent accreditation from the CDP.
- Develop carbon reporting to incorporate an increased number of Scope 3 GHG emissions and incorporate learnings from initial CDP response into decarbonisation strategy.

### Achievements and Next Steps

#### Carbon Disclosure Project (CDP)

- In 2020, CIÉ Group submitted their first carbon emissions report for the year 2019 and were awarded a 'B' rating. Second annual carbon emissions report for 2020 was submitted in July 2021 and the Group received a 'B' rating for the response.

#### Taskforce for Climate Related Disclosures (TCFD)

- CIÉ Group became a supporter of TCFD in 2021 and is adopting the recommendations in 2022.
- Training on adoption of TCFD reporting standards, delivered by Sustainable Finance Ireland, has been attended by senior leadership across the Group, with training to continue in 2022.
- TCFD recommendations include conducting and reporting on a scenario analysis. CIÉ Group plan to use external tools such as the "CDP Scenario Analysis Tool" and "IEA World Energy Model" tool to complete climate scenario analysis in 2022. A carbon reporting framework is in development to align with the TCFD.

#### Corporate Sustainability Reporting Directive (CSRD) and EU Taxonomy

- Training on CSRD and EU Taxonomy is due in 2022, in anticipation of the regulatory obligations of these legislations. CIÉ Group are reviewing best practise and guidelines for these reporting standards and is preparing to commence reporting in 2022.

#### Carbon and Sustainability Reporting:

- CIÉ Group is working to develop a streamlined IT solution to carbon reporting across the group, which will commence in early 2022. As a result, sustainability data collection and reporting for internal and legislative purposes is expected to be greatly simplified for CIÉ Group's sustainability teams.
- The CIÉ Group operating companies have signed the Business in the Community Ireland Low-Carbon Pledge which commits signatory companies to recording Scope 3 emissions and setting science-based carbon reduction targets.

#### Climate Action Plan

- NewERA has designed a Climate Action Framework for commercial semi-state bodies. The SEAI and the EPA will publish guidance for preparing Climate Action Roadmaps. Use of the SEAI 'Gap to Target' tool will allow organisations to understand the steps required to meet their targets will prepare to report based on NewEra, EPA and SEAI guidance in 2022, once the expectations have been communicated.

**Delivering on Policies: Climate Action Plan, Corporate Sustainability Reporting Directive and EU Taxonomy Regulations, Taskforce on Climate Related Disclosures, NewEra Reporting**

### Targets for Building Energy Management and Efficiencies

- Consolidate a CIÉ Group energy efficiency strategy that follows best practices of energy management.
- Implement targeted energy efficiency improvement projects to achieve the public sector target of 50% energy efficiency improvement by 2030, notwithstanding expanding fleet capacity.
- Assess CIÉ Group building stock to ascertain opportunities for building energy performance improvement.

#### Achievements and Next Steps

- Bus Éireann Energy team achieved ISO50001 Energy Management certification in 2020. The Bus Éireann energy efficiency metric has improved by 21% (SEAI verified) to 2020 from the baseline measurement year.
- ISO 50001 certification is in place for Bus Átha Cliath and Iarnród Éireann.
- Certification to ISO50001 was maintained in early 2021 for Broadstone Depot. Work is ongoing to extend the certification to Capwell Depot in Cork in Q1 2022. Future depots to undergo ISO50001 certification include Waterford, Galway and Limerick.
- Bus Átha Cliath is conducting energy efficiency pilot projects at Phibsboro depot.
- The Roxboro Bus Éireann depot in Limerick will be redeveloped in 2022 to be 'Near Zero Energy Building' compliant. The administration building at Roxboro will have an extremely low energy consumption, achieved through features such as building fabric insulation, energy efficient glazing, and energy efficient LED lighting. Employees are due to move into the building from mid-2022.

### Delivering on Policies: Climate Action Plan

#### Targets for Green Building Technology

- Review feasibility of piloting green building technologies on CIÉ Group property, including green-roofing, solar panels, and water harvesting.
- Explore emerging solutions for behind the meter renewable energy power production.
- Implement green building technologies on CIÉ Group buildings where feasible and effective.

#### Achievements and Next Steps

- A building audit and feasibility study for green building technologies is in development for Bus Átha Cliath and CIÉ Holding Company and planned for 2022.
- In 2020, a pilot rainwater harvesting system was developed by Bus Átha Cliath at the Summerhill Bus Garage to sustainably source water for washing buses. The CIÉ Group is planning to deliver water harvesting schemes at bus stations where it is feasible.
- Bus Átha Cliath has fitted new solar panels on the roof of Phibsboro depot, with the view of assessing this pilot project for additional sites.
- On-site generation of renewable electricity is being explored by Bus Éireann, Bus Átha Cliath and Iarnród Éireann.

### Delivering on Policies: Climate Action Plan, National Development Plan

### Targets for Biofuel Usage

- Complete a review of supply chain options for potential integration of biofuels on bus fleet, to align with the BOS. As per the CAP, biofuel blends will be increased annually until 2030.
- Introduce targeted pilot of biofuel usage on rail in 2021 and consider options for increase of biofuels in line with targets set out in the [Renewable fuels for transport policy statement](#).

#### Achievements and Next Steps

- Iarnród Éireann is trialling the use of a 7% biofuel blend to power its train engines to ensure engine compatibility with biodiesel planned for Q1 2022.
- Iarnród Éireann uses the Envirox fuel additive to reduce fuel consumption and increase energy efficiency, resulting in savings of approximately 6%. The nationwide use of Envirox commenced in 2019.
- Bus Éireann used 3.5 million litres of biofuel in 2020, and 2.5 litres up to Q3 2021, and is planning for full introduction of biofuel across the fleet.

### Delivering on Policies: Climate Action Plan, Biofuels Obligation Scheme, Renewable Fuels for Transport Policy Statement

### Targets for Hydrogen Fuel Use

- Deliver the transition to lower emission vehicle fleet across the public transport network by facilitating innovation in alternative fuel technology.
- In partnership, implement Hydrogen Mobility Ireland trial to deploy three hydrogen zero direct emission vehicles, commencing year end 2020.

#### Achievements and Next Steps

- A significant milestone was achieved in 2020 with the operation of the first hydrogen fuelled bus in service in Ireland as part of a trial involving Bus Éireann, Bus Átha Cliath, Hydrogen Mobility Ireland, CIÉ Group and DCU. Three hydrogen fuel-cell-electric double-deck buses are currently running as part of Bus Éireann's fleet. The three buses are on target to achieve savings of over 43 tonnes of CO<sub>2</sub> by the end of the year.
- CIÉ Group became an associate partner on the [SeaFuel](#) hydrogen project to learn and observe from a hydrogen transport deployment project. SeaFuel is an EU funded research project which aims to use the renewable resources across the Atlantic Area to power a local transport fleet and support the shift towards a low-carbon economy.
- CIÉ Group is participating in the DCU [HyLIGHT](#) programme which is leading research on Ireland's green hydrogen transition. The aim of HyLIGHT is to guide a cost-effective and sustainable large-scale implementation of hydrogen technologies in Ireland.
- CIÉ Group is a member of Hydrogen Mobility Ireland and contributes to the strategic development of hydrogen development in the Irish transport sector.
- CIÉ Group is working with partners to investigate the feasibility of rolling out Ireland's first green hydrogen hub at Galway, G2H2.

### Delivering on Policies: Climate Action Plan



## Targets for Electric Vehicle Infrastructure

- Undertake a survey of operational sites to confirm optimal locations for hybrid, electric or vehicle charging infrastructure.

### Achievements and Next Steps

- Bus Átha Cliath received a delivery of 74 hybrid vehicles and charging infrastructure in 2021 and is working with the NTA and ESB to install charging infrastructure for full battery EVs.
- The installation of 22 chargers for the van and car fleet at Bus Éireann locations in Q4 2021.
- The Bus Éireann Roxboro Depot in Limerick will be redeveloped to provide for the planned conversion of the Limerick bus fleet to EVs.
- Bus Éireann saw 61 hybrid vehicles enter into service in 2021 in Galway and Limerick.
- Bus Éireann is working with ESB and NTA on five regional city EV charging infrastructure and were shortlisted for Galway Chamber of Commerce Sustainability Award for their 100% hybrid fleet in Galway city.
- The deployment of the first fully electric bus fleet in Athlone is in progress for 2022. There are 11 Bus EVs and 8-10 double sided chargers to be installed, with the depot to be operational in 2023.
- Six fast chargers have been installed at Iarnród Éireann stations for use by taxis.
- Bus Átha Cliath have fitted chargers to accommodate support vehicles to EV's.

**Delivering on Policies: Climate Action Plan, Clean Vehicles Directive**



### Targets for Expanding the Zero-Emission Bus Fleet

- Deploy 11 electric vehicle buses to Bus Éireann road fleet in Athlone.
- Achieve 50% of Bus Éireann fleet composed of electric buses with the remaining 50% consisting of Euro VI engines, by 2030.
- Under the BusConnects Dublin project, the NTA intends that the Dublin area bus network will be operated solely by zero emission buses by 2035.
- Bus Éireann aims to have their full fleet of 120 service vehicles to go electric by 2025. In 2022 it is hoped to replace 50% of vans/cars up for renewal with electric vehicles.
- With NTA to achieve the target of having 300 EV buses on the road by 2025 and 1,500 EV buses by 2030, as per the CAP.

#### Achievements and Next Steps

- The deployment of the first fully electric bus fleet in Athlone is in progress for 2022. There will be 11 electric buses added to the fleet.
- A total of 14 EVs in non-service vehicles were added to Bus Éireann road fleet in 2020.

### Delivering on Policies: Climate Action Plan, National Development Plan, Clean Vehicle Directive

### Targets for Expanding the Low-Emission Bus Fleet

- Develop strategy for conversion or replacement of Expressway coach and school bus fleet to meet Clean Vehicle Directive standards.
- Commence the commission of up to 100 diesel hybrid buses with plug-in capability across city, town and inter-urban bus fleets.
- Achieve 50% of Bus Éireann bus fleet at Euro VI emission standards by 2020.
- Achieve 100% of Bus Éireann non-electric fleet at Euro VI emission standards or better by 2030.

#### Achievements and Next Steps

- A total of 135 hybrid buses (74 to Bus Átha Cliath and 61 to Bus Éireann) were delivered in 2020 to enter service in 2021.
- A total of 63% of the Bus Éireann fleet is now at the Euro VI engine emissions standard.
- 40 hybrid bus vehicles are now operational on Bus Éireann Galway city routes. An additional 21 hybrid buses are to be delivered for Limerick routes at the end of 2021.
- No new diesel only buses will be purchased for Bus Éireann's urban fleet going forward. By 2025, 50% of the service fleet will be low emission and 30% will be zero emission.

### Fleet – Euro VI Emission Standard Engine (Euro VI), Hybrid Electric Vehicles (Hybrid) and Fully-Electric Vehicles (Electric)

	Bus Éireann	Bus Átha Cliath	Iarnród Éireann
Percentage of Fleet – Euro VI	63%	58%	–
Percentage of Fleet – Hybrid	4%	6%	4%
Percentage of Fleet – Electric	0%	0%	15%

## Delivering on Policies: Climate Action Plan, National Development Plan, Clean Vehicle Directive

### Targets for Reducing Passenger Rail Emissions

- Implement suite of measures to ensure 80% of Iarnród Éireann journeys are free of direct emissions by 2027. Measures include rail electrification through the DART+ Expansion programme.
- By year end, validate energy efficiency improvement and reduced GHG emissions for the ZF Gearbox upgrade on 1 Nr. 3-Car prototype.

