HSE Sustainable Transport Framework

A framework to eliminate, reduce, and substitute transport emission sources associated with delivering and accessing healthcare.

HSE Climate and Sustainability Programme

An Overview of the United Nations Sustainable Development Goals

Executive Summary

Climate change presents a fundamental threat to human health. It affects the physical environment as well as all aspects of both natural and human systems; including social and economic conditions and the functioning of health systems. As climatic conditions change, more frequent and intensifying weather and climate events are observed, including storms, extreme heat, floods, droughts and wildfires. These weather and climate hazards affect health both directly and indirectly, increasing the risk of deaths, non-communicable diseases, the emergence and spread of infectious diseases, and health emergencies.

The Health Service Executive (HSE) is committed to reforming and improving the delivery of care to help reduce greenhouse gas (GHG) emissions and is aligned with the Sláintecare Reform Programme, which prioritises digital healthcare, promotes social prescribing and facilitates service users care closer to home. The impact of COVID-19 has led to a large increase in the use of digital services, not just for provision of healthcare services, but also enabling people to work from home as far as is reasonably possible.

Within this framework, the first section outlines the context, scope, best practice examples of sustainable transport and an overview of the current state of sustainable transport within the HSE. The approach, outlined in Section 2, identifies the key building blocks to deliver the strategic objective of sustainable transport outlined in the HSE Climate Action Strategy and the structure and methodology that will be used to underpin effective implementation of the strategic objective. The third and fourth section focuses on implementation and enablers of the framework from a national to local lens.

It is intended that this document will be a live document which will be updated and expanded as required to reflect emerging best practices and mandated requirements outlined in the Climate Action Public Sector Mandate which is updated annually.

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1. Introduction

The climate crisis is a health crisis. The link between climate change and various health challenges, including respiratory illnesses, water-borne diseases, vector-borne diseases, malnutrition, non-communicable diseases, mental health, injury and mortality from climate hazards and extreme weather events will put significant additional pressure on healthcare facilities and have a lasting effect on our health systems. At the same time, current models of care and service delivery can make a significant contribution to damaging the environment.

The healthcare sector is responsible for approximately 4.4% of global emissions. If it was a country, the global health sector would be the fifth biggest emitter on earth and unless the carbon footprint of healthcare sector is cut, its emissions could triple between now and 2050, with the unintended consequence of a drastic impact on people's health.[1] The Irish health service is a high emitter of GHG when compared with similar health systems and it is estimated that it contributes between 5%-8% of Ireland's GHG emissions.

There has been an acceleration of global efforts to 'reverse the tide' on environmental damage, particularly since the signing of the Paris Agreement[2] in 2015. The EU Green Deal provides a package of policy initiatives launched by the Commission in 2019 to set the path to a green transition with the ultimate goal of reaching climate neutrality by 2050. At national level, the Climate Action Plan provides a roadmap for halving Ireland's emissions by 2030 and reaching net zero by 2050, as committed to in the Climate Action and Low Carbon Development Act 2021.[3]

As a result, the HSE has drafted its Climate Action Strategy 2023 - 2050 which sets out the HSE's commitment to achieve net-zero emissions no later than 2050, delivering healthcare which is environmentally and socially sustainable. The strategy outlines how the HSE will contribute to putting Ireland on a more sustainable path by cutting emissions, creating a healthier, cleaner, and greener society, and helping to protect and prepare the population for the health consequences of climate change and biodiversity loss. It comprises six priority areas, ten strategic objectives and two enabling functions, summarised in Table 1.

The purpose of ***the strategic framework documents*** of which this is one, which is developed for each strategic objective, is to translate that HSE's vision for a net-zero health service that is environmentally and socially sustainable into a practical programme for delivery of the relevant strategic objective.

This document provides a Strategic Framework for delivery for sustainable transport for the HSE, including a supporting implementation plan and key milestones. It addresses strategic objective 3 (SO3) to eliminate, reduce and substitute transport emission sources associated with delivering and accessing healthcare.

