**Climate Positive**

Driving positive change to a cleaner greener transformation

in public transport

# FOREWORD

Climate change is the most pressing environmental challenge of our time, with overwhelming scientific evidence that we need to act now. The scale of the challenge demands a step change in both the breadth and scale of ambition, and we all have a duty to act quickly and decisively to reduce emissions. For Translink, transport has a huge role to play in the economy reaching Net Zero.

Our mission is to lead the transport transformation in Northern Ireland. By creating advanced public transport services and integrated networks which connect people and communities, enhance the economy, improve health and environmental wellbeing for all. We want to achieve this responsibly by:

## Achieving at least 50% reduction in our current emissions by 2030 in line with our Climate Action Pledge.

**Placing Translink at the forefront in the journey towards zero emission public transportation, and for all our buses, trains and buildings to be Net Zero by 2040.**

## Being Climate Positive by 2050, going beyond achieving net zero to create and an environmental benefit by removing additional carbon dioxide from the environment while growing our business.

We anticipate that this step change in reducing our environmental impact will be supported by the measures set out in this strategy and seek to maintain Translink’s leadership position within a rapidly evolving climate change framework.

To achieve these aims, a climate positive philosophy will be applied across the whole range of Translink’s operations. This includes the transport fleet, buildings, estate and all associated aspects.

Having an aspirational Climate Positive Strategy will help us further improve our local air quality, keep the population active and moving for a healthier region, and help rebuild our economy to be fit for a low emissions future.

### Chris Conway

**Group Chief Executive Officer**

# SHAPING OUR APPROACH

This Climate Positive Strategy is in line with legislative and other considerations:

* Translink Corporate Strategy – ‘Get on Board’
* Translink Corporate Responsibility Strategy
* Translink Safety, Health and Environmental Management System
* United Nations Sustainable Development Goals
* Climate Change Act 2008 – requires at least a 100% reduction of UK greenhouse gas emissions by 2050 (compared to 1990 levels)
* Companies (Directors’ Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018 – introduced Streamlined Energy and Carbon Reporting
* Energy Management Strategy and Action Plan to 2030 for Northern Ireland Central Government (2019) – establish effective energy management processes that unlock value; lowering net energy requirements by 30% by 2030 across Government (from a 2016/17 baseline year)
* Air Quality Regulations (Northern Ireland) 2003
* Air Quality Standards Regulations (Northern Ireland) 2010
* Business in the Community ‘Business Action on Climate’ – 50% reduction in Scope 1 & 2 and relevant Scope 3 Emissions by 2030
* United Nations Sustainable Development Goals
* Science Based Target Initiative
* Reducing Emissions in Northern Ireland - Committee on Climate Change Report 2019

# OUR APPROACH – GO ECO

Over recent years we have developed and delivered a range of Corporate Responsibility projects and initiatives, in line with the UN Sustainable Development Goals, which has made us one of Northern Ireland’s leading businesses in this area.

Our Corporate Responsibility Strategy, with a focus on 4 key strands (Go Safe, Go Together, Go Healthy and Go Eco) places sustainability at the heart of our organisation.

Our Go Eco strand has three specific work-streams: Energy & Carbon; Resource Efficiency; and Biodiversity.

**Energy & Carbon** - we are a major user of energy, largely attributed to the consumption of diesel to power our bus and rail fleet.

**Biodiversity** - our transport network, and in particular the railway environment, is an important biodiversity resource; offering important habitats for many species of flora and fauna, acting as a ‘green network’, linking cities and towns and creating more ‘natural’ corridors through intensively managed agricultural areas.

**Resource Efficiency** - we annually commit significant expenditure to a host of products, processes and services. Our purchasing decisions have major socioeconomic and environmental implications, locally, nationally and globally, now, and for generations to come.

Our Climate Positive Strategy provides a measured coordinated approach to achieve our targets, with a framework of priority objectives and high-level actions across all three of our Go Eco work-streams.

Each division or department will have its own unique set of circumstances; this document is a common set of considerations that can be adapted to suit an individual division, site, station or other facility.