### Achievements and Next Steps

- Prototype ICR gearbox testing and validation was completed in December 2021 with results showing potential fuel savings of 20%.
- A feasibility study is ongoing for repowering several 29000 diesel commuter fleet for hybrid conversion.
- Iarnród Éireann grew their EVs service fleet from 13 to 28 in 2021.
- The Intercity Railcar Hybrid Drive Trials commenced in 2021 and service trials are due to commence in 2022. The project will be phased in over 8-10 years and will avoid the emission of 18,000 tonnes of carbon each year, in addition to reduced air and noise pollution.
- Enterprise generator units commenced a programme to refurbish eight diesel generators on the Enterprise Intercity fleet, which were replaced in 2021 with modern emissions friendly diesel generators.
- The DART+ programme, involving the electrification of the Dublin commuter network, will expand 50 km of electrified track to 150 km.
- Biofuel trials on a sample ICR are due in Q1 2022 with a view to moving to biofuel across the entire fleet.

## Delivering on Policies: Climate Action Plan, National Development Plan

### Targets for Eco-Driving

Roll out eco-driving education across the CIÉ Group to develop eco-driving techniques.

### Achievements and Next Steps

- Bus Éireann rolled out the new fleet telematics system in 2021. The system enables improved driver awareness of driving performance as it impacts on fuel consumption and passenger safety.
- Bus Átha Cliath has implemented eco-driving training, which has yielded a 13% reduction in fuel use since 2008, equating to 4.2 million litres of diesel.
- The behavioural change programme for eco-driving in Bus Éireann is planned to be delivered in 2022.

## Delivering on Policies: Climate Action Plan

### Targets for Improving Air Quality

- Adopt Group-wide usage of diesel exhaust treatment to reduce exhaust emissions for both rail and bus fleets.
- Mitigate harmful exhaust after-treatment emissions across public transport fleet and contribute towards our overall emissions reduction targets.

### Achievements and Next Steps

- The EPA has issued a proposal to conduct a research project on air emissions near major railway stations in Dublin City Centre. Trinity College Dublin put forward a submission which is currently under review. If awarded, they will start their project in 2022, where they will review the air quality in Connolly, Pearse, and Heuston stations and provide recommendations on improving air quality.

## Delivering on Policies: Climate Action Plan

### Targets for Fostering Partnerships

- Participate in industry policy working groups bringing technical and commercial expertise in sustainable transport policy development.
- With partners, implement a behavioural change communication strategy to promote sustainable travel, internal energy efficiency and waste management.

### Achievements and Next Steps

- CIÉ Group has developed partnerships with organisations that have common sustainability goals and are pivotal in offering opportunity for impact.
- Supporting SDG 17: Partnerships, we are working closely with our partners on a range of sustainability challenges, pooling resources, expertise, and strategic assets, in order to deliver impact at scale.
- CIÉ Group will participate in the OECD review *The Well-being lens applied to the Irish Transport Sector* in 2022.

## Delivering on Policies: Climate Action Plan



## TRANSPORT-ORIENTATED DEVELOPMENT

**Vision:** Optimise the provision of housing, employment, public services and leisure space near frequent, high-quality transport services to support TOD



### Targets for TOD Masterplans

- Prepare Masterplans and, in co-ordination with development partners, achieve planning permission and deliver schemes of development which optimise TOD in CIÉ Group Property Developments.
- Launch Masterplans for Heuston, Limerick and Galway, subject to market conditions, in 2020.

### Achievements and Next Steps

- Horgan’s Quay, Cork: The mixed-use development over 2.5 hectares comprises substantial office building, Boutique DEAN Hotel (opened in December 2020), 325 residential units and retail units within the former carriage shed.
- Heuston Station Masterplan: Launched in November 2021 the Masterplan includes proposals for residential and commercial units, green space, cross-Liffey bridges, and active transport infrastructure over a 10-hectare site.
- Ceannt Station Quarter, Galway: The Augustine Hill development is currently at planning application stage and incorporates over 400 residential units, retail, hotel and office space together with quality public realm areas and facilities for cyclists over 3.3 hectares.
- Connolly Station Quarter: Planning for the commercial and residential elements was applied for in 2020. The first phase of development, with c. 32,500 sq. m. of offices and a 200+ bedroom hotel, is due to commence construction early 2022. Planning permission is expected to be sought for a similar number of offices and approximately 200 apartments on the remainder of the site.
- Colbert Station, Limerick: Consultation around plans for lands at Colbert Station Limerick is nearing completion. This study has been prepared by the LDA, in conjunction with CIÉ Group, Limerick City and County Council and the HSE.

**Delivering on Policies:** Climate Action Plan, National Development Plan, Housing for All Plan



### Targets for Multi-Purpose Site Development

- Conduct a feasibility study to identify multi-purpose sites (residential, office, retail and operational) to support transport orientated development while retaining operational capability.
- Develop multi-purpose bus depot sites at two locations by 2027 (dependent on successful feasibility studies).

#### Achievements and Next Steps

- Bus Átha Cliath is undertaking feasibility studies to investigate the potential to provide multi-purpose sites (residential, office, retail and operational), at existing locations, while retaining the operational capability of these locations.
- Bus Éireann completed a study with KPMG on the GDA depot requirements for the future.

### Delivering on Policies: Climate Action Plan

### Targets for Micro-Mobility Infrastructure

- Review scope for including active travel and micro-mobility facilities and infrastructure in CIÉ Group property and development plans.
- Collaborate with micro mobility providers to deploy micro-mobility options on CIÉ Group property and prioritise active travel facilities in line with TOD.

#### Achievements and Next Steps

- The NTA is working to develop solutions for integrating micro-mobility travel with public transport and road infrastructure. Where feasible, CIÉ Group will support the NTA in this integration process.
- The Heuston Station Masterplan, launched in November 2021, includes the provision of substantial new pedestrian and cycling infrastructure and 5,000 cycle parking space.
- The new train carriages ordered as part of the DART+ fleet have dedicated family and bicycle storage areas, and charging facilities for everything from mobile phones to e-bikes and e-scooters.

### Delivering on Policies: Climate Action Plan



## Targets for Greenways and Cycling Infrastructure

- Aim to provide land to Local Authorities to build and sustain Greenway cycling infrastructure on abandoned railway infrastructure in accordance with the 'Strategy for the Future Development of National and Regional Greenways 2018'.

### Achievements and Next Steps

- CIÉ Group been involved in the development of Greenways from Waterford to Dungarvan, in North Kerry and from Mullingar to Athlone. We also plan to facilitate Greenway developments from Waterford to New Ross, Middleton to Youghal and Navan to Kingscourt; and aim to support the development of any future Greenways across the rail network.

**Delivering on Policies: Climate Action Plan, Strategy for the Future Development of National and Regional Greenways 2018**

## RESPONSIBLE CONSUMPTION AND PRODUCTION

**Vision: Support Ireland's transition to a Circular Economy**



## Targets for Developing a Waste-Management Plan

- Develop sustainable construction and development guidelines by 2023.
- Develop a Group-wide circular economy strategy
- Partner with the EPA to gain best practice insight into sustainable construction and development.

### Achievements and Next Steps

- CIÉ Group completed a waste audit in 2020, cataloguing the amount and type of waste produced across the Group in 2019. Based on this data, CIÉ Group is developing a Group-wide CE strategy which is aimed for publication in 2022.
- In 2020, CIÉ Group collected feedback from the EPA on its waste audit and possible next steps. The EPA contributed suggestions for projects and waste management practices which will be integrated into the Group's CE strategy.
- Iarnród Éireann drafted a CE strategy in 2021 and aim to finalise it in 2022.
- The Bus Éireann waste management plan was developed and approved by Bus Éireann senior management in April 2021.
- CIÉ Group is collaborating with partners to create an environmental database commencing in Q1 2022. This will collate and store waste-related data from all CIÉ Group companies and will help track progress and target waste management initiatives across the group.
- CIÉ Group and the operating companies are reviewing methodologies for applying life cycle analysis to assist with calculating environmental savings from CE initiatives.

**Delivering on Policies: Climate Action Plan, Draft Circular Economy Bill**

### Targets for Waste Recycling

- Refine and improve waste recycling practices, in collaboration with the EPA, and work with waste providers to improve segregation strategies on general non-hazardous waste.
- Achieve a 75% recycling rate across the Group by 2025.

### Achievements and Next Steps

- The waste recycled/recovered across each operating company in 2020 was 15%, 69%, and 48% for Bus Éireann, Bus Átha Cliath, and Iarnród Éireann, respectively.
- Bus Éireann’s waste management partner will develop a strategy to increase recycling levels in 2022/2023. There is a planned increase in recycling receptacles at depots and decrease in open general waste skips in 2022. They are also planning on replacing 20% of their general waste bins with recycling bins in 2022.
- Bus Éireann’s Broadstone HQ has a designated “Furniture shop” where old office furniture can be used again or redistributed to other locations.
- Bridgestone Tyres provide vehicle tyres to Bus Éireann. They recycle almost 1,000 of Bus Éireann tyres annually.
- Iarnród Éireann commenced a priority CE project in 2021 which recycles redundant concrete sleepers and non-hazardous redundant ballast.
- Iarnród Éireann has instituted contracts with its waste management partners that state that the reuse of concrete sleepers must be prioritised over disposal of the material.
- Iarnród Éireann has formed partnerships with local groups such as the SMILE Resource Centre that re-purpose packaging waste and other clean waste into construction projects for schools and local organisations.

### Delivering on Policies: Climate Action Plan, Draft Circular Economy Bill

#### CIÉ Group Waste recycled/recovered figure up to June 2021\*

	Bus Éireann	Bus Átha Cliath	Iarnród Éireann
Waste recycled/recovered	8.7%	60%	46%





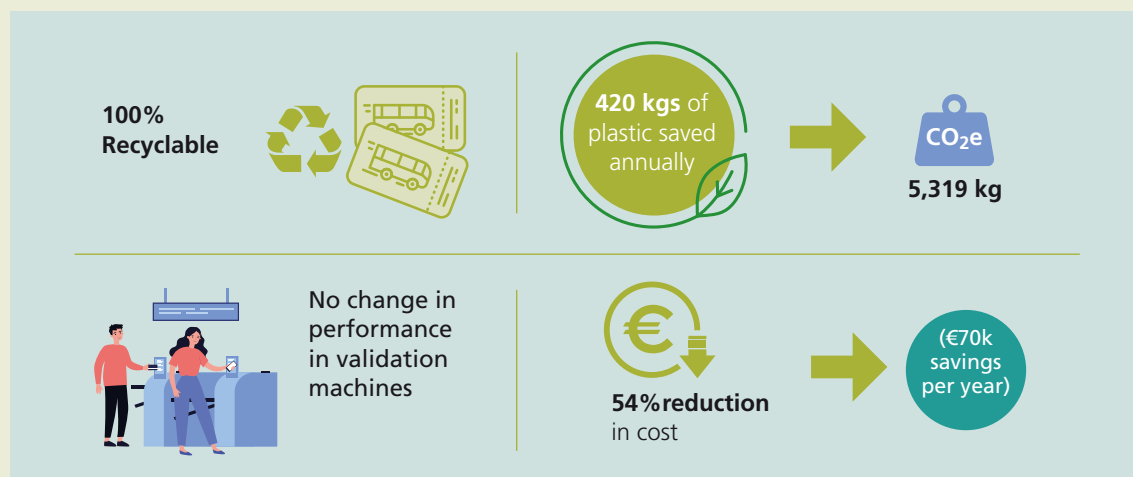
## Targets for Waste Prevention and Reduction

- Achieve a 25% reduction in waste produced Group-wide by 2025.
- Refine and improve waste prevention practices, in collaboration with the EPA, in order to improve performance in initial focus areas of: office waste, site waste and IT end of life waste.
- Achieve a 25% reduction in hazardous waste from train maintenance activities.

