



George Best
BELFAST
CITY AIRPORT

Net Zero Roadmap

Introduction

Belfast City Airport provides fast, efficient connectivity to and from the heart of Belfast, enabling our community to thrive and our economy to realise its ambitions. At Belfast City Airport, our purpose is to be the heartbeat of connectivity, enabling our community to link with people, places, and possibilities.

We exist to facilitate seamless travel experiences, enable economic growth, nurture our employees in an inclusive workspace and enrich the community we serve, with a commitment to sustainability and responsible business.

We recognise the contribution we make to Greenhouse Gas (GHG) emissions and we take seriously our responsibility to reduce these emissions as far as possible.

We have been working to reduce our carbon emissions for a number of years, measuring and reporting our carbon footprint since 2017 and participating in the ACI's Airport Carbon Accreditation (ACA) programme since 2019 – currently we are accredited at Level 3 'Optimisation'.

BCA is signatory to ACI Europe's Net Zero 2050 Commitment.

This document sets out key actions we plan to take in order to achieve our Net Zero ambitions.

Our Commitment

Achieving Net Zero by 2050 at the latest for those emissions under our direct control (Scope 1 & 2)

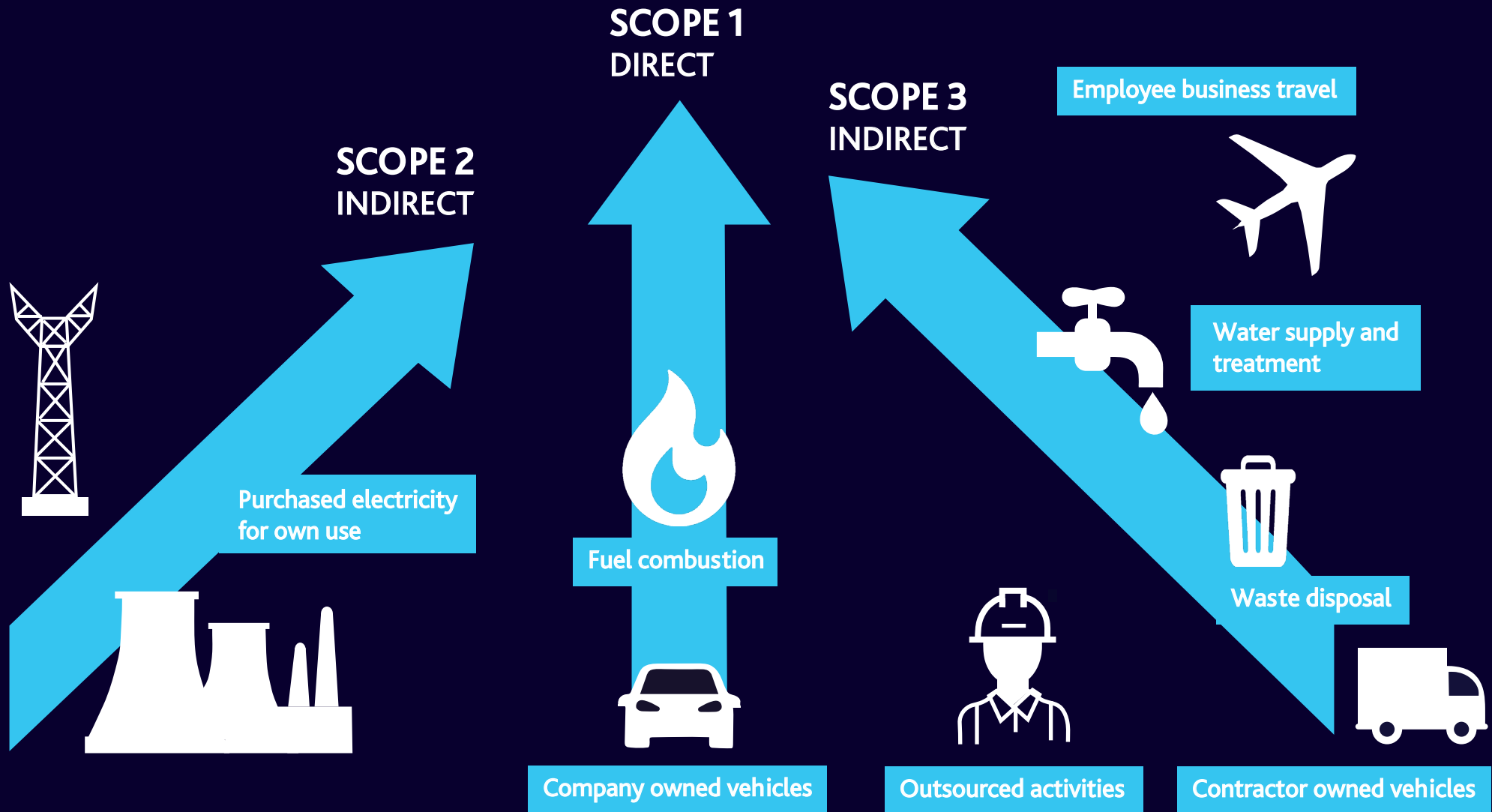
'Airport Carbon Accreditation is the only institutionally-endorsed, global carbon management certification programme for airports. It independently assesses and recognises the efforts of airports to manage and reduce their carbon emissions through 7 levels of certification. Level 3 'Optimisation' includes the requirement to prepare an independently verified Carbon Footprint including Scope 1, 2 and 3 emissions and engage with third party operators to reduce emissions.