# CURRENT STATUS & BASELINE

Our Corporate Responsibility Strategy and voluntary proactive actions have all driven positive advancements in our monitoring and measurement capabilities. These have directly contributed to our ability to implement carbon reduction solutions across our business.

|  |  |  |  |
| --- | --- | --- | --- |
| **Actual Energy (kWh)** | **FY18-19 (baseline)** | **FY19-20** | **Change** |
| **Fuel** | 411,077,129 | 405,661,625 | -1.32% |
| **Electricity** | 13,603,167 | 14,692,952 | 8.01% |
| **Gas** | 12,913,438 | 12,234,868 | -5.25% |
| **Oil** | 7,233,129 | 6,742,000 | -6.79% |
| **Total** | 448,826,863 | 439,331,446 | -1.24% |

The figures above summarise the respective energy sources to illustrate a combined total when comparing the 2019-20 period against our baseline of 2018-19.

92-93% of our greenhouse gases are attributed to our bus and rail operations which combined carried 84,312,219 passengers in 2019-20. This represents 102,612 TCO2e of our total emissions of 110,604 TCO2e.

We currently operate approximately 1350 bus vehicles ranging from minibuses to coaches, which are fitted with systems to monitor driving characteristics, including accelerating, braking and idling. This is reported back to the driver through a dashboard device and a web-based monitoring report at the depot. We have also developed and implemented our successful Glider service, using an environmentally responsible fleet of hybrid vehicles.

7

Similar systems are also fitted to our Class 3000 and Class 4000 trains. The system allows the exchange of information between the railway system and the driver, and already returns energy saving such as avoiding unnecessary braking and running at reduced speed, for fuel efficiency while maintaining on-time arrival.

Translink currently owns and operates 120 buildings within 55 locations across Northern Ireland, and a facility in Stranraer, Scotland. These consist of stations, offices, and engineering related properties, each with their specific operational requirements and impacts on our carbon footprint.

Our buildings currently contribute around 7-8% of our total carbon emissions and while, not necessarily being the highest contributor, we continue to implement a range of initiatives in order to monitor and reduce our consumption, emissions, and costs. For build projects and refurbishments, we have an emphasis on meeting BREEAM (Building Research Establishment Environmental Assessment Method) certification. This has resulted in the recently completed Milewater Service Centre achieving a ‘Very Good’ status. We will continue to ensure our buildings are procured, constructed, refurbished and operated in an energy efficient manner to deliver sustainable reductions in their greenhouse gas emissions.

Since the introduction of our Corporate Responsibility Strategy in 2016 our Infrastructure and Property related emissions have reduced by 28% from 11,002 (TCO2e) for 2015-16 to 7,958 (TCO2e) in 2019-20.

Along with our 120 buildings we also manage an extensive amount and range of infrastructure with over 200 miles of railway corridor, 700 bridges both underline and overline, 290 culverts, 3 tunnels, 10 viaducts, 23km of sea defences, 144 embankments and cuttings and 124 platforms. Much of our rail network runs through or adjacent to areas that are important for conservation with a range of statutory designations such as Areas of Special Scientific Interest and Areas of Outstanding Natural Beauty.

8

We currently spend in excess of £75m per year maintaining and constructing this infrastructure, with plant and equipment on the network 24/7 helping to ensure a safe and efficient railway service. We also purchase significant quantities of construction materials with an embodied carbon footprint resulting from the emissions produced to manufacture, transport, install and ultimately dispose of the material if required. For example, materials such as concrete and steel, contribute to emissions released by several of the UK’s largest industries.

Materials, such as concrete and steel, contribute to emissions released by several of the UK’s largest industries. Our infrastructure-related emissions are largely therefore generated by our supply-chain.

Our project teams are embedding an understanding and evaluation of the carbon impacts in our infrastructure and engineering works. For example, low-carbon concrete has already been used in the construction of our Adelaide Train Maintenance Facility.

Many more projects are re-using materials on site, on other Translink projects, or in partnership with local communities, schools or wider environmental programmes.

Our infrastructure and land provide a huge opportunity to help reach our targets, by offsetting residual emissions where we don’t yet have the technology to do so, through planting trees and carbon sequestration. Our land may also provide opportunities for renewable energy generation.

# STRATEGIC TARGETS

## Achieve at least 50% reduction in our current emissions by 2030 in line with our Climate Action Pledge.

We will engage with other organisations and stakeholders with the aim of providing leadership across the business sector and supporting local organisations in their quest for zero emissions.

We will pledge to meet a target 50% reduction in relevant emissions by 2030 to achieve the BITC Business Action on Climate Gold Standard accreditation.

## Place Translink at the forefront in the journey towards zero emission public transportation, and for all our buses, trains and buildings to be Net Zero by 2040.