### Achievements and Next Steps

- In support of government policy, a ban on SUPs has been introduced across the Group.
- Bus Éireann updated their waste management plan in September 2021 to include activities that contribute to circularity such as re-use of packaging and paper to redistribute mended parts for items such as tickets machines. Bulk heavy duty wooden packaging is reused to distribute spare parts across the depot network.
- Bus Átha Cliath has significantly reduced waste produced by taking on company-wide initiatives. Since 2017 the amount of waste generated has fallen by an average of 10% each year.
- Bus Átha Cliath has implemented a rainwater harvesting scheme in Summerhill to reduce water waste and plans to implement across other sites in 2022.
- A coolant recycling system is to be trialled in 2022 in Iarnród Éireann maintenance depots to allow the reuse of ethylene glycol, thereby reducing resource consumption and eliminating ethylene glycol from the waste stream.
- Iarnród Éireann trialled a switch from plastic-laminated tickets to paper-only tickets. The trial resulted in no change to the validation performance and a 54% cost decrease. Switching entirely to non-laminated tickets saves an average of 420kg of plastic and 5,319kg of CO<sub>2</sub> annually.
- In 2020, an Iarnród Éireann station piloted a switch in cleaning products from single-use bottles to product sachets that are mixed with water in reusable bottles. This pilot project resulted in 91% reduction in plastic use, 93% reduction in chemical storage, minimised risk of spills, and 204 kg CO<sub>2</sub> saved. This initiative is set to roll out to two large stations and nine depots.
- Iarnród Éireann achieved paper waste reduction of 100% from digitalisation of infrastructure, fleet maintenance and renewal management.
- Iarnród Éireann has implemented a filter crusher in the running shed of Inchicore Works to reduce the hazardous waste volume by 85%.

## Delivering on Policies: Climate Action Plan, Draft Circular Economy Bill



### Targets for Behavioural Change Strategy

- Develop a waste-related behavioural change strategy, in partnership with the EPA, to focus on employee and passenger behavioural change.
- Implement a CIÉ Group internal waste-related behavioural change strategy by 2022.

#### Achievements and Next Steps

- CIÉ Group has partnered with GAP Ireland to support behavioural change among staff to target food waste reduction across the Group. Each operating company is developing an individual food waste management strategy with GAP, which will be delivered in staff canteens and coffee stations from the end of 2021 and into 2022.
- A public campaign for waste awareness for rail commuters is planned when normal commuter patterns re-emerge after the pandemic.

### Delivering on Policies: Climate Action Plan, Draft Circular Economy Bill

### Targets for Employee Engagement

- Commence a Green Teams National Programme to seek training and support for environmental champions across the CIÉ Group.
- Partner with GAP to develop a FoodTalks programme targeting food waste reduction across the Group.
- Promote staff engagement on sustainability in the workplace and incorporate learning into preventing food waste and SUPs through initiatives with the EPA.
- With the support of the EPA and the Green Teams National Programme, establish a 'Greening CIÉ' Steering Group.

#### Achievements and Next Steps

- CIÉ Group has partnered with GAP Ireland to target food waste reduction across the Group. Each operating company is developing an individual 'FoodTalks' food waste management strategy with GAP, which will be delivered in staff canteens and coffee stations from the end of 2021 and into 2022. The programme helps caterers to provide more ethical, environmentally aware, and healthier options for their guests; and informs participants on how to make better decisions regarding the food they purchase and consume.
- The CIÉ Group employee materiality survey (section 5.2.2) identified employees that would like to participate in ongoing sustainability initiatives. These employees will be invited to promote and participate in sustainability projects across the group.

### Delivering on Policies: Climate Action Plan, Draft Circular Economy Bill

### Targets for Green Procurement (GPP) Practices

- Review the CIÉ Group procurement processes for inclusion of green and sustainable criteria in procurement.
- Implement a procurement policy that supports the national policy on green procurement standards across the CIÉ Group supply chain by 2022.
- Establish a Group-wide green procurement expert working Group to review existing procedures.

## Achievements and Next Steps

- Bus Átha Cliath:
  - Working with the CIÉ Group to update its procurement policy to ensure it meets best practise on Green Public Procurement.
- Bus Éireann
  - Procurement personnel undertook GPP training in Q3 and Q4 2021. There is a planned roll out of training to technical staff in 2022.
  - A survey on sustainability was issued to Bus Éireann School contractors on “Awareness of green procurement procedures for Public Transport”.
  - Green criteria is integrated into tenders for EV charger infrastructure, Athlone tender specifications and office furniture specifications for the Roxboro Road Phase II project.
- Iarnród Éireann:
  - Targets that 25% of raw materials purchases must come from recycled sources.
  - Major contract specifications will request “green” alternatives and tender evaluation criteria will incorporate weighing that favours these alternatives.
  - Major product contracts will incorporate “packaging reduction” into evaluation weighing.
- A draft Group GPP policy was approved and adopted by the CIÉ Board at the end of 2021.
- CIÉ Group has been in discussions with the OGP on the implementation of the OGP Guidelines on Green Public Procurement.
- CIÉ Group staff attended training on GPP delivered in conjunction with the EPA. The EPA are providing guidance and oversight for GPP to the Group.

**Delivering on Policies: Climate Action Plan, Draft Circular Economy Bill, Green Public Procurement**



## ACCESSIBILITY

**Vision:** Provide a high-quality and equally accessible transportation service to all



### Targets for Accessible Bus Travel

- Commission 42 low-floor coaches to improve accessibility to coach travel on regional towns and cities and inter-urban fleet services.

### Achievements and Next Steps

- Between 2019 to 2021, Bus Éireann commissioned 77 low-floor coaches to improve accessibility to coach travel on regional towns and cities and inter-urban fleet services.
- Accessibility projects were delivered by Bus Éireann in Killarney, Rosslare, Tralee, Waterford, Tramore, Wexford, Ballina and Athlone. Planned for completion in 2022 – Parnell Place (Cork), Ennis, Mullingar, Kilkenny, Macroom, Clonmel and Longford.
- In October 2021, senior leader team members participated in the “Day in my Wheels” challenge. This event provided valuable insights that can be used in our work to make our network as accessible as possible for everyone in our community. The facilities and accessibility officer are undertaking further engagement with disability groups at the end of 2021.
- As a low-cost travel option, public buses provide accessible travel to a wide range of customers. A [2021 KPMG report](#) determined that 82% of workers, 83% of students/young people, and 84% of Free Travel Pass holders strongly agree or agree that Bus Éireann is an essential service to them and their families.

### Delivering on Policies: National Development Plan

### Targets for Accessible Rail Travel

- Deliver, in partnership, accessible infrastructure at bus stations and rail stops, particularly in North-Western locations where there is no rail-link.

### Achievements and Next Steps

- Iarnród Éireann plans to conduct trials of gap fillers and platform humps at Sandymount and Killester stations for easier passenger access.
- The Connolly Station public toilets renovation is complete and includes a new changing places facility for adults with disabilities. The Heuston Station public toilet upgrade and extension design phase is also complete.

### Delivering on Policies: National Development Plan

#### Vehicle Accessibility at June 2021

	Bus Éireann	Bus Átha Cliath	Iarnród Éireann
Percentage Accessibility	100%	100%	100%

## HEALTH AND WELLNESS

**Vision:** Provide holistic and health and wellness support to CIÉ Group employees across the Group



### Targets for an Employee Wellness Strategy

- Conduct a workplace employee wellness audit across the CIÉ Group.
- Design, action and implement a plan deriving from the employee wellness audit, ultimately culminating in a CIÉ Group workplace health and wellbeing strategy.

### Achievements and Next Steps

- Iarnród Éireann and Bus Éireann conducted a 12-week online Life Fit program for shift workers in 2021.
- Iarnród Éireann completed an internal employee health audit in 2021. In response to this audit, several health initiatives and disease prevention programmes have taken place in 2021 with more planned for 2022.
- A Healthy Heart initiative was delivered for Bus Éireann in Broadstone in 2021, and a one-day Health Heart screening was completed in Capwell garage. The Bus Éireann Food Nutrition programme launched in November 2021 in collaboration with CIÉ Group Health Promotion Executive and Broadstone canteen caterer.
- In 2020, an initial study on Drivers and type 2 diabetes risk across the CIÉ Group was carried out by the Diabetes Department and Trinity college with the support of the CIÉ Group Health Promotion Officer. The CIÉ Group are now looking at the setting up of a program that has a positive impact on employee's lifestyle and health while addressing chronic preventable health conditions such as type 2 diabetes.
  - Iarnród Éireann is currently leading and funding this initial program and have a planned study in place for February 2022.
  - The three operating companies will have employee access to the Ignition app for free.
- Bus Átha Cliath are in the initial stages of developing a Health and Wellbeing strategy. The overall aim of the strategy is to outline the process to promote and enable Bus Átha Cliath employees to increase control over and to improve their health. To form part of this strategy, Bus Átha Cliath distributed a survey form to all employees to collect suggestions for an employee wellness program.

### Targets for a Wellhub Programme

- Pilot an I.T. Wellhub programme in specific CIÉ Group Organisations.
- Launch the I.T. Wellhub programme across the CIÉ Group by 2025.

### Achievements and Next Steps

- Bus Átha Cliath have had their own online Wellhub in operation for approximately one year.
- The Wellhub concept and service has been shared with the Iarnród Éireann Wellbeing manager.
- The Wellhub agreed to provide cross company services from the medical department with each company having their own brand and page. The medical department is being relocated to the vaults in Connolly and a new purpose-built department is being constructed.

### Targets for KeepWell Mark Accreditation

- Develop plan to expand the Irish Business and Employers Confederation (IBEC) 'KeepWell Mark' accreditation across the CIÉ Group.
- Achieve KeepWell Mark accreditation' across all CIÉ Group operations by 2025.

### Achievements and Next Steps

- The CIÉ Holding Company has received KeepWell Mark accreditation.
- Bus Átha Cliath has received KeepWell Mark accreditation.
- Iarnród Éireann are interested in the proposed government Healthy Ireland workplace funded accreditation model that has yet to be launched and are also researching other accreditation bodies.
- Bus Éireann is aiming to review their strategy and one of their recommendations will be to apply for the KeepWell Mark accreditation'.

### Targets for a FoodTalks Programme

- Partner with Global Action Plan Ireland (GAP) GAP to target food waste reduction and healthy eating across the Group.
- CIÉ Group has partnered with Global Action Plan (GAP) GAP Ireland to target food waste reduction and healthy eating across the Group. Each operating company is developing an individual food waste and healthy eating management strategy with GAP, which will be delivered in staff canteens and coffee stations from the end of 2021 and into 2022. This campaign will be implemented in conjunction with the Drivers and type 2 diabetes programme.

**Delivering on Policies: A Waste Action Plan for a Circular Economy 2020-2025**



## GENDER EQUALITY AND EQUAL OPPORTUNITY

**Vision:** Strive for gender equality and equal opportunity across the Group



### Targets for Female Management Opportunities

- Provide female employees with opportunities for leadership at all levels of decision-making within the CIÉ Group.
- Achieve gender parity in terms of representation at senior management and board level by 2030.

#### Achievements and Next Steps

- As of June 2021, the board had 36% female members.
- Two female senior managers were appointed to the Bus Éireann Chief Safety and Sustainability Officer's Department in 2021.
- Measures to achieve target of gender parity representation at senior management and board level by 2030 have been implemented.

### Targets for Female Bus Drivers and Craftworkers

- Build on the success of the recruitment drive of female drivers with further increases in female driver numbers.
- Increase female bus drivers in Bus Átha Cliath from 4% to 8% of the bus driver population.
- Increase female bus drivers in Bus Éireann from 4% to 15% by 2030.
- Continue Bus Éireann's female driver and craftworkers recruitment campaign initiated in 2019.

