



Iarnród Éireann
Irish Rail



#SUSTAINABILITYE

IARNRÓD ÉIREANN SUSTAINABILITY STRATEGY 2021-2030

Our sustainability commitments

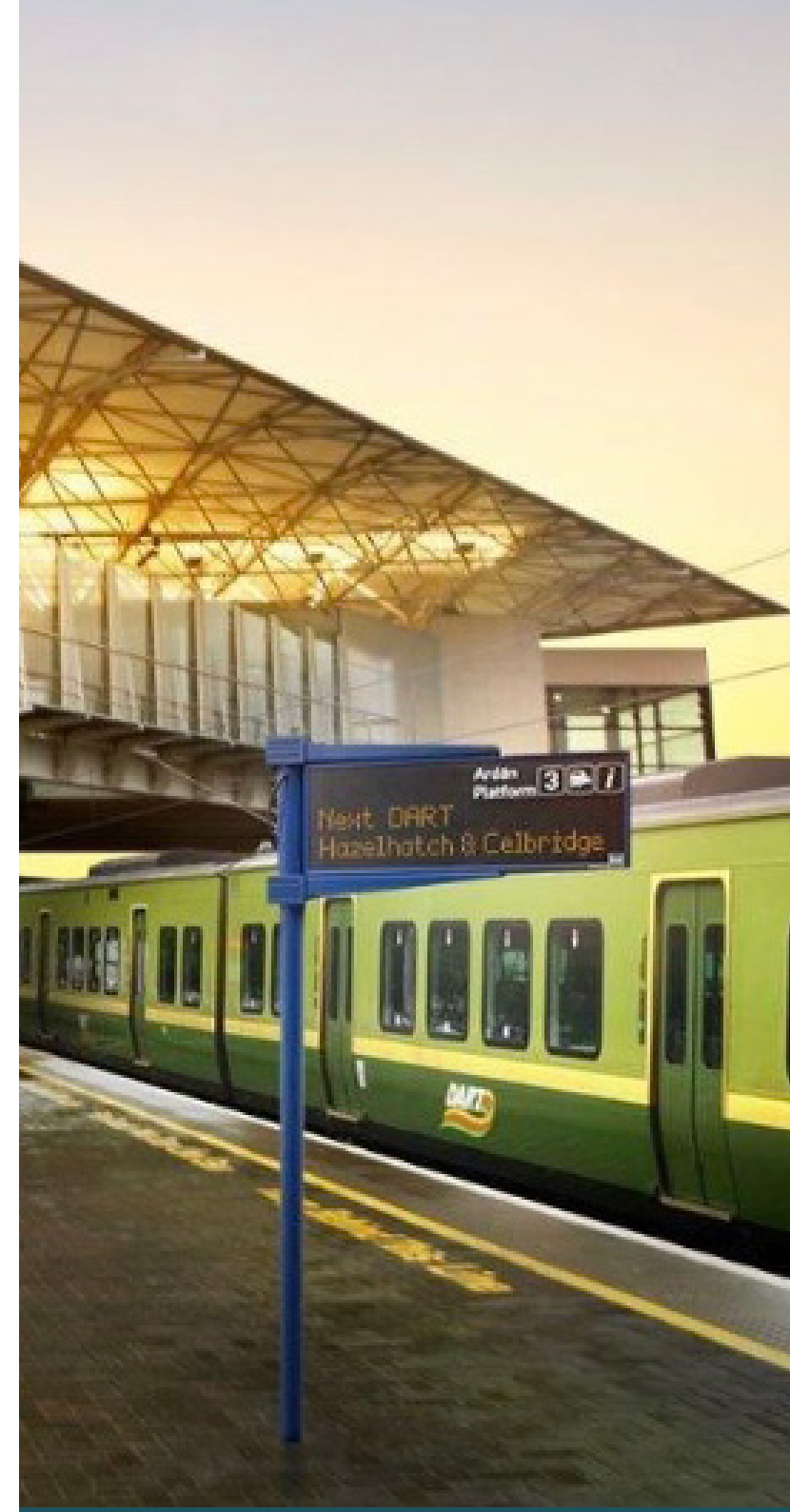
Iarnród Éireann is set to be the backbone of a public transport network that prioritises sustainable mobility for our citizens, visitors, communities and companies.