Background

Carbon Emissions

A company's Greenhouse Gas (GHG) emissions can be considered to fall into three 'scopes'.

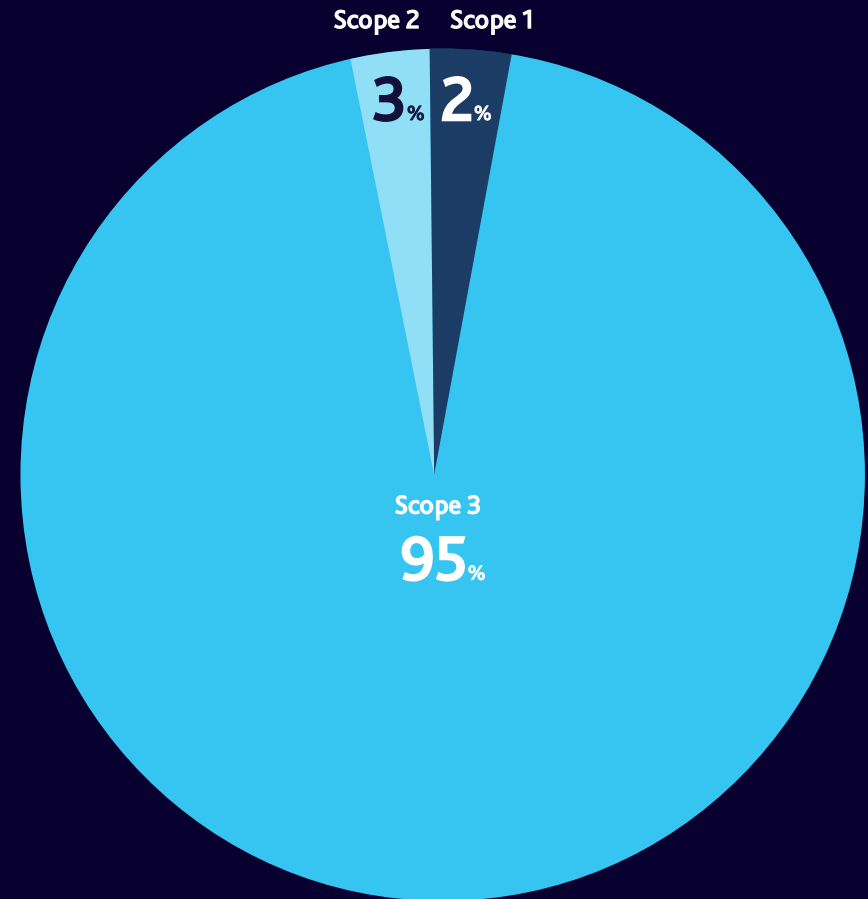
- Scope 1 - direct emissions from company-controlled sources;
- Scope 2 - indirect emissions from the generation of purchased energy; and
- Scope 3 - indirect emissions that occur in the value chain of the company



Airport Emissions

An airport's emissions can generally be divided into each Scope as follows:

Scope 1 (Direct) GHG Emissions	Scope 2 (Indirect) GHG Emissions	Scope 3 (Other Indirect) GHG Emissions
<ul style="list-style-type: none"> ✓ BCA Natural Gas ✓ BCA Vehicles ✓ Fire Training (LPG) ✓ Refrigerants 	<ul style="list-style-type: none"> ✓ Grid Electricity 	<ul style="list-style-type: none"> ✓ Aircraft LTO Cycle & Engine Testing ✓ Passenger Surface Access ✓ Staff Surface Access ✓ Tenant Electricity ✓ Tenant Natural Gas ✓ Third-Party Vehicles ✓ Waste Disposal ✓ Business Travel ✓ Water Supply & Treatment



At BCA, Scope 1 & 2 emissions represent around 2% and 3% respectively, whilst Scope 3 emissions represent around 95% with the majority of these arising from aircraft operations at or close to the airport and travel to and from the airport by passengers and staff.