#### Achievements and Next Steps

- Following a Women Drivers Recruitment Day in 2019 and a follow-up campaign across social media, radio and local channels, the drive for greater gender balance among drivers resulted in eight new female drivers joining Bus Éireann in 2020.
- Two female mechanical apprentices joined Bus Éireann in 2021.

## Targets for Diversity & Inclusion

- The CIÉ Group works to foster diversity in the workforce and prioritise equal access to services for our customer base.
- The Group is committed to creating an environment where employees and customers are treated with dignity and respect and where diversity is welcomed and valued. We seek to ensure inclusive conditions for all staff, that nurtures a productive, open and effective culture, and that our staff reflects the diversity of our population and customer base.
- Aim to create an environment in which everyone can achieve their full potential and where a broad range of individual abilities, talents and perspectives are valued and supported.

## Achievements and Next Steps

- The range of Work Life Balance initiatives available to staff in the Group are kept under ongoing review.
- The Group participates with a variety of external organisations in developing its practices and procedures, including membership of the Diversity in the Workplace Working Group in IBEC.
- Bus Éireann's commitment to Diversity and Inclusion continued in 2020 with employees from over 40 countries among their workforces.
- Iarnród Éireann aim to facilitate workplace participation for all, and particularly amongst under-represented groups in their workplace and others, through education and industry partnerships, including Open Doors.
- Bus Átha Cliath 'Diversity and Inclusion' Strategy reflects the company's continuing commitment to equality, diversity and non-discrimination for employees, customers and the wider community.
- Bus Átha Cliath is one of the founding Irish signatories of the "Irish Diversity Charter" and has provided support to Dublin's Annual LGBTQ+ Pride Parade for the last ten years, with the last two years having rainbow flag wrapped buses take to the city streets during Pride month.





## COMMUNITY ENGAGEMENT

**Vision:** Support the development and enhancement of communities and cities



### Targets for Community Engagement

- Develop CIÉ Group programmes for community engagement across different themes such as wellbeing, environmental education and safety.

### Achievements and Next Steps

- CIÉ Group works to promote access to higher education and have actively engaged in a work experience programme that benefits transition year students from the local community. Working with the Northeast Inner City, this programme is a government-endorsed social regeneration initiative with the goal of effecting lasting, positive change in the area, and are in initial stages of rolling out programme to a school in Galway.
- Bus Átha Cliath have been supporting grassroots voluntary and community groups across the GDA through the Community Spirit Awards since 2004. To date almost 2,000 groups have received funding from Bus Átha Cliath which has helped many worthwhile causes in communities across the GDA.
- Bus Átha Cliath are working with Business in the Community on a number of programmes.
- Iarnród Éireann is working to achieve the Business Working Responsibly Mark, accredited through Business in the Community, and are implementing a community policy to support communities through initiatives such as education, arts and sports, and the environment.
- Bus Éireann continued its efforts to reach out to its communities and engaged directly with 10 community and voluntary organisations or charities throughout the first half of the year.
- Bus Éireann are collaborating with Phibsboro Tidy Towns on a community garden with a biodiversity focus in Broadstone depot.

### Delivering on Policies: Climate Action Plan



## HERITAGE

Vision: Protect and promote access to our historic assets

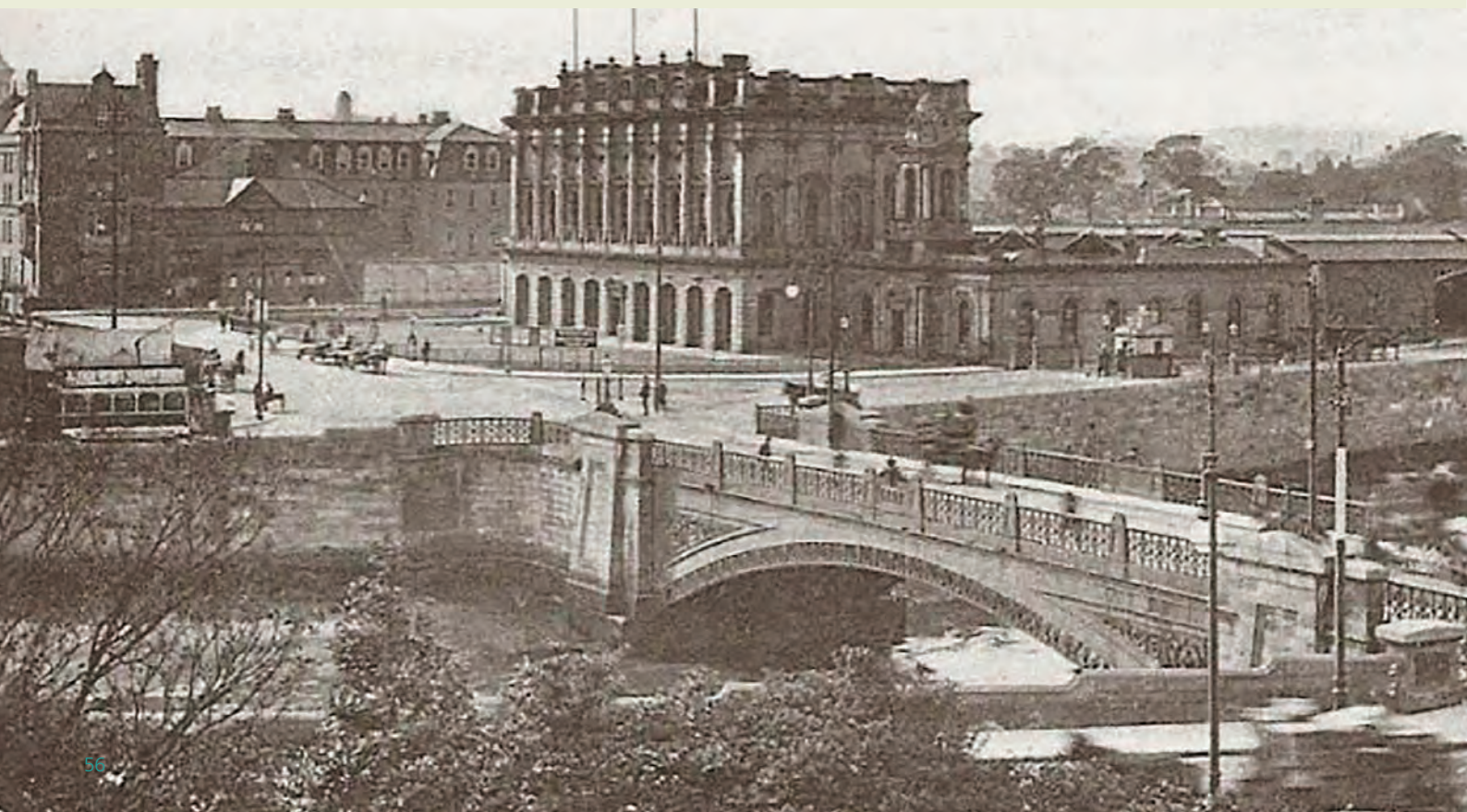


### Targets for Historic Records

- Adhere to conservation requirements whilst successfully digitising the historic CIÉ Group archive collection and allowing public access.
- Conduct a scoping exercise to assess the conservation requirements for storing and displaying the archive.

### Achievements and Next Steps

- CIÉ Group has an extensive record archive located mainly at Heuston Station. The archive scoping project has been completed and the recommendations noted. As an initial specific project, it has been decided to digitise all old Annual Reports since 1884. Once completed, it is intended that these will be made available on the CIÉ Group website for the public to view. It is expected that this project will be completed in 2022.
- In September 2021, Bus Éireann applied for planning permission for major renovations to the internal area of Busáras and repurposing of derelict Eblana theatre.

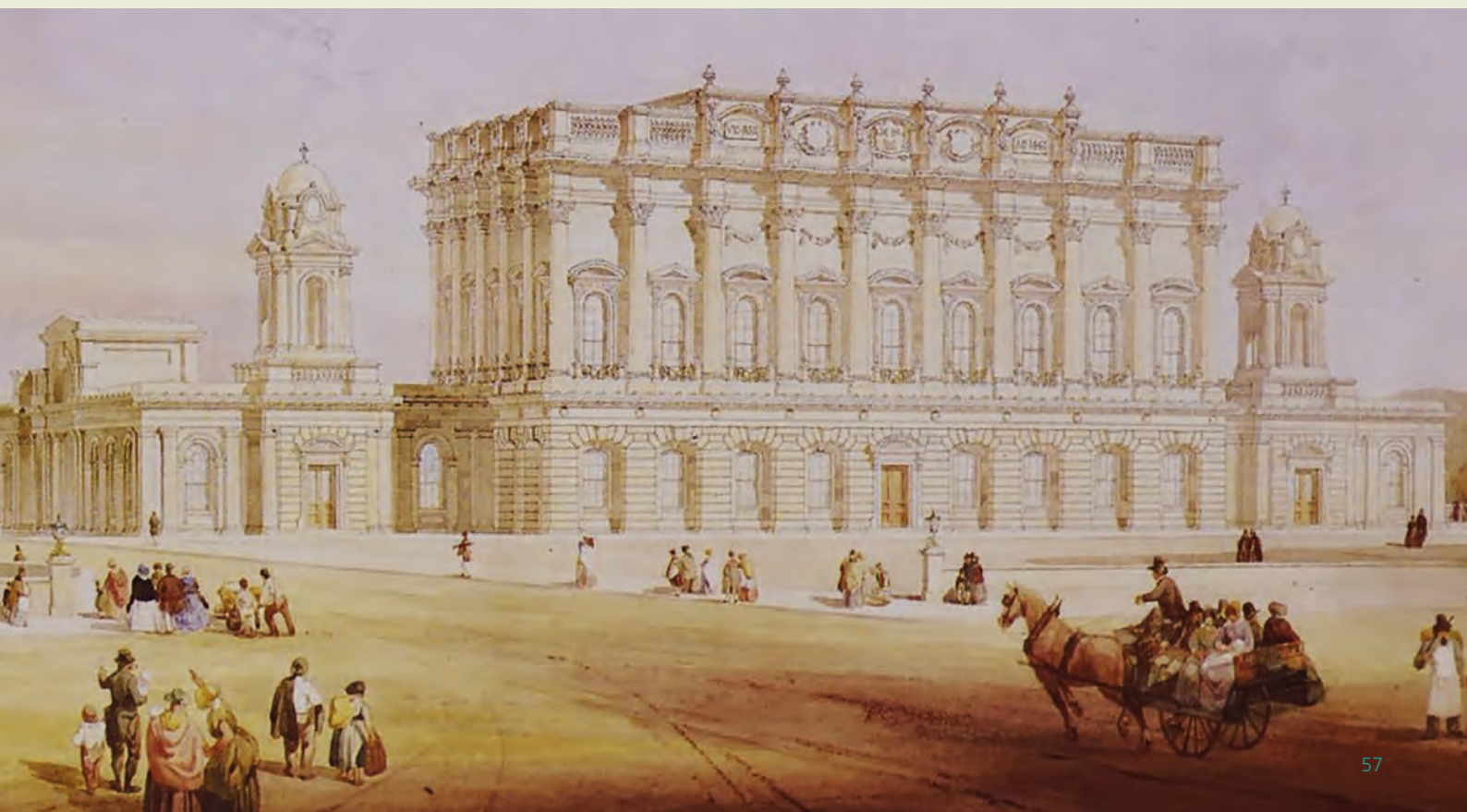


### Targets for Heritage Sites

- Develop knowledge and best practice approaches to maintaining structural heritage sites, which a view to the potential retrofitting of such sites through pilot investigations.
- Enhance and protect our heritage through the sustainable restoration and refurbishment of historical stations and workshops.