1 Health Policy Partnership, The nexus between climate change and healthcare, 2022.

2 The Paris Agreement is the first legally binding international Treaty on climate change, adopted by 196 parties at the UN Climate Change Conference of the (COP21) in Paris in 2015. Its overarching goal is to hold *"the increase in the global average temperature to well below 2oc above pre-industrial levels and to pursue efforts to limit temperature increase to 1.5oc above pre-industrial levels."* The signing of the Paris Agreement was the trigger for governments around the globe to develop and enhance the strategies and policies needed to reduce global warming.

3 Chapter 10 of the Climate Action Plan and the related Climate Action Mandates and Public Sector Climate Action Strategy are focused on the responsibility of the public sector to lead by example by fast-tracking the changes that are needed.

Table 1. Overview of HSE Climate Action Priority Areas and corresponding Strategic Objectives

		Strategic Objectives
A.	**Sustainable Buildings and the Green Environment**	**SO1** Achieve a 50% reduction in energy usage, and a 51% reduction in energy-related GHG emissions by 2030 and a net-zero emission target by 2050 (at latest) under the requirement set out for public sector bodies in the Climate Action Plan 2021.
		SO2 Develop a HSE Green Space Framework and supporting implementation plan to optimise the use of green space for the promotion of the health and wellbeing of service users, staff and the local communities.
B.	**Transport and Mobility**	**SO3** Develop a HSE Transport Framework and supporting implementation plan to eliminate, reduce and substitute transport emission sources associated with delivering and accessing healthcare.
		SO4 Develop a mobility framework and implementation plan to promote travel initiatives to avoid unnecessary service user and staff journeys. Where journeys are required, support and encourage active travel, low carbon or public transport alternatives.
C.	**Sustainable Procurement**	**SO5** Develop procured goods and services waste reduction framework and supporting implementation plan to reduce waste and related emissions, strengthen supply chain resilience and support the transition towards a circular economy.
		SO6 Develop a baseline for all HSE supply chain emissions and work in consultation with key supply chain product partners to include sustainability criteria in all tender procurement processes and establish a credible decarbonisation trajectory (no later than 2025).
D.	**Greener Models of Healthcare**	**SO7** Develop a framework for greener models of healthcare delivery and supporting implementation plan to reduce the environmental impact of the delivery of models of care, pharmaceutical products / services used while continuing to prioritise service user safety, prevention and population health.
E.	**Water and Waste Management**	**SO8** Develop a HSE Waste Management Framework and supporting Implementation plan to minimise food waste generation, increase recycling and reduce the amount of clinical waste generated.
		SO9 Develop a data driven water consumption framework and implementation plan to report and manage water consumption and conservation measures to reduce wastage.
F.	**Adaptation and Resilience**	**SO10** Ongoing implementation of the measures set out in the Department of Health Adaptation plan 2019 -24 and all subsequent plans.

	Enabling Function	Description
1	**Measurement and Assurance**	The Measurement and Assurance Work stream will coordinate the collection, collation and calculation of the relevant sustainability data across the ten work programmes, including climate (Scope 1, 2 and 3 emissions), water usage, waste disposal and relevant biodiversity data. Identification of metrics and key performance indicators, target setting and tracking implementation of the Strategy will be enabled. The methodologies used will be in line with international standards.
2	**Collaboration, Communication, Awareness and Training**	In recognition of the need to inspire and upskill the workforce to embrace sustainability and adapt dynamically, the HSE recognises the need to educate and upskill a large workforce to act as climate activists and to equip staff with the knowledge to promote an overall culture of sustainability awareness.

1.1 Context

The health sector's role is primarily to improve the health and social care of the population, but it also has a part to play in advocating sustainable transport — public transport, walking and cycling — which makes more efficient use of road space and which, along with low and zero-emission vehicles, produce lower emissions of carbon dioxide (CO2) and other air pollutants. Transport is an area where healthcare providers can make a significant contribution to broader sustainability ambitions.