However, we in Iarnród Éireann place sustainability not only at the heart of the service and infrastructure we deliver, but also at the heart of how we deliver them.

A sustainable national transport system, with our railway network playing a pivotal role, raises the quality of life by:



Our team of over 4,100 colleagues are working every day to achieve this, in what we do today, and in how we build for the future.



Our sustainability commitments (continued)

We are working to advance environmental sustainability:

- decarbonising transport, ensuring climate change resilience,
- reducing our impact on the natural environment, and
- proactively protecting and enhancing biodiversity.

Our actions align with and support the United Nation's Sustainable Development Goals (SDGs), Ireland's Climate Action Plan, National Development Plan 2021-2030, the European Green Deal, the CIÉ Group's Sustainability Strategy and the EU's "Fit for 55" initiative.

We are working to advance social sustainability:

- to be an employer that champions diversity and inclusion, and provides rewarding careers to our people to ensure we are an employer of choice;
- to be a good neighbour to those who live and work beside our network;
- to be transparent in what we do;
- to ensure social inclusion, helping to enhance the communities we serve, and crucially ensuring our services are accessible to all who wish to travel with us; and
- to ensure safety for all – our customers, our employees, and the general public.

We are working to advance economic sustainability:

- by building that network and delivering those services, and integrating with other modes including active travel to ensure sustainable mobility is available to all;
- ensuring our supply chain and procurement practices are sustainable;
- to support sustainable regional development, and
- be a leader in facilitating transport-oriented development and strengthening the role of rail in freight transport, and building international connectivity as port authority for Rosslare Europort.

The goals are clear, as are the challenges. We will report to our customers and our stakeholders annually on our progress.

From platform to boardroom, sustainability is a journey to which we are committed.

Jim Meade

Chief Executive



Our sustainability goals and commitments for 2030



80 million
passenger journeys
up from the pre-COVID high
of 50.1 million



51% reduction
in carbon emissions



70% recycling
of all waste - general
and construction



Pollinator plans
in place at all stations
and 100 acres of
native planting on
non-operational lands

Doubling of number
of **female employees**



Trebling of
electrified network



**Intercity railcar
fleet** achieve
Stage V emissions



100%
electric or hybrid
road vehicles



100%
of traction and
utility electricity from
renewable sources

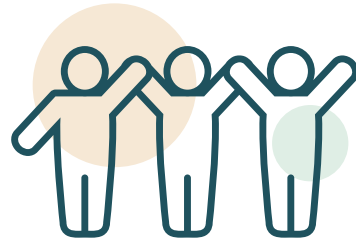
**Near Zero
Energy Building**
standard in all
new buildings, and
upgrades of 140
existing buildings to
minimum BER B



Environmental

Work with partners to:

- ▶ Lead the transition to a low emissions transport network/achieve long-term reductions in carbon emissions through modal shift, improved energy efficiency, and renewable power sources
- ▶ Ensure the protection of natural capital and railway infrastructure at risk of climate-related disruption
- ▶ Transform our business to minimise impacts on and maximise benefits to the environment, protecting our environment and enhancing biodiversity; and prioritising circular economy initiatives and waste management



Social

Foster a diverse and inclusive society by ensuring access and opportunity for all

- ▶ Customer-driven, putting customers at the heart of the railway, and rail in reach of all people
- ▶ Be safe for our customers, our employees, and other citizens and property
- ▶ Be an employer of choice for a diverse workforce, whose wellbeing is supported at all times
- ▶ Enhancing the lives of the communities we serve and the communities we neighbour
- ▶ Being open and accountable in our decision making, and report on our progress towards our sustainability goals



Economic

Providing a high-quality public transport service that tackles congestion, stimulates economic activity, and connects communities, businesses and organisations

- ▶ Optimising the railway, maximising its capability, capacity and efficiency
- ▶ Providing an end-to-end journey, working together with all transport modes, including active travel, to provide an integrated, accessible and affordable transport service
- ▶ Supporting a vibrant, sustainable economy through our services and through supporting transport orientated development, as well as sustainable regional development

A journey we have been on

Sustainability is a journey we have been on in Iarnród Éireann, enhancing our services while reducing our emissions and other environmental impacts; building a workplace of choice; and ensuring Ireland's railways are amongst the safest in Europe.