### Achievements and Next Steps

- CIÉ Group collaborated with the Farranfore Development Association to facilitate the construction of a community park and associated car parking at Farranfore Railway Park.
- CIÉ Group's pipeline project of reforming the Old Station House in Ballyglunin is also determined to achieve all works in an environmentally and archaeologically sensitive manner. The reformation of the Station House will provide a heritage site for communities and tourists to revisit the history surrounding Ballyglunin Station House.

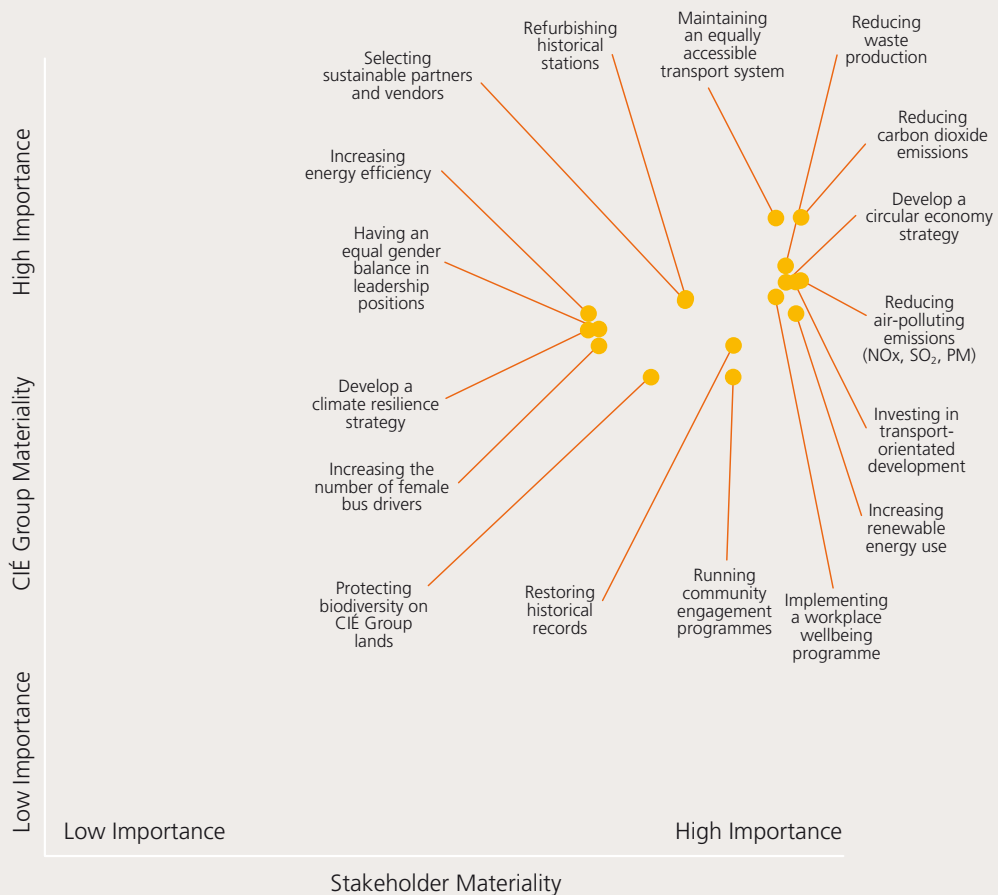


### 5.2.2 Stakeholder Engagement and Materiality Assessment

Stakeholder engagement is a key element of strategy development and allows organisations to better understand stakeholder expectations on sustainability and build an internal consensus on key sustainability priorities. In 2021, CIÉ Group distributed the first sustainability stakeholder survey to employees across the operating companies to raise awareness about the Group’s emphasis on sustainability and collect feedback on the Group’s strategy and prioritisation of initiatives. The survey was sent to over 10,000 employees and returned a wide variety of responses.

The results of the survey were collated and plotted on the below materiality matrix, which indicates that the highest-priority actions for CIÉ Group and its employees are reducing CO<sub>2</sub> and air polluting emissions, and delivering transport orientated development. Of the eight actions that received the highest priority rating from employees, five were related to environmental quality. Comments from the survey also included valuable suggestions on new initiatives to include in the strategy and ideas on how to make additional progress on our sustainability goals. As the final question, employees were asked to state their interest in contributing to CIÉ Group’s sustainability efforts. The respondents that answered affirmatively will be contacted in the future about the opportunities available to participate in CIÉ Group’s sustainability initiatives.

#### Employee Materiality Matrix – Materiality Assessment



CIÉ Group also engaged with external stakeholders to encourage discussion and gather feedback on CIÉ Group’s sustainability efforts and how they can align with stakeholder expectations and activities.

Feedback on our materiality assessment was given by our key partners through a survey and meetings to discuss priorities for focusing our strategy. We also engage in regular discussion with our partners on collaborating to achieve common goals. Below is a summary of the results from our initial round of stakeholder engagement.

Stakeholder Discussion Results		
Stakeholder	Means of Engagement	Key issues identified
National Transport Agency	Survey and direct feedback	Transitioning the bus and rail fleets to low and zero emissions technology; ongoing collaboration with the NTA to ensure alignment with the NTA's strategic objectives.
Office of Government Procurement	Survey and direct feedback	Circular economy; green public procurement; planning to allow for greater passenger numbers; transport accessibility.
Department of Transport	Direct feedback	Circular economy; CO <sub>2</sub> emissions; alternative fuels; air quality; delivering the CAP; promoting modal shift.
NewEra	Survey and direct feedback	Setting sustainability targets; ensuring Board-level governance of sustainability objectives and disclosure; aligning with CDP and TCFD best practice; delivering public sector emission reduction and energy efficiency targets; circular economy; and green public procurement; achieving 40% gender parity at Board level per the <a href="#">Annex to the Code on Gender Balance, Diversity and Inclusion</a> .
Environmental Protection Agency	Survey and ongoing discussion	Delivering the Climate Action Plan, implementing the EPA Green Public Procurement Guidelines and Circular Economy Programme; food and construction waste reduction; alignment with the <a href="#">EU Green Deal Circular Economy Action Plan 2020</a> ; raising awareness and prompting behavioural change for waste reduction.
University College Dublin	Ongoing discussion	Creating partnerships across the Group for sustainable transport. Research led planning for decarbonisation of transport and energy.
Dublin City University	Ongoing discussion	Hydrogen economy, alternative fuels, HyLight programme
CIÉ Group Employees	Survey	CO <sub>2</sub> emissions; accessibility; air quality; transport-orientated development; circular economy.

### 5.3 Scenario Analysis

#### Scenario Analysis – Overview

Scenario analysis is a process of examining and evaluating possible events or scenarios that could take place in the future and predicting the various feasible results or possible outcomes. By adopting the TCFD recommendations to carry out scenario planning analysis, we are stress testing our strategy, risks and opportunities against possible impacts of global warming.

The TCFD recommends that organisations include scenario analysis into strategic planning and/or enterprise risk management processes by:

- Identifying and defining a range of scenarios, including a 2 degree Celsius scenario, that provide a reasonable diversity of potential future climate states.

- Evaluating the potential resiliency of their strategic plans to the range of scenarios.
- Using this assessment, identify options for increasing the organisation's strategic and business resiliency to plausible climate-related risks and opportunities through adjustments to strategic and financial plans.

#### Example of Scenario Analysis – Rail

The coastal routes of the Iarnród Éireann network, due to their close proximity to the sea are a prime example of infrastructure that will need to be safeguarded from the adverse effects of climate change. Routes well known for their picturesque sea views such as the DART's coastal track along Dublin Bay and the Dublin to Rosslare line that includes the eye-catching passage through the waterfront in Wexford town will all need to be adapted to protect against rising sea levels and associated extreme weather events.

CIÉ Group is prioritising the protection of infrastructure from climate related conditions and to ensuring a consistent, safe service in the face of climate disruption. The preparatory work for an integrated plan for climate adaptation is underway, with action being taken to protect the 60km of coastal network. In the longer-term, this work will culminate in the publication of a CIÉ Group Climate Adaptation Plan that will guide the implementation of a programme of resilience strategies on our most vulnerable assets to climate related damage.

#### CIÉ Group Scenario Analysis

CIÉ Group is planning on completing Scenario Analysis in 2022, as part of the TCFD reporting. Various tools and external supports will be utilised to complete the scenario analysis, such as the [CDP scenario analysis tool](#) and the [International Energy Agency's "World Energy Model"](#). The scenario analysis will feed into the Group's climate risks, opportunities and sustainability strategy.

## 5.4 Risks and Opportunities

The sustainability risks facing the CIÉ Group include environmental, social and governance risks, as highlighted by the World Economic Forum. The impact of the pandemic and shift in political ambition for climate action observed during 2020 demonstrates the speed and magnitude of how the risk universe can change. Risks can be mitigated by a forward-looking, cross-organisational sustainability approach.

Moreover, climate change and climate targets not only pose risks but also presents opportunities for companies. CIÉ Group is in a position to deliver climate targets and exploit climate and commercial opportunities and has identified multiple opportunities based on the review and management of climate related risks.

The scenario analysis that is planned for 2022 will feed into the risk register and opportunity management for CIÉ Group. The findings of this analysis will be worked through and shared with the risk team and operating companies, and the Group's risks and opportunities will be updated and managed accordingly.

See below for breakdown of CIÉ Group's risk management process and climate related opportunities.

### 5.4.1 CIÉ Group Climate Risks

#### Risk Identification Process

Each operating company carries out their risk assessment process on an individual basis. Risk identification is the responsibility of the Heads of Department relying upon the resources of their departments so that all risks originating within, or impacting upon, the department's objectives are identified.

If a climate-related risk is identified, it is assigned a risk owner. Risk ownership is aligned with business ownership so the head of that department will own the risk. The risk owner will then determine the frequency with which a risk should be assessed and is recorded on the Risk Management System (OpRiskControl). Individual risks are then assessed based on the frequency identified by the risk owner. All risks are reported and discussed at a monthly management meeting.

If a risk is assessed as being a Principal Risk it is then escalated to the CIÉ Executive Team, CIÉ Board Audit and Risk Committee and the CIÉ Board. This escalation also includes any risks deemed Not Tolerable, in Breach of Risk Appetite or changes to Principal Risk Ratings.

### CIÉ Group Risk Register

CIÉ Holding Company and each operating company hold a central risk register where climate related risks that have been identified are documented. CIÉ Holding Company currently have no climate related risks listed on the Risk register. However, there are climate related risks listed on the “Emerging risk” register for CIÉ Holding Company, which are risks that may impact the organisation over the next five years.

As per TCFD best practice guidelines, each risk should be listed with its impact, likelihood, time frame, financial impact and management mitigating actions. The risk team in CIÉ Holding Company are currently starting to work with the operating companies to expand each of these risks to include these categories and are aiming to have a climate risk process in place for the TCFD reporting in 2022. This climate risk management process will be reviewed and enhanced on a continuous basis as the TCFD reporting and climate risks become more aligned and integrated.

### Risk Management and Review

The CIÉ Group Board Audit and Risk Committee (ARC) regularly reviews the principal risks of the CIÉ Group of Companies and makes recommendations to the Board of CIÉ Group 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 CIÉ board meetings. A sustainability update is also provided to the CIÉ Board as a fixed agenda item at all meetings.

Moreover, the SSG meets monthly to discuss climate-related risks and opportunities and progress projects that are in place across the Group. The SSG members represent leaders in each of the operating companies in positions where climate related issues are central to their operations. As part of CIÉ Group’s sustainability governance structure, the SSG identifies and communicates emerging sustainability risks including:

Sustainability Risk Category	Sustainability Risk
Transitional risk and efficient allocation of resources	Technology
	Policy and Legal
	Market
	Reputation
Physical Risks	Acute
	Chronic

### 5.4.2 Climate Related Financial Opportunities

Achieving climate goals not only poses commercial risks but also presents opportunities in emerging sectors. Drawing on these strengths ensures strategic responsiveness in a dynamic and high-risk environment. CIÉ Group has identified a range of potential financial opportunities stemming from climate impacts and mitigation strategies.