Where are we now?

In recent years, through a range of initiatives, including installation of energy-efficient equipment and improved operating practices, we have worked to reduce our emissions.

Since 2019 we have reduced our Scope 1 & 2 emissions by 44%.

	2019	2020	2021	2022	2023
Total scopes 1-2 (tonnes CO2e) Location-based²	1,812	1,337	1,259	1,310	1,024

In 2023 our Scope 1 & 2 emissions (location-based) totalled 1023 TCO2e, broken down as follows:

Activity	TCO2e
Our vehicles	74.69
Fire service training	7
Generators	0.25
Electricity	623
Gas	316.65
Refrigerants	2.85

Our principal Scope 3 emissions were as follows:

Activity	TCO2e
Aircraft landing and take-off cycle; engine testing	11,238
Passenger and staff travel to and from the airport	11,730.8
Third party energy and transport	631.25

² Location-based emissions are based on the average emission intensity of the local grid where the power is sourced (as opposed to Market-based emissions which take into account factors such as green tariffs).



What actions have we taken?

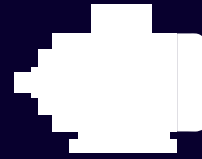
Below are just some of the actions we have taken to improve energy consumption and reduce GHG emissions across the airport.



Fixed electrical ground power
at all aircraft stands



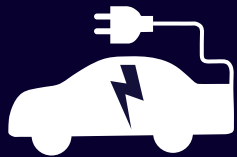
Low energy LED lighting
across site



Installation of low energy
plant



Environmental rebate for new
generation aircraft



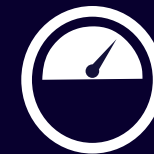
Provision of passenger
EV charging



Continuous Descent/Climb
Operations



Airside electric vehicles



Installation of smart energy
monitoring and targeting
goals

Our Commitment


We are committed to achieving Net Zero for those emissions under our direct control (ie our Scope 1 and 2 emissions) by 2050, with ambition to achieve this sooner.

In addition, we recognise the available opportunity to impact our Scope 3 emissions. Whilst these emissions are outside our direct control, we are committed to, firstly, measuring our Scope 3 emissions and secondly, working to reduce Scope 3 emissions where possible, through proactive engagement with and ongoing support for our stakeholders.

Our Science-based Target

A key element of our Net Zero ambition is the development of an approved Science-based Target.

Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement – limiting global warming to 1.5°C above pre-industrial levels. Having a Science-based Target will provide us with a defined pathway for reducing our carbon emissions in the short term – as a vital step in our longer journey to Net Zero.

A close-up photograph of a car door handle area. The car is dark grey. A white decal is applied to the door, featuring the word 'ZERO' in large, bold, sans-serif capital letters. To the right of 'ZERO', the words 'emissions' and '100% Electric' are written in a smaller, sans-serif font. The background of the image shows a reflection of a cloudy sky in the car's window. At the bottom of the image, there is a yellow and red checkered pattern, likely a safety warning or a decorative element.

ZERO emissions
100% Electric

How will we get there?



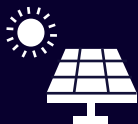
Energy Demand Reduction



Removal of Gas



Emissions



Generation

Scope 1 and 2 Emissions

Reducing energy demand across the airport will be critical to our efforts. We have already achieved reductions by installing energy management systems, retrofitting LED lighting across the site and replacing equipment with high-efficiency alternatives. We will continue this programme through further improvements to HVAC efficiency and extending our smart energy monitoring and targeting systems.

Removing natural gas as a source of energy (primarily used to heat the main terminal building) would result in an estimated 80% reduction in our Scope 1 emissions. We are exploring opportunities to remove our current reliance on gas.

On the airfield, many of our ground handling vehicles are already electric and all remaining airside-based diesel vehicles will be moving to Hydrogenated Vegetable Oil (HVO) fuel-use during 2024 leading to a significant reduction in GHG emissions.

We have purchased 100% green electricity since 2013, however we recognise the value of on site renewable generation in reducing emissions. We have undertaken initial studies to assess suitable areas for installing solar PV across the site. We are committed to continuing to explore the feasibility of developing on site renewable generation.

How will we get there?