Workplace of choice



Ireland's third best employer

Sunday Independent / Statista Ireland's Best Employers research, 2021

Safety



The only national rail network in Europe with zero passenger or workforce fatalities 2011-2019

Railway Safety Standards Board safety performance reports

Transport emissions between rail and road

28g
per passenger km



RAIL

102g
per passenger km



CAR

16g
per freight tonne km



RAIL

140g
per freight tonne km



ROAD

Emissions 2006-2019



↑ 6%
Millions of train kms operated



↑ 28%
Millions of passenger kms



↓ 28.8%
Total energy use



↓ 43%
Energy use per passenger km

Environment



Decarbonising transport and reducing energy consumption

Target to reduce carbon emissions by 51% by 2030 through:

- ▷ Building our infrastructure to enable modal shift
- ▷ All new train orders will be at a minimum diesel-electric hybrid, with DART+ fleet set to be battery – electric / electric only, and Dublin- Belfast Enterprise through PEACE PLUS funding and Cork commuter fleets set to be bi-mode (diesel & electric)
- ▷ Under the DART+ programme, we will treble the electrification of our network, and ensure up to 80% of journeys are powered by renewable electricity by the end of the decade
- ▷ Existing InterCity railcar fleet will be upgraded to automatic gearbox and hybrid operations at Stage V emissions to reduce fuel consumption by 33%
- ▷ Subject to feasibility, repower 29000 Commuter fleet, and upgrade emission reduction technology on all Commuter fleets
- ▷ All diesel rail fleets to operate on 7% Biofuels (B7)
- ▷ All new buildings delivered to, and up to 140 existing buildings upgraded to, nearly Zero Energy Building (nZEB) standard
- ▷ Power Purchasing Agreements in place, subject to business case, for depots and large station roofs
- ▷ 100% electrified or hybrid road vehicles and construction plant, and supporting migration to EV taxis by installing rapid chargers at stations
- ▷ Other energy efficiency measures include roll out of LED lighting, low energy lifts / escalators and replacement of oil boilers
- ▷ Phased delivery of Rail Freight Strategy to treble freight volumes by 2030



Hybrid case study

Iarnród Éireann is on target to be one of the first railway companies in the world to introduce Hybrid Drive technology to an existing diesel-powered fleet, with the commencement of the first phase of its programme to convert its existing 234-carriage Intercity railcar fleet to hybrid operation.

The three-phase process is targeting 20% fuel consumption and emission reduction targets in its first phase, with up to 33% targeted upon completion, representing 76 million litres of fuel annually, 23,000 tonnes of CO₂, 860 tonnes of NO_x and 45 tonnes of PM per year. Customers will also benefit from reduced noise in operation, and enhanced station environments.

Climate change resilience

As Infrastructure Manager for the national rail network, we have seen the impact of our changing climate directly: more flood incidents, more coastal defence requirements, severe storms including winter storms impacting our services.

We are committed to building resilience in our network and services to protect our ability to provide our essential public services against the growing challenges of climate change.

- ▶ Deliver the **Coastal Railway Infrastructure Protection Programme**, to secure the future of the Dublin to Rosslare line
- ▶ Working with partner agencies, deliver Ballycar, Co Clare, and other **flood relief works**
- ▶ Deliver the Infrastructure Manager Multi-Annual Contract (IMMAC) annual maintenance and renewal work programme, including continuously enhance our dynamic preventative strategy for **key infrastructure**, to prevent climate impacts on 3,700 embankment and cutting earth structures
- ▶ Deliver a dynamic weather impact preventative strategy, including annual review of **weather management protocols**, with updated mitigation measures for developing climate issues, and their impact on infrastructure, fleet and our ability to provide services to our customers
- ▶ Working with infrastructure partners and Government departments on a **partnership approach** to climate change adaptation
- ▶ Deliver the full **Cork route rehabilitation project**
- ▶ Deliver a **station upgrade and painting programme** across all stations, and at a seven-year cycle



Protecting vulnerable assets – case study

Almost 45% of the Dublin to Rosslare route lies directly adjacent to the coastline leaving several sections highly susceptible to accelerated erosion. A long term climate resilience coastal protection strategy is being developed for the vulnerable sections of the route to be delivered in partnership with other stakeholders including local authorities. Hard measures include seawalls / breakwaters and soft measures include beach nourishment. Due to the environmental sensitivity of the coastline and its unique habitats and natural processes, all adaptation options will be appropriately assessed under the habitats directive as part of the planning process.