The TCFD framework provides a classification system for climate-related opportunities and categorises them according to whether they stem from resource efficiency, energy source, products and services, markets or resilience.

These opportunities are described below according to their potential financial impacts and CIÉ Group’s response to maximise the benefits. They will be passed onto the SAG for regular review and will be updated as needed once CIÉ Group completes their initial scenario analysis.

<b>Resource Efficiency</b>	<b>Climate-Related Opportunity: Move to more efficient buildings</b>	
	<b>Potential Financial Impacts</b>	<b>CIÉ Group Response</b>
	<ul style="list-style-type: none"> <li>• Reduced operational costs for heating buildings.</li> <li>• Increased value of the Group's assets by having highly rated energy efficient buildings in its portfolio.</li> </ul>	CIÉ Group is currently assessing options for retrofitting buildings in its portfolio.
	<b>Climate-Related Opportunity: Increasing fuel-use efficiency</b>	
<b>Energy Source</b>	<b>Potential Financial Impacts</b>	<b>CIÉ Group Response</b>
	<ul style="list-style-type: none"> <li>• Reduced operational costs of diesel fuel for buses and rail.</li> <li>• Reduced exposure to future diesel price increases.</li> <li>• Lower direct CO<sub>2</sub> emissions and therefore less exposure to changes in the price of carbon, which is expected to increase through the proposed <a href="#">EU Emissions Trading Scheme II for Road Transport and Buildings</a>.</li> <li>• Return on investment in low-emission technology.</li> </ul>	CIÉ Group has introduced a variety of initiatives to decarbonise the Bus Éireann, Bus Átha Cliath, and Iarnród Éireann fleets. CIÉ Group is trialling the use of three double-deck hydrogen FCEVs, the first in Ireland. Hybrid electric buses were added to the Bus Átha Cliath and Bus Éireann fleets in 2021, with additional hybrid fleet expansion planned from 2022-onwards. The EV fleet expansion is planned in accordance with the Clean Vehicles Directive, which targets a 45% low-emissions fleet by 2025 and a 65% zero-emissions fleet by 2030. CIÉ Group has also initiated an eco-driving program for drivers, aimed at promoting driving skills that reduce fuel consumption.
	<b>Climate-Related Opportunity: On-site renewable energy generation</b>	
	<ul style="list-style-type: none"> <li>• Reduced electricity costs, which may become more volatile in the future as electricity suppliers adjust to fossil fuel price increases.</li> <li>• Opportunity for additional revenue through the upcoming <a href="#">Government Micro-Generation Support Scheme</a>, which will provide a framework for micro-producers to sell any excess electricity to the grid.</li> <li>• Reputational benefits through emissions reductions and visible energy-generation technology, resulting in increased demand for services.</li> </ul>	The CIÉ Group is a large user of energy, having purchased approximately 68,500 MWh of electricity in 2020. This electricity use was associated with the production of over 20,200 thousand tonnes of CO <sub>2</sub> counted as Scope 2 emissions for CIÉ Group. The Group has set a target of delivering a reduction of 51% CO <sub>2</sub> savings by 2030, in line with the national climate targets of the Climate Action Plan 2021. On-site generation of renewable electricity is being explored by Iarnród Éireann and Bus Éireann, and Bus Átha Cliath has installed photo-voltaic panels on the roof of the Phibsboro Depot with the view of extending this pilot project to additional sites.



<b>Energy Source continued</b>	<b>Climate-Related Opportunity: Use of biofuels as a less carbon-intensive fuel source</b>	
	<p><b>Potential Financial Impacts</b></p> <ul style="list-style-type: none"> <li>• Reduced expenditure in the form of biofuel buyout and/or bio cert charges, which are expected to increase under the Biofuels Obligation Scheme, Renewable Fuels Policy Statement and Climate Action Plan 2021.</li> <li>• Reduced exposure to changes in the price of carbon.</li> </ul>	<p><b>CIÉ Group Response</b></p> <p>Bus Éireann, Bus Átha Cliath, and Iarnród Éireann use approximately 45 million litres of diesel per year, 47% of which is consumed by Iarnród Éireann. Iarnród Éireann is currently trialling a 7% blend of biodiesel in its intercity railcars to ensure engine-fuel compatibility before rolling out the use of biodiesel on a wider basis.</p> <p>The Group are also working with suppliers on increasing the blend of biofuels on all current and future stock of buses and trains and are working on the required storage of the new blended fuel.</p>
<b>Products and Services</b>	<b>Climate-Related Opportunity: Expansion of low-emission transport services</b>	
	<p><b>Potential Financial Impacts</b></p> <ul style="list-style-type: none"> <li>• Increased revenue through shift in demand for lower-emissions forms of transport caused by increasing public climate awareness.</li> </ul>	<p><b>CIÉ Group Response</b></p> <p>With the NTA, CIÉ Group is expanding its low and zero-emissions offering in accordance with the Clean Vehicles Directive, with procurement of hybrid electric and low emission vehicles and potential opportunities for hydrogen FCEV.</p> <p>With the NTA, the CIÉ Group is expanding services, the DART+ extension will triple and electrify, the length of the existing network and is supported by the NDP and the CAP.</p>
	<b>Climate-Related Opportunity: Transport-Orientated Development</b>	
	<p><b>Financial impacts</b></p> <ul style="list-style-type: none"> <li>• Increased demand for services led by convenient access to public transport services through TOD planning.</li> <li>• Increased revenue from tenants occupying the residential and commercial units built as part of TOD.</li> <li>• Increased diversification of assets.</li> </ul>	<p><b>CIÉ Group Response</b></p> <p>CIÉ Group has set a goal of building compact, connected, thriving cities with its TOD strategy. CIÉ Group has launched five Masterplans across its main stations, integrating active travel infrastructure, public transport, and residential and retail property. This strategy supports the objectives of the NDP for compact growth and planned spatial planning.</p>
	<b>Climate-Related Opportunity: Sustainable tourism</b>	
<p><b>Potential Financial Impacts</b></p> <ul style="list-style-type: none"> <li>• Increased revenue through demand for more sustainable tourism services.</li> <li>• Improved competitive position to reflect shifting consumer preferences towards sustainability and climate awareness.</li> </ul>	<p><b>CIÉ Group Response</b></p> <p>CIÉ Group will work with CIÉ Tours to develop a comprehensive CIÉ Tours sustainability strategy, ensuring the environmental, social, and economic sustainability of its operations.</p>	

<b>Markets</b>	<b>Climate-Related Opportunity: Government support of public transport</b>	
	<b>Potential Financial Impacts</b> <ul style="list-style-type: none"> <li>Increased demand for passenger bus travel through the NTA BusConnects program, which will attract new and more frequent users.</li> <li>Increased demand for services supported by government funding and policy measures such as the NDP and the CAP, which sets a target of 125,000 additional public transport and active travel journeys per day by 2025, and 500,000 additional per day by 2030.</li> </ul>	<b>CIÉ Group Response</b> <p>CIÉ Group is working closely with the NTA, DoT, EPA, and other public sector bodies to support the planned increase of public transport use and is increasing the size of its fleet to account for greater passenger numbers.</p>
<b>Resilience</b>	<b>Climate-Related Opportunity: Climate adaptation assessment and planning</b>	
	<b>Potential Financial Impacts</b> <ul style="list-style-type: none"> <li>Increased asset values through resilience planning and ensuring infrastructure will withstand climate impacts.</li> <li>Increased ability to operate under various conditions (e.g., rising sea-levels, storms, freezing weather)</li> </ul>	<b>CIÉ Group Response</b> <p>CIÉ Group has commenced a Coastal Infrastructure Protection Programme to assess the climate risk of infrastructure against impacts of coastal erosion and flooding.</p> <p>CIÉ Group will also include the use of scenario planning tools to better assess climate-related risks from 2022 onward.</p>



## 5.5 Metrics and Targets

The CIÉ Group operating companies measure a range of KPIs to track progress towards our sustainability targets and ambitions. These KPIs are divided into economic, social and environmental segments, reflecting our three-pillar strategy.

Please note, figures for 2021 are up to the end of June 2021.



### Pillar One: Economic

Generating Economic Value					
Connecting People	2021*	2020	2019	2018	2017
Passenger journeys (millions)	23	51	89	84	79
Passenger journeys (% increase/decrease)		-42%	7%	6%	-2%
Customer satisfaction (passenger focus score) (%)	85%	87%	84%	89%	92%
Number of buses in operation	1072	1047	1,138	1,148	1,171
Sustainable Finance					
Total Revenue (€) (Million)	163.1	284.8	366.5	337.6	309.3
Revenue Growth (%)	+21%	-22%	+9%	+8%	-1%
EBITDA (€m)	0.9	6.1	8.8	9.7	2.9
Net Profit/(Deficit) (€m)	(0.77)	(9.2)	2.3	(6.4)	(23.7)

### Pillar Two: Social

Sustainable cities and communities					
Accessibility	2021*	2020	2019	2018	2017
Fully accessible managed stations/stops (%)	100%	90%	75%	65%	65%
Community Engagement					
Partner organisations/beneficiaries directly reached	10	22	13	12	10
No. of students transported under the School Transport Scheme per school day	100,347	114,000	120,800	117,800	115,500
No. of students transported per school day with special education needs	14,477	14,500	14,300	13,400	11,700

<b>Wellbeing, Gender Equality and Inclusivity in our Workforce</b>					
<b>Investing in our workforce</b>	<b>2021*</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
Number of Employees	2,766	2,735	2,727	2,562	2,446
<b>Safety</b>					
Employee accident rate per 100 employees	0.58	0.63	1.32	1.76	2.04
<b>Gender equality</b>					
Female employees (%)	10%	10%	9%	9%	9%
Women in Senior Management roles (%)	45%	38%	38%	25%	25%
Female Board members (%)	29%	29%	29%	29%	29%
<b>Diversity</b>					
Non-Irish employees (%)	14%	13%	13%	15%	14%

### Pillar Three: Environmental

<b>Climate Action and Air Quality</b>					
<b>Greenhouse Gas (GHG) Emissions</b>	<b>2021*</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
Scope 1 – Direct emissions (thousand tCO <sub>2</sub> e)	33.57	71.48	76.54	73.01	67.94
Scope 2 – Indirect emissions from electricity purchased (thousand tCO <sub>2</sub> e)	0.7	1.4	1.72	1.97	2.21
Scope 3 – Indirect other (thousand tCO <sub>2</sub> e)**	0.1	0.1	0.32	–	–
Total emissions (thousand tCO <sub>2</sub> e)	34.37	72.98	78.58	74.98	70.15
<b>Energy Efficiency</b>					
Diesel use (thousand litres of diesel)	12,674	25,908	30,226	28,491	26,605
Diesel use (MWh)	128,881	262,457	305,572	288,370	269,192
Electricity total (MWh)	2,331	4,761	5,073	5,235	5,040
Gas usage (MWh)	3,868	5,856	7,196	6,101	4,263
Total Energy Consumption (MWh)	135,080	273,074	317,841	299,706	278,495
Energy Performance Indicator (EnPI = MWh/ASKm)	61				

Climate Action and Air Quality					
Fleet Proportions	2021*	2020	2019	2018	2017
Service fleet with Euro VI standard engine (%)	63%	55%	53%	43%	34%
Service fleet with hybrid/ Fuel cell engine (%)	4.1%	0%	0%	0%	0%
Service fleet that are fully powered by electricity (%)	0%	0%	0%	0%	0%
Fleet that are gas powered (%)	0%	0%	0%	0%	0%
Average age of bus fleet (years)	9	10.7	10.7	n/a	n/a

\*\* Scope 3 emissions are calculated based on emissions factors of waste figures. These figures do not include water waste, non-hazardous waste, or staff travel.