We will adopt a Net Zero Emissions target by 2040, ahead of the UK Net Zero Emissions target of 2050, showing our commitment to combating climate change than simply focusing on a CO2 reduction and will demonstrate a measurable reduction in NOx and particulate emissions.

## Be Climate Positive by 2050, going beyond achieving net zero to create an environmental benefit by removing additional carbon dioxide from the environment while growing our business.

Our premise will be to first reduce all emissions that we viably can, then go beyond offsetting the remainder and become climate positive. The use of ‘offsetting’ aims to neutralise a certain volume of greenhouse gas emissions through projects which create an equivalent reduction of greenhouse gases, such as through tree planting.

We want to go beyond offsetting, going beyond doing no harm, providing an environmental benefit, with the objective of being a leading Climate Positive business.

10

# PRINCIPLES TO ACHIEVE CLIMATE POSITIVE

The ‘Translink SPIRIT’ is a set of guiding principles that are a fundamental part of everything we do. These core values are embedded in the culture of the organisation and enable us to lead, inspire and succeed in delivering our goals for Translink. To achieve our targets our values of Safety, People, Innovation, Responsibility, Integrity and Teamwork hold strong.

## Safety

**Lead the transition to low carbon travel within Northern Ireland safely.**

## People

**Embed climate positive thinking and approaches into strong, clear, decisive and insightful leadership at all levels.**

**Commit to being an agent of transformative**

**change beyond own direct operations.**

**Encourage modal shift from the private car to sustainable public transport.**

## Innovation

**Use our direct influence through the deployment of new sustainable**

**zero, low or convertible technologies, policies and procurement, and develop our wider influence through partnerships.**

## Responsibility

**Outstanding environmental performance is central to being successful.**

**We will be an example to others, and work with partners to encourage the adoption of our own high**

**ambitions.**

## Integrity

**Challenge the status quo and look at all our processes, operations and services through a green and fair lens,**

**promoting innovative and climate positive solutions that also address wider aspects of good corporate responsibility.**

## Teamwork

**Maximise available resources for communications to inspire and enable our co-workers and customers.**

**Develop the skills and talents of our people and partnerships required to deliver a climate positive public transport.**

By following these principles, we can develop and deliver viable, credible, behavioural and technical climate positive actions.

# FRAMEWORK TO ACHIEVE CLIMATE POSITIVE

**Priority 1: Greener Vehicles**

### High Level Action 1a: Translink Bus Fleet Strategy

### 2020 - Belfast Metro - order for 100 Zero Emission Buses

### 2021 - Introduce first Zero Emission Buses to Belfast Metro

### 2022 - Euro VI conversion of Belfast / Foyle Metro Fleets complete

### 2025 - Introduce Zero Emission Buses across all routes (except Goldline)

### 2032 - Introduce Zero Emission Coaches

### 2040 - Zero Emission Fleet

### Key Bus Fleet Aspirations & Milestones

To improve the robustness and deliverability of a sustainable bus fleet we will:

* Trial hydrogen fuel cell double decks including implementation of robust monitoring to allow assessment of the technologies;
* By the end of 2022 place over 100 zero emission vehicles into service in Belfast;
* Carry out further comprehensive route assessments to inform the future bus technology choice;
* Assess the total cost of ownership for zero, low or convertible technologies;
* Perform depot and operational assessments to determine suitability of zero, low or convertible technologies;
* Modify our older bus fleets in Belfast and Derry~Londonderry to ensure they meet the latest ‘clean’ Euro emission standards;
* Ensure that all Belfast and Foyle Metro bus fleets will transition to zero emission technologies by 2030.

### High Level Action 1b: Translink Railway Strategy

### Ongoing - Procure 21 vehicles to boost regional service capacity - New Trains 3

### 2023 - Procure 12 vehicles for hourly Enterprise service - New Trains 3b

### 2025 - Procure 15 x 3 car units for regional service - New Trains 4

### 2026/2027 - Enterprise fleet replacement with 9 x 8 car trains

### By 2035 - Enterprise Route electrification

### 2040 - Zero Emission Fleet

### Key Rail Fleet Aspirations & Milestones

To improve the robustness and deliverability of a sustainable rail fleet we will:

* Perform a feasibility study and cost analysis of decarbonising the rail network;
* Assess the optimum zero emission fleet technologies;
* Develop the business case and programme for Enterprise fleet replacement using zero, low or convertible technologies;
* Perform depot and operational assessments to determine suitability of zero, low or convertible technologies.