Environmental management and circular economy

Iarnród Éireann recognises that we have a responsibility to reduce our environmental impact by operating and improving the business in a way that minimises the negative impacts and maximises the benefits of the railway to the environment.

We will promote initiatives which minimise resource usage including water, reduce activity impact, and incorporate green procurement principles through our supply chain.

We will focus on air and noise pollution, and address sites with historical contamination issues proactively.



Achieve **70%** recycling for general waste in IÉ



Environmental Management System (EMS) in place for all IÉ divisions



At least **70%** of construction & demolition (C&D) waste streams to be recycled or reused directly



25% of raw material purchases to come from recycled sources



Major contract specifications to request green alternatives, and tender evaluation criteria to incorporate weighting that favours these alternatives



All major IÉ product contracts to incorporate **reduction in packaging** into evaluation weighting



All contracts for **concrete sleeper disposal** to prioritise reuse of material



New **ventilation systems** proposed at Connolly and Limerick Stations



Develop **air and noise** pollution mitigation measures for key sites



100% digitalisation of infrastructure and fleet maintenance and renewal management

Protecting and enhancing biodiversity

All human activity impacts on the environment – the challenge facing us as a society is to ensure that impact is a positive one, and minimise negative impacts.

In Ireland, 85% of our protected habitats are in poor or inadequate condition, and over 50% are declining while 14% of species are considered to be endangered. A total of 190 locations along our network interface or lie within designated sites of European and national biodiversity importance, and a total of over 4,000 kilometres of boundary is managed by Iarnród Éireann. It is clear that, in Iarnród Éireann, we must take the opportunity to enhance our environment and biodiversity, and to change our operations to reduce negative impacts.

- ▶ Over 30 stations now have **pollinator plans**, with our goal to introduce such plans to all 145 stations on the network currently, and future new stations

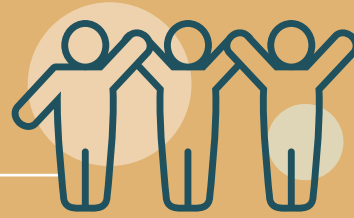


- ▶ With a programme to **plant 12,000 trees** already underway at the first Public Lands Native Planting Scheme site in the country, at Carrick-on-Shannon, we aim to plant a total of at least 100 acres at non-operational sites by 2030

- ▶ Equip our Infrastructure teams with the **resources and knowledge to protect biodiversity**, with guidelines for employees produced, and vegetation management standards reviewed
- ▶ Move to 100% **non-glyphosate herbicides** in treating infrastructure



Social sustainability



In fostering a diverse and inclusive society by ensuring access and opportunity for all, we commit to a customer-driven culture, putting safety first, and ensuring rail is accessible to all who wish to use it.

We will be an employer of choice, by respecting, encouraging and developing a diverse workforce, supporting its wellbeing and actively considering and addressing the challenges of the future labour market.

We will be a good neighbour, both in our impacts on the communities we serve, and in fostering improvements in the social fabric of those communities, through engagement and partnerships which enhance quality of life. This will include community initiatives in the spheres of mental health, arts and education, and protecting the heritage of which we are custodians.

We will be open, accountable and transparent in our decision making, and in our engagement with stakeholders.



Customers at the heart of our business

Our customer-driven culture will ensure the needs of all customers are prioritised, including:

- ▶ Achieve all **punctuality and reliability targets** agreed with NTA under Public Service Obligation target
- ▶ Working to achieve **independent access to our services** for mobility-impaired customers, ensuring accessibility is prioritised in new fleets, stations and systems. We will consult with mobility impaired customers and representative bodies on all proposals which relate to their travel. Specifically we will:
 - Ensure new fleet orders allow independent access
 - Complete the introduction of Customer Service Officers on Intercity to allow notice-free travel
 - Complete the lift renewal and replacement programme in 52 stations, and equip a further 20 stations with new lifts and expand lift-call facilities where required
 - Equip six major stations with Changing Places facilities and ensure toilets are accessible in all stations where they are available
- ▶ Deliver **transformed customer information systems** through a new integrated strategy, ensuring timely accurate information in station, including wayfinding, on board, and when planning travel
- ▶ Delivering a **safe railway** for everyone – customers, employees, and public – through targeted safety investment including train control and protection
- ▶ Integrate **Mobility as a Service** principles into station development, ensuring active and sustainable modes are integrated and prioritised
- ▶ Reduce year-on-year incidents of **anti-social behaviour**, working with communities and Gardaí