Responsible Consumption and Production					
Waste management	2021*	2020	2019	2018	2017
Total waste generated % increase/decrease*	-45%	-14.7%	+1%	+2%	-1%
Waste recycled/recovered (% of waste collected to be recycled)	8.7%	26.61%	16%	14%	13%

\* Up to end of June 2021.



## Pillar One: Economic

Generating Economic Value					
Connecting People	2021*	2020	2019	2018	2017
Passenger journeys (millions)	4.8	17.9	50.2	47.9	45.5
Passenger journeys (% increase)	-54.3%	-64.2%	5.1%	5.3%	6.3%
Sustainable Finance					
Total Revenue	49.8	143.7	297.4	280.9	264.8
Revenue Growth (%)	-65.3%	-51.7%	5.87%	6.1%	8.3%
EBITDA (€m)	4.5	14.4	21.1	19.3	25.1
Net Deficit (€m)	-0.6	2.5	2.6	(1.1)	(1.1)

## Pillar Two: Social

Sustainable cities and communities					
Community Engagement	2021*	2020	2019	2018	2017
Partner organisations/ beneficiaries directly reached	15	33	12	–	–

Wellbeing, Gender Equality and Inclusivity in our Workforce					
Investing in our employees	2021*	2020	2019	2018	2017
Number of Employees	4231	4135	4009	3831	3761

Safety					
Employee lost time accidents – reportable	24	35	55	47	53
Gender equality					
Female employees (%)	11%	11%	11%	10%	10%
Women in senior management roles (%)	20%	19%	17%	–	–
Female Board members (%)	57%	57%	57%	50%	40%

## Pillar Three: Environmental

Climate Action and Air Quality					
Greenhouse Gas (GHG) Emissions	2021*	2020	2019	2018	2017
Transport emissions ('000 tCO <sub>2</sub> e) Scope 1	39.75	93.01	115.7	118.0	113.7
Indirect emissions from electricity purchased ('000 tCO <sub>2</sub> e) Scope 2	6.84	17.4	25.1	24.7	28.0
Thermal (Gas) – ('000 tCO <sub>2</sub> e) Scope 1	1.00	1.74	1.7	1.7	1.5
Scope 3 – Indirect other (thousand tCO <sub>2</sub> e)**	0.05	0.08	0.14	–	–
Total emissions ('000 tCO <sub>2</sub> e)	47.64	112.23	142.64	144.4	143.2
TCO <sub>2</sub> e/'000 train km	–	7.61	8.17	8.85	8.86

<b>Energy Efficiency</b>	<b>2021*</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
Train Energy consumption MWh (1 litre = 10.165 kWh)	160,371	375,233	460,113	445,500	438,600
Road diesel use (MWh)	7,082	14,644	14,676	15,005	15,527
Electricity for traction (MWh)	9,139	23,235	27,695	26,222	25,240
Electricity for fixed assets (MWh)	20,191	35,804	35,791	37,031	36,816
Electricity total (MWh)	29,330	59,039	63,486	63,253	62,056
Gas usage (MWh)	5,727	9,979	9,278	9,032	8,600
Total Energy Consumption (MWh)	202,511	458,895	547,553	532,789	524,783
<b>Fleet Proportions</b>					
Fleet with hybrid engine (%)	4%	4%	0%	0%	0%
Fleet that are fully powered by electricity (%) (4 car sets – DART)	15%	15%	15%	15%	15%
Fleet that are gas powered (%)	0%	0%	0%	0%	0%

Please note, the emissions figures for Iarnród Éireann differ from what was reported in the 2020 CIÉ Group Sustainability Report due to a difference in the metric used to calculate emissions. This has now been rectified and the standardised metric for calculation will be used in emissions reporting in future reports.

\*\* Scope 3 emissions are calculated based on emissions factors of waste figures. These figures do not include water waste or staff travel.

<b>Responsible Consumption and Production</b>					
<b>Waste management</b>	<b>2021*</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
Total waste generated (tonnes)	1117	2644	3079	3246	3216
Total waste generated (% increase/decrease)	–	-14%	-5%	1%	–
Waste recycled/recovered (% of waste collected to be recycled)	46%	48%	53%	54%	58%
Number of waste upcycling projects completed with community groups	0	0	5	2	0

\* Up to end of June 2021.



### Pillar One: Economic

Generating Economic Value					
Connecting People	2021*	2020	2019	2018	2017
Passenger journeys (million)	25	69	142	143	139
Passenger journeys (% increase)	–	-51%	5%	2.9%	8.1%
Passenger kilometres (million)	201	555	1,147	979	1,115
Customer satisfaction (passenger focus score)	–	–	74%	78%	82%
Number of buses in operation	991	994	1,016	1,010	1,016
Sustainable Finance					
Total Revenue (€) (Million)	–	125.1	263.0	263.3	251
Revenue Growth (%)	–	-52%	0%	1.8%	1.5%

### Pillar Two: Social

Sustainable cities and communities					
Community Engagement	2021*	2020	2019	2018	2017
Number of Groups awarded 'Community Spirit' funding grants	65	–	88	85	85
No. of Community Stakeholder Meetings held	36	–	27	23	18
Accessibility					
Fully accessible stations/stops (%)	100%	100%	100%	100%	100%

Wellbeing, Gender Equality and Inclusivity in our Workforce					
Investing in our workforce	2021*	2020	2019	2018	2017
Number of Employees	3,603	3,573	3,552	3,432	3,469
Gender equality					
Female employees (%)	7.5%	7%	7%	7%	7%
Women in Senior Management roles (%)	22%	22%	22%	22%	22%
Female Board members (%)	44%	44%	44%	44%	44%
Diversity					
Non-Irish employees (%)	–	21%	19%	19%	19%



**Pillar Three: Environmental**

<b>Climate Action and Air Quality</b>					
<b>Greenhouse Gas (GHG) Emissions</b>	<b>2021*</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
Scope 1 – Direct emissions (thousand tCO <sub>2</sub> e)	27.8	62.3	66.9	72.3	73.6
Scope 2 – Indirect emissions from electricity purchased (thousand tCO <sub>2</sub> e)	0.57	1.1	1.3	1.4	1.7
Scope 3 – Indirect other (thousand tCO <sub>2</sub> e)**	0.0194	0.0389	0.137	0.082	0.065
Total emissions (thousand tCO <sub>2</sub> e)	28.39	63.44	68.34	73.78	75.37
Total number of cars off the road	31,328	86,711	160,000	179,000	–
<b>Energy Efficiency</b>					
Bus/train Diesel (thousand litres)	9,926	22,439	25,029	26,759	27,605
Diesel use (MWh)	100,898	228,092	254,420	272,005	280,605
Electricity consumption for traction (MWh)	0	0	0	0	0
Electricity for fixed assets (MWh)	2,243	4,422	4,576	4,462	4,521
Electricity total (MWh)	2,243	4,422	4,576	4,462	4,521
Gas usage (MWh)	5,836	10,019	10,785	11,111	10,084
<b>Fleet Proportions</b>					
Fleet with Euro IV standard engine (%)	15%	14%	14%	14%	14%
Fleet with Euro V standard engine (%)	7%	7%	15%	15%	15%
Fleet with Euro VI standard engine (%)	58%	57%	56%	46%	36%
Fleet with hybrid engine (%)	6%	0.88%	0.88%	0%	0%
Fleet that are fully powered by electricity (%)	0%	0%	0%	0%	0%
Fleet that are gas powered (%)	0%	0%	0%	0%	0%
Average age of bus fleet (years)	7	7	7	6	6

\*\* Scope 3 emissions are calculated based on emissions factors. The 2020 and 2021 figures do not include staff travel due to COVID.

Responsible Consumption and Production					
Waste management	2021*	2020	2019	2018	2017
Total waste generated % increase/decrease	-	-11%	-5%	15%	-11%
Waste recycled (tonnes)	247	563	627	658	564
Waste recycled/recovered (% of waste collected to be recycled)	60%	69%	64%	72%	75%

\* Up to end of June 2021.



## 6 Next Steps and Plans for 2022

Over the course of 2020 and the first half of 2021, CIÉ Group has achieved many milestones in regard to its sustainability goals and targets and the SDGs. The Group plans to continue with the progress made over the past year and will use this momentum to achieve further sustainability goals over the course of 2022.

The main objective for the Group next year will be to carry out a gap analysis against current strategy and policy, market and regulatory changes. We aim to implement the recommendations and targets as outlined in the CAP 2021 to achieve the carbon emissions reductions of 51% by 2030. Along with the CAP targets, we also intend on developing a plan to commence adoption and measure of science-based targets in 2022. Science-based targets provide a well-defined pathway for companies to reduce their greenhouse gas emissions in line with what the latest climate science states is necessary to limit global warming to 1.5 degrees Celsius, as per the Paris Climate Agreement.

Various initiatives are already under way in order to meet the targets set out in the CAP, and the Group aims to build on these initiatives in order to gain the emissions and efficiency targets required. The Group will continue working through and achieving its ISO certifications for energy and environmental management next year and will continue working towards the targets set out in the CAP and EU Clean Vehicles Directive to ensure decarbonisation of the Group's fleet and delivery of the CAP emissions targets for the transport sector. The Group recognises the key role that alternative fuels will play in supporting our emissions reductions targets, and it will continue to support the development of hydrogen in transport to enable its role in the decarbonisation of energy and transport. The Group will also assess options and develop targeted pilot projects to review the feasibility of implementing biofuels across Group services.

Transport orientated development will also be a priority for CIÉ Group going into 2022, and we will continue supporting the delivery of the government Housing for All policy by advocating for TOD and sustainable urban growth as we implement the TOD Masterplans and incorporate transport and urban housing infrastructure across the various CIÉ Group properties.

The CIÉ Group is steeped in history and is the custodian of a rich and important corporate and national heritage. We plan to promote our historical assets and support our heritage projects. CIÉ Group's archival Annual Reports, dating back to 1884, will be digitised and displayed online for the public to access. Bus Éireann has also applied for planning permission to renovate and repurpose the Eblana Theatre in Busáras, which has been out of use since 1995.

CIÉ Group will continue focusing on its waste reduction targets of 25% and waste recycling target of 75% by developing a Group-wide circular economy strategy. Additionally, we will implement Green Public Procurement practices, and review methodologies for using life cycle analysis to calculate environmental costs and savings across the Group. In order to facilitate these targets and comply with the aims and objectives of the CAP, employee Green Teams and sustainability training will also be rolled out to CIÉ Group employees in 2022.

CIÉ Group will also aim to commence and prepare for the various sustainability reporting standards that are being implemented in the EU and Ireland, such as the TCFD and CSRD frameworks, the EU Taxonomy regulations and the reporting required under the CAP as dictated by NewEra, the SEAI and the EPA. At the start of 2022, CIÉ Group will commence developing a reporting system to streamline, facilitate and automate a solution for metrics and reporting for sustainability disclosures. The TCFD framework recommends that companies conduct a scenario analysis as best practice for sustainability reporting, and we will commence this in 2022 using the latest available tools. The findings of this exercise will inform our management response to the climate-related risks and opportunities faced by the CIÉ Group. We will also incorporate the feedback from the 2021 CDP review into our strategy, and we aim to implement their suggestions across our sustainability targets, governance, reporting initiatives.

We conducted a detailed stakeholder materiality survey with external stakeholders at the end of 2021, and we will analyse and review the feedback and apply it to our strategy development in 2022. We will also develop, analyse and interpret results from UNEP FI Corporate Impact Analysis tool, and will continue working with and building relationships with partners across the transport sector to achieve the goals as set out in the current policy framework.

The CIÉ Group sees opportunity in the emerging market of sustainable tourism. In 2022, CIÉ Tours intends to set out a vision for its sustainability strategy, defining its position in the market and its goals and objectives for sustainability. The development of the strategy will be supported by the CIÉ Group.