The HSE is also committed to supporting the 17 UN Sustainable Development Goals (SDGs) to promote prosperity while protecting the planet. Although the HSE contributes to most SDGs in one form or another, as they directly relate to health or contribute to health indirectly, health has a central place in SDG Goal 3: "Ensure healthy lives and promoting wellbeing for all ages". The relevant UN SDGs to this framework are:

Figure 1. An Overview of Sustainable Development Goals relevant to Transport

Goal 3: Good health and wellbeing

Goal 7: Affordable and Clean Energy

Goal 11: Sustainable cities and communities

Goal 13: Climate action

Emissions from the Irish transport sector currently account for about 30% of the public sector's overall GHG emissions. Nationally, the transport sector has been mandated to reduce emissions by 50% by 2030 which will be achieved by the transition to zero or low emission vehicles, coupled with the increased use of public transport and promotion of active travel. In addition, Sustainable Energy Authority of Ireland (SEAI) public sector monitoring and reporting system (M&R) tracks progress towards the energy efficiency and energy related carbon targets.

Considering the pressing need for change, the transport sector has been mandated to reduce emissions. This reduction is to be achieved through transition to zero or low emission vehicles, improvement to, and increased use of public transport and promotion of active travel. The HSE is committed to reforming and improving the delivery of care to help reduce emissions and is aligned with the Sláintecare Reform Programme, which prioritises digital healthcare, promotes social prescribing and facilitates patient care closer to home. This focus on decarbonising transport across the HSE resulted in the development of strategic objective 3 and as such is the aim of this framework. Below is a listing of non-exhaustive relevant policies (EU, National and Local) to provide further context:

- **The European Green Deal:** Writes into law the goal set out in the European Green Deal for Europe's economy and society to become climate-neutral by 2050. The law also sets the intermediate target of reducing net GHG emissions by at least 55% by 2030, compared to 1990 levels.
- **Climate Action Plan:** The most recent yearly update to Ireland's Climate Action Plan (CAP) stipulates the necessary measures and actions to meet carbon budgets and sectoral emissions ceilings. This plan outlines a strategic approach for reducing Ireland's emissions by half by 2030 and achieving net zero by 2050, as pledged in the Climate Action and Low Carbon Development (Amendment) Act 2021.
- **Public Sector Climate Action Mandate:** Public sector bodies shall procure only zero-emission vehicles from the end of 2022, enabling Ireland to go beyond the requirements of the Clean Vehicles Directive. Public sector procurement contracts for delivery and haulage should specify zero emissions vehicles where possible. It should be noted that ambulances are exempt under this mandate.
- **Department of Transport Statement of Strategy 2023-2025:** Investment in electric vehicle (EV) infrastructure, provision of grant schemes, increased roll out of EV Infrastructure through: development of EV Infrastructure national & local plans and delivery of funding schemes for EV infrastructure. Support the supply of renewable energy and alternative fuels in transport.
- **Electric Vehicle (EV) Charging Infrastructure Strategy 2022-2025:** Residential on-street charging points, shared charging solutions, destination charging points at sports facilities, hotels, retail outlets, etc. en-route charging points on road networks, fast taxi-charging hubs, publicly accessible heavy-duty-vehicle charging points.

1.1.1 Climate Action Plan and Public Sector Climate Action Mandate requirements

The government's CAP and Public Sector Climate Action Mandate applies to all bodies covered by decarbonisation targets. The mandate highlights the main climate action objectives for public bodies, underlined in the Governments Climate Action Plan, and is reviewed annually. Progress on the implementation of the mandate will be tracked through the SEAI M&R system using a 'comply or explain' approach. Each public sector body's Climate and Sustainability Champion has responsibility for reporting annually on the mandate. Target delivery measures are categorised into four key areas:

- Targets.
- People.
- Ways of working.
- Buildings and vehicles.