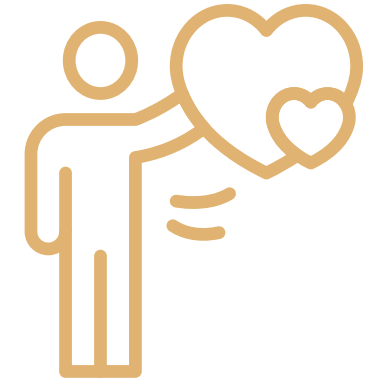
Employer of choice

Iarnród Éireann is proud to be recognised in the Sunday Independent / Statista Ireland's 150 Best Employers research as Ireland's third best employer, amongst companies with more than 200 employees each.

We wish to sustain the company as a place where motivated workers chose to work and are given opportunities for career development and progression. Our leadership development programmes will ensure those opportunities are available to all.



Iarnród Éireann will be a fair, safe and diverse and supportive place to work with a strong focus on the health and well-being of the workforce including staff engagement and feedback.



We will work to ensure:

- ▶ Greater **representation of women** and greater **diversity** in our workplace, including doubling the number of female employees by 2030



- ▶ We facilitate workplace participation for all, and particularly amongst **under-represented groups** in our workplace and others, through education and industry partnerships, including Open Doors

- ▶ We prioritise the **health and wellbeing** of our people, including mental health



- ▶ Every year, we provide **career progression opportunities** to our people, through our High Potential, Leadership Development and Women in Leadership programmes, and attract the best talent to Iarnród Éireann in open recruitment, and apprenticeship and graduate programmes

- ▶ Ensure we keep our people **safe**, by delivering a continuous reduction in workplace accidents

A responsible member of our communities

We serve 145 communities and their wider catchment areas directly, and have a presence across the entire landscape through which our railway lines pass.

We commit to ensuring that we make a positive contribution to those communities, through our services, through how we engage with them on what we do, and through proactive initiatives to enhance the quality of life, focusing on mental health, the arts, education and the environment.



We will:

- ▶ Demonstrate our approach to our community and sustainability by working to achieve the **Business Working Responsibly Mark**, accredited through Business in the Community Ireland
- ▶ Engage directly with communities to **ensure awareness** of:
 - major capital programmes, and how they will affect the community
 - ongoing maintenance works, working to reduce noise and impacts
 - timetable changes or service alterations
- ▶ Continue to support **mental health awareness** nationally amongst communities and our customers and colleagues to help ensure mental health issues can be discussed without stigma
- ▶ Implement a **community policy**, to support our communities through initiatives including:
 - Environmental enhancement and biodiversity, particularly in station areas and adjacent to our network
 - Arts and sports programmes which directly benefit those who travel to or through our communities
 - Educational access initiatives for areas of lower opportunity where we have a presence including Dublin's North East Inner City and Inchicore