Surface Access



Aviation

Scope 3 Emissions

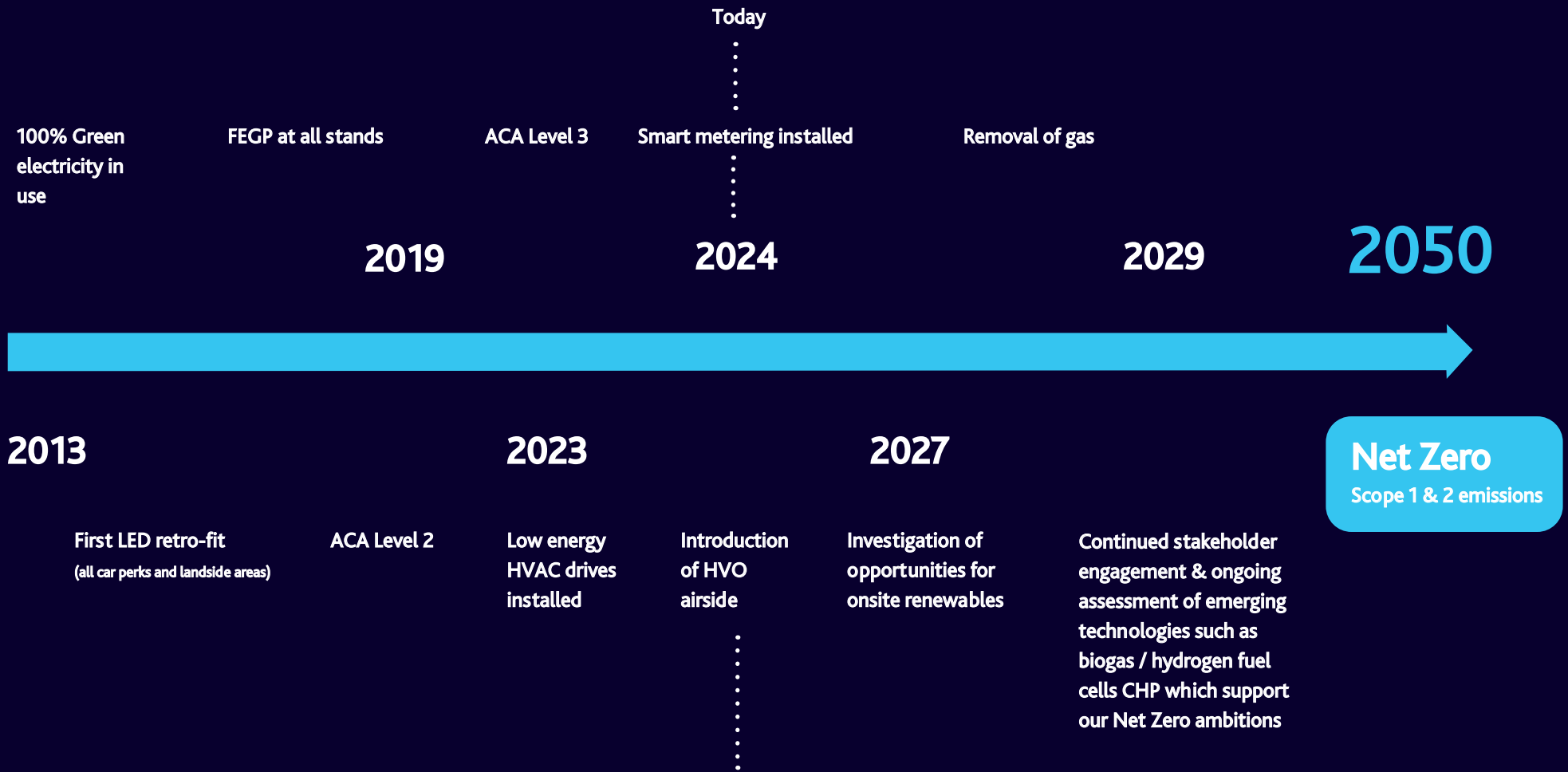
Emissions arising from passenger and staff travel to and from the Airport are currently responsible for around 47% of our total carbon footprint. Decarbonising surface access to the airport is a key focus area, alongside reducing emissions from our onsite transport operations. In 2024 we commenced a programme installing EV charging for passengers in our car parks, and we are committed to working with Government to improve public transport links and cycle routes to the Airport.

Aircraft-related emissions (from landing and takeoff and ground runs) currently represent around 45% of our carbon footprint. To date, work we have done to reduce aircraft emissions includes installation of Fixed Electrical Ground Power (FEGP) at all stands (removing the need for aircraft to use fuel-powered Ground/Auxiliary Power Units), management of ground operations to minimise taxiing times, use of Continuous Descent/Climb operations which reduce aircraft fuel consumption, and introducing an environmental rebate on airport charges for new generation, lower emission aircraft.

We are committed to:

- Continuing engagement with our airline partners to support and facilitate their decarbonisation strategies
- Actively pursuing opportunities to engage and collaborate with Government and aviation industry initiatives to support and contribute to the development of zero carbon infrastructure and flight

Our Journey to Net Zero





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