CIÉ Group will continue supporting our people throughout the COVID 19 pandemic and will also continue to support diversity and inclusion initiatives across the Group over the coming year. The health and wellbeing of our staff will also remain a priority, with a cross company wellbeing pilot initiative being implemented which will provide online health coaching and educational support to participants.

The CIÉ Group's Sustainability Strategy is a dynamic one. We have many initiatives planned and in progress to help us achieve our economic, environment and social objectives as set out in our 2020 sustainability strategy. We are collaborating as a Group to ensure our sustainability goals and targets are achieved and will continue to work towards our targets over the course of 2022.

See below further details of areas of focus for CIÉ Group over the coming years:

Biodiversity
Continue to advocate for biodiversity projects across the Group and support the implementation of pollinator plans and biodiversity investment.
Climate Action
Each operating company to release and implement their Sustainability Strategies and continue to work towards the SDGs.
Climate Action Plan 2021 recommendations to be reviewed and operational plans to deliver targets set out and implemented.
The Group will continue working through and achieving its ISO Certifications for Energy and Environmental management.
Continue working towards the targets set out in the CAP and EU Clean Vehicles directive to ensure decarbonisation of the Group's fleet.
CIÉ Group will continue to develop, analyse and interpret results from UNEP FI Corporate Impact Analysis Tool.
CIÉ Group to commence and prepare for SEAI, NewEra, TCFD, CSRD and EU Taxonomy and Government reporting regulatory reporting standards.
CIÉ Group to develop a data and reporting system to streamline and facilitate and create a solution for metrics and reporting across the operating companies.
Support the development of hydrogen in transport to enable its role in decarbonisation of energy and transport.
Assess options for implementing biofuels and renewable fuels across Group services.
Develop plan to commence adoption and measure of Science Based Targets in 2022.
Continue working with and building relationships with partners across the transport sector to achieve the goals as set out in the current policy framework.
Complete stakeholder materiality survey with external stakeholders and apply stakeholder feedback to strategy development in 2022.
CIÉ Tours to develop a sustainability strategy in 2022.

**Climate Resilience**

Scenario Analysis for risk and opportunity management to be completed across CIÉ Group in 2022.

**Transport-Orientated Development**

Continue to advocate for transport-orientated development and plan and implement the TOD Masterplans across the country.

**Responsible Consumption and Production**

Circular economy strategy to be created and implemented across the Group.

Green public procurement and life cycle analysis to be implemented across the Group.

Employee Green Team and sustainability training to be rolled out to CIÉ Group employees.

**Gender Equality and Equal Opportunity**

Continue supporting Diversity and Inclusion initiatives across the Group.

**Health and Wellbeing**

Implement a cross-company wellbeing pilot initiative, which will provide online health coaching and educational support to participants.

**Heritage**

Support restoration and repurposing of Heritage assets across the Group.



## 7 Appendix: Policy Instruments

CIÉ Group’s Sustainability Strategy aims to follow and integrate the most up-to-date government policy. The below policies inform the development of the CIÉ Group Sustainability Strategy.

Policy Instrument	Description and strategy context
<b>EU Taxonomy Regulation 2021</b>	The Taxonomy Regulation establishes an EU framework for classification of sustainable economic activities. Companies that fall under the scope of the NFRD/CRSD will have to disclose to what extent the activities that they carry out meet the criteria set out in the EU Taxonomy for six environmental objectives. Taxonomy Disclosures are applicable from 1 January 2022 for the environmental objectives of climate change mitigation and climate change adaptation, and 1 January 2023 for the remaining objectives.
<b>EU Corporate Sustainability Reporting Directive 2021</b>	The EU CSRD replaces the existing Non-Financial Reporting Directive (NFRD). The CSRD enhances the scope of the NFRD requires around 49,000 companies across Europe to disclose information on business model and strategy, policies, risks, targets and due diligence regarding environmental and social matters. A set of EU Sustainability Reporting Standards will be released under the CSRD and due for adoption by October 2022.
<b>TCFD Good Practice Handbook</b>	The Climate Disclosure Standards Board published a guidance on best practices for disclosing under the TCFD reporting framework. These practices include: <ul style="list-style-type: none"> <li>• Communicating transparent progress</li> <li>• Including climate-related risks and opportunities in financial reporting rather than solely in sustainability reporting</li> <li>• Report on planned actions taken to reach targets, not simply the targets themselves.</li> <li>• Report on the 11 recommendations included in the four main thematic areas of the TCFD recommendations: governance, strategy, risk management, and metrics and targets.</li> </ul>
<b>Climate Action and Low Carbon Development (Amendment) Bill 2021</b>	The Act requires the Government to “pursue and achieve the transition to a climate resilient and climate-neutral economy by the end of 2050”. It provides the following targets and actions: <ul style="list-style-type: none"> <li>• The objective of climate neutrality by 2050;</li> <li>• An interim target of a 51% reduction in GHG emissions by 2030, relative to a baseline of 2018.</li> </ul>
<b>Circular Economy Bill 2021</b>	The Circular Economy forms the national policy framework for Ireland’s transition to a circular economy. Among other action items, the Bill states that the EPA will establish a Circular Economy Programme and National Food Loss Prevention Roadmap.
<b>Biofuels Obligation Scheme 2010</b>	The BOS came into effect in 2010 and mandates fuel suppliers to include a percentage of biofuels (generally gasoline and motor diesel) in their sales. The CAP includes a provision for biofuel blends to be increased on a yearly basis with targets in place until 2030. The next increase in the rate of supply of biofuels blended in diesel and petrol will take effect from 1 January 2022, and there will be a statutory consultation for regulations to be made giving effect to this change. In 2019, the recast Clean Energy Directive was extended to cover the rail sector, so it is expected that the scope of the BOS will also change to include blend limits for rail.

Policy Instrument	Description and strategy context
<p><b>Renewable fuels for transport policy statement</b></p>	<p>On 25th November the Renewable Fuels Policy Statement was published and raises targets for the use of biofuels across the transport sector. The Statement sets out the policy direction for the use of biofuels and renewable fuels in the transport sector by 2030. The statement include:</p> <ul style="list-style-type: none"> <li>• Increases in the level of renewables relating to petrol and diesel – 10% blend of ethanol in petrol (E10) and a 12% blend of biodiesel in diesel (B12) respectively, by 2025.</li> <li>• Examines availability of Used Cooking Oil and certain Animal Fats with a view to seeking a higher limit for biofuels made from these feedstocks (waste oil – considered sustainable)</li> <li>• Limits on certain biofuels – crop based biofuels for example (considered less sustainable due to impact on biodiversity, but purest form of HVO).</li> <li>• Enforcement of Carbon Intensity Requirements – penalties for non-compliance.</li> <li>• Expand the biofuel obligation to the rail sector from 2024.</li> <li>• Expands to incentivise Alternative Fuels, including hydrogen and green electricity.</li> </ul>
<p><b>Guidance on Green Public Procurement 2021</b></p>	<p>Per the 2019 Climate Action Bill, all procurement using public funds will need to include green criteria by 2023. The EPA published a guidance on green public procurement to outline the processes that should be taken to source goods, services or works with a reduced environmental impact. Criteria is provided for the ten priority sectors which account for the largest environmental and economic impacts of public procurement. GPP criteria include mandatory 'core' criteria that reflect legislative mandates, and optional 'comprehensive' criteria that can be used to source products and services with a higher environmental performance. For the transport sector, 'core' criteria are designed to meet the targets of the Clean Vehicles Directive.</p>
<p><b>Clean and Energy Efficient Road Transport Vehicles (Amendment) Regulations 2021</b></p>	<p>The Clean Vehicles Regulation sets targets for procurement of clean vehicles by increasing the share of low and zero-emission vehicles purchased by public bodies.</p> <ul style="list-style-type: none"> <li>• Ireland adopted the maximum target for procurement of clean vehicles. From 2021-2025, the target is 38.5% of procured cars and light trucks, and 45% of buses to be low-emission vehicles.</li> <li>• From 2026-2030, the target is 38.5% of procured cars and light trucks, and 65% of buses to be zero-emission vehicles.</li> </ul>
<p><b>Housing for All 2021</b></p>	<p>Housing for All is a government-issued plan to improve the national housing system and deliver more homes of all types. Actions outlined in the plan include:</p> <ul style="list-style-type: none"> <li>• Supply of an average of 33,000 new homes per year from 2021 to 2030;</li> <li>• Increased funding for development of public lands for affordable and social housing in city and town centres.</li> </ul>
<p><b>EU Fit for 55 Climate Package</b></p>	<p>The EU Fit for 55 Package is a set of interconnected proposals aiming towards a reduction of greenhouse gas emission by 55% by 2030 from 1990 levels. The package includes the following initiatives:</p> <ul style="list-style-type: none"> <li>• Lowering the cap of the EU Emissions Trading System (EU ETS) and establishing a separate emission trading system for road transport and building to become operational in 2025;</li> <li>• Proposed amendment to the Renewable Energy Directive to target 40% of gross energy consumption from renewable sources by 2030;</li> <li>• Proposed amendment to the Energy Efficiency Directive to increase the target to reduce energy consumption by 2030 to 39% relative to 2007;</li> </ul>

Policy Instrument	Description and strategy context
<p><b>National Development Plan 2021</b></p>	<p>The National Development Plan (NDP) commits €165 billion for spending on capital projects from 2021 to 2030. Targets of the NDP include: Sustainable Mobility. The transport sector will receive €35 billion in funding over 2021-2030.</p> <ul style="list-style-type: none"> <li>• €12 in funding for public transport, including €6 billion for roads projects and €4 billion for walking and cycling infrastructure over 2021-2030.</li> <li>• €360 million a year for 'active transport', including 1,000 km of walking and cycling infrastructure by 2025, and investment in Greenways.</li> <li>• BusConnects rolled out in 5 cities by 2025.</li> <li>• Transition of the bus fleet to lower emission vehicles.</li> </ul> <p>Transition to a Climate-Neutral and Climate-Resilient Society</p> <ul style="list-style-type: none"> <li>• A Microgeneration Support Scheme will incentivise independent electricity production by providing payments for any electricity exported to the grid.</li> <li>• The carbon tax will gradually increase to reach €100/tonne by 2030.</li> </ul>
<p><b>Climate Action Plan 2021</b></p>	<ul style="list-style-type: none"> <li>• The Climate Action Plan 2021 is the Government roadmap for how to reduce emissions by 51% by 2030 and reach net zero emissions by 2050. Targets and measures of the CAP include:</li> <li>• Electricity: 62-81% reduction in emissions by 2030</li> <li>• Buildings: 44-56% reduction in emissions by 2030 <ul style="list-style-type: none"> <li>◦ Includes targets to retrofit homes and install renewable energy heat sources in residential buildings.</li> </ul> </li> <li>• Transport: 42-50% reduction in emissions by 2030 <ul style="list-style-type: none"> <li>◦ 125,000 additional public transport/active travel journeys per day by 2025, and 500,000 additional journeys daily by 2030.</li> <li>◦ All replacements for bus and commuter rail vehicles to be low/zero carbon by 2030.</li> <li>◦ 300 EV buses by 2025, 1,500 EV buses by 2030.</li> <li>◦ Rollout of rural public transport through Connecting Ireland.</li> <li>◦ Increase biodiesel blend-rates incrementally until 2030.</li> <li>◦ It is being considered to extend the scope of the Biofuels Obligation Scheme to include green hydrogen.</li> <li>◦ Expand electrified rail services.</li> </ul> </li> <li>• Circular Economy <ul style="list-style-type: none"> <li>◦ Reduce food waste by 50%</li> <li>◦ Ensure all plastic packaging is reusable or recyclable by 2030</li> </ul> </li> </ul>





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