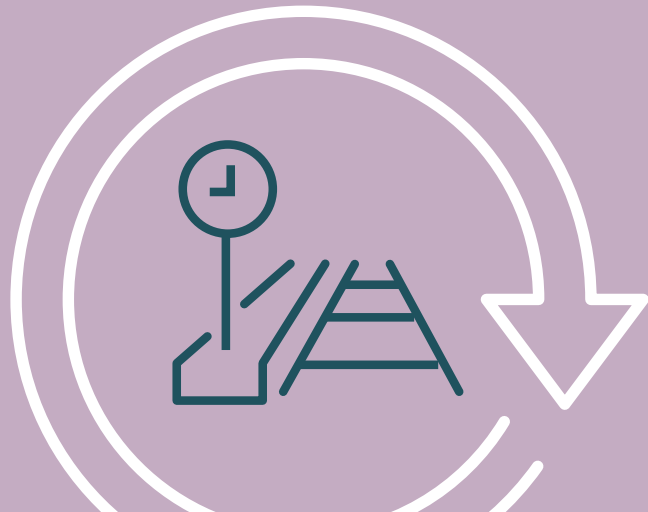
Economic sustainability



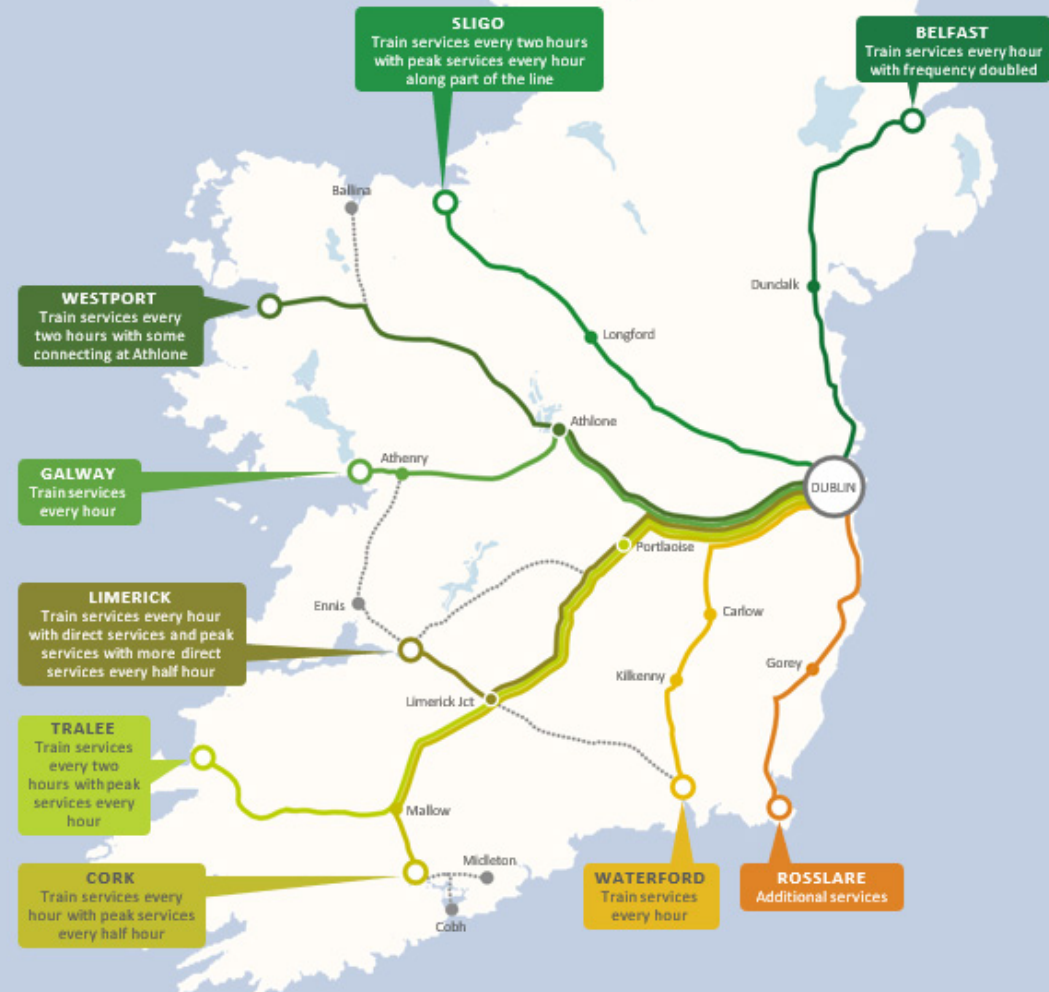
At the heart of our economic sustainability is the delivery of a network and services that allow more people and more goods to move by rail, at the core of an integrated and sustainable transport network; that enhances connectivity to Europe and Britain for Irish industry as port authority for Rosslare Europort; and that facilitates strategic development goals through Transport Orientated Development at railway sites and adjacent properties.

Our passenger network at the heart of sustainable transport

Supported by the National Transport Authority, Department of Transport, and European Union, our investment programmes will ensure significant modal shift to public transport, ensuring sustainable mobility at regional and national levels is at the heart of Ireland's transport network.