### High Level Action 1c: Fleet/Operational Management Systems

We will continue to develop our current fleet operation management systems with an emphasis on energy efficiency and service performance improvement, to ensure we are maximising the environmental benefits including -

* Bus Telematics System;
* Support Fleet Vehicle Management System;
* Railway Driver Advisory System;
* Rail Fleet Train Management System.

13

# Priority 2: Greener Infrastructure

### High Level Action 2a: Energy Strategy

We will implement our energy strategy, detailing the roadmap to the respective energy and emission reduction targets in relation to our buildings, facilities and infrastructure,

e.g signalling and telecommunications. Our energy strategy will incorporate, but not be limited to, the following technologies:

* SMART metering;
* Zero, low and convertible heating fuel solutions;
* Low energy lighting;
* Renewable energy technologies;
* Building Energy Management Systems.

Further to the above, all new builds and refurbishment projects will target BREEAM ‘Excellent’ or ‘Very Good’ rating respectively. In addition to energy and emissions, there will be a focus on other elements such as resource efficiency and health & wellbeing. For example, facilities to promote active travel.

### High Level Action 2b: Sustainable Infrastructure

We will change the way we design, build and operate our infrastructure and assets so we can minimise our whole-life carbon and air pollution emissions, making an important contribution to the UK’s targets and look after the safety and wellbeing of our passengers, neighbours and employees.

* Ensure design quality with a focus on reducing energy and emissions;
* Target CEEQUAL ‘Excellent’ or ‘Very Good’ on all infrastructure projects with a focus on our Go Eco work-streams;
* Ensure our supply chain complete regular Contractors Sustainability Reports evidencing progress against our targets;
* Reduce whole life carbon in products / activities through innovation in the supply chain;
* Develop an Asset Management and Building Information Model which supports our zero emission targets by enabling capture of energy related data, targets and improvements linked to individual assets;
* Develop active travel plans in conjunction with all significant capital projects relating to our facilities (stations, large depots/offices and Park & Ride’s), with engagement from supporting organisations such as Sustrans and local councils;
* Improve engagement with key policy makers (Department of Infrastructure Transport Plans, Local Council Local Development Plans, DAERA Air Quality and Energy Strategies) to shape policies and deliver measures that reallocate the use of road space to sustainable travel and encourage a shift to sustainable travel.

# Priority 3: Greener Business

### High-Level Action 3a: Biodiversity

We will continue to look after nature and protect, maintain and enhance biodiversity helping habitats and ecosystems provide essential services such as carbon storage, clean air, food and our wellbeing.

* Develop a new biodiversity strategy which supports new woodland, tree and wildflower planting, helping to promote biodiversity, health & wellbeing, as well as assisting in reaching climate positive;
* Support the All-Ireland Pollinator Plan by improving the quality and amount of flower- rich habitat, including the improvement of grassland management and increased pollinator friendly planting across the Translink estate.

### High-Level Action 3b: Circular Economy

A circular economy seeks to move away from ‘take-make-dispose’ and towards a system of designing out waste. We will continue to keep products and materials in use as long as possible, reusing, recycling and repurposing materials at the end of their life rather than throwing them away, and reducing the over-extraction of finite natural resources.

* Develop a zero-waste strategy that aims to reduce waste through employee and customer awareness, assessing our supply chain impact and implementing green procurement practices, and through robust waste segregation and operational processes;
* Manage our water usage sustainably, meeting our water needs through sound water stewardship including accurate measurement and reporting, investment in water efficiency technologies and embedding a culture of responsible water use.

16

### High-Level Action 3c: Active Travel

Active Travel is an important part of sustainable end to end journeys. It also helps to keep the air cleaner by reducing emissions around our facilities. We will continue to put In place facilities such as bicycle storage and make sure that access and wayfinding supports passengers who want to walk and wheel to our stations.

* Develop an employee active travel strategy, helping eliminate unnecessary car journeys, making better use of technology and encouraging the use of active travel / zero-low emission alternatives.

# MONITORING & MEASUREMENT

Performance needs to be measured to maintain and continually improve the effectiveness of our Climate Positive Strategy. This will require a combination of proactive and reactive measures, with the ability to take corrective action rapidly if required. Our performance data is analysed, trend information collected and reported and made available for review at all levels.

Our annual Corporate Responsibility Review will provide transparent reporting on our progress.

We will develop a communications plan to fully engage our employees, contractors, customers and community on our environmental targets.

17