FREQUENCY CHANGES



We target 80 million journeys by 2030, up from the pre-COVID high of 50.1 million, through:

- ▶ In the Greater Dublin Area, delivering **DART+ elements** funded under the National Development Plan, a programme which will more than double the capacity of our services, and treble the electrified network
- ▶ This will include first orders from the **largest and greenest ever fleet** order in Irish public transport history, of up to 750 new electric / battery-electric carriages over a 10-year period
- ▶ **Cascading Intercity trains** to build capacity and frequency on our Intercity network, with improved journey times, service frequencies and inter-regional connectivity
- ▶ Improving frequency and journey time on **Dublin to Belfast** Enterprise services with a new bi-mode fleet through PEACE PLUS funding
- ▶ Develop the **role of rail** in our regional cities, in line with local land-use and transport development strategies, including:
 - Building a Cork Commuter network capable of trains every 10 minutes on each of three corridors, supported by the EU Recovery and Resilience Fund, to Cobh, Midleton and Mallow, through resignalling, track and station works
 - Deliver Oranmore and Ceannt Station Galway improvements to build frequency and demand, supported by URDF Exchequer funding
 - Relocation of Waterford Plunkett Station, as part of integrated transport hub
 - Developing rail at the heart of the Limerick Shannon Metropolitan Area Transport Strategy
- ▶ Facilitating **Transport Oriented Development**, including at Heuston, and in partnership with the Land Development Agency, under the Housing for All Strategy
- ▶ Mobility as a Service: Develop **interchange opportunities** with other sustainable modes of transport



Delivering Rail Freight 2040

Iarnród Éireann's Rail Freight 2040 strategy targets a transformation of the rail freight sector in Ireland, to add over 100 weekly rail freight services to our operations, a five-fold increase in frequency and volume.



The strategy will:

Reduce CO2 emissions by over **20,000** tonnes per year

Provide over **100** new weekly rail freight services

Avoid **140,000** HGV journeys per year

Creating over **8,000** new jobs, direct and indirect

With the support of stakeholders, it will be delivered on a phased basis, in line with market conditions, through:

- ▶ Enhancing connections with seaports, with all Tier 1 ports in Ireland rail connected, adding Shannon Foynes Port and Port of Cork to the network, and enhancing facilities at other ports
- ▶ Investing in rolling stock, including a new climate-friendly locomotive fleet, and modern intermodal and bulk wagons for improved performance and capacity
- ▶ Developing a network of intermodal terminals, offering logistics services options nationally
- ▶ Network developments, including connections to industrial sites and new passing loops
- ▶ Policy initiatives with the support of Government and other agencies, including the incentivisation of more sustainable freight movements



Rosslare Europort – delivering the masterplan



Rosslare Europort's status as Ireland's Gateway to Europe has been confirmed post-Brexit, with new services to and from the European continent with DFDS, Stena Line and Brittany Ferries. Seventeen services now operate each way to and from Europe each week, making it Ireland's foremost Ro-Ro port for direct continental services, as well as continuing daily connections to Wales and the British market.

We will build on Rosslare's critical role for Ireland's economy, ensuring efficiency and sustainability in our operations, through the port's Masterplan, investing over €40 million in port facilities, infrastructure and systems.

Rosslare Europort is also uniquely placed to act as a hub for the offshore wind industry, for planned developments in the Irish and Celtic Seas. We will work with local stakeholders to support the development of this sustainable energy source.

Partnership

Our sustainability strategy cannot be delivered by Iarnród Éireann alone, and is critically dependent on funding.

We work with a range of stakeholders who support us and who we consult on its development and delivery.

As part of the CIÉ Group Sustainability Strategy, we work in partnership with CIÉ, Dublin Bus and Bus Éireann through the CIÉ Sustainability Advisory Group to ensure a coordinated approach to sustainability issues. From funding and regulatory agencies such as the Department of Transport, New ERA, National Transport Authority and Commission for Railway Regulation, to local authorities and other planning agencies, to customer, industry and sectoral representative bodies and elected representatives, we will continue to work collaboratively to ensure we support each other on this sustainability journey.

Transparency

We will report annually on our progress to these goals, on new initiatives to strengthen further our sustainability journey, and to highlight how we intend to address areas where our targets are proving challenging.

As part of the CIÉ Group, we have achieved a B rating in our first year as participants in the Carbon Disclosure Project, a significant achievement in the Irish and international context, particularly in the transport sector.

We are signatories to the Task Force on Climate Related Disclosure (TCFD), working with Sustainable Finance Ireland.





Iarnród Éireann
Irish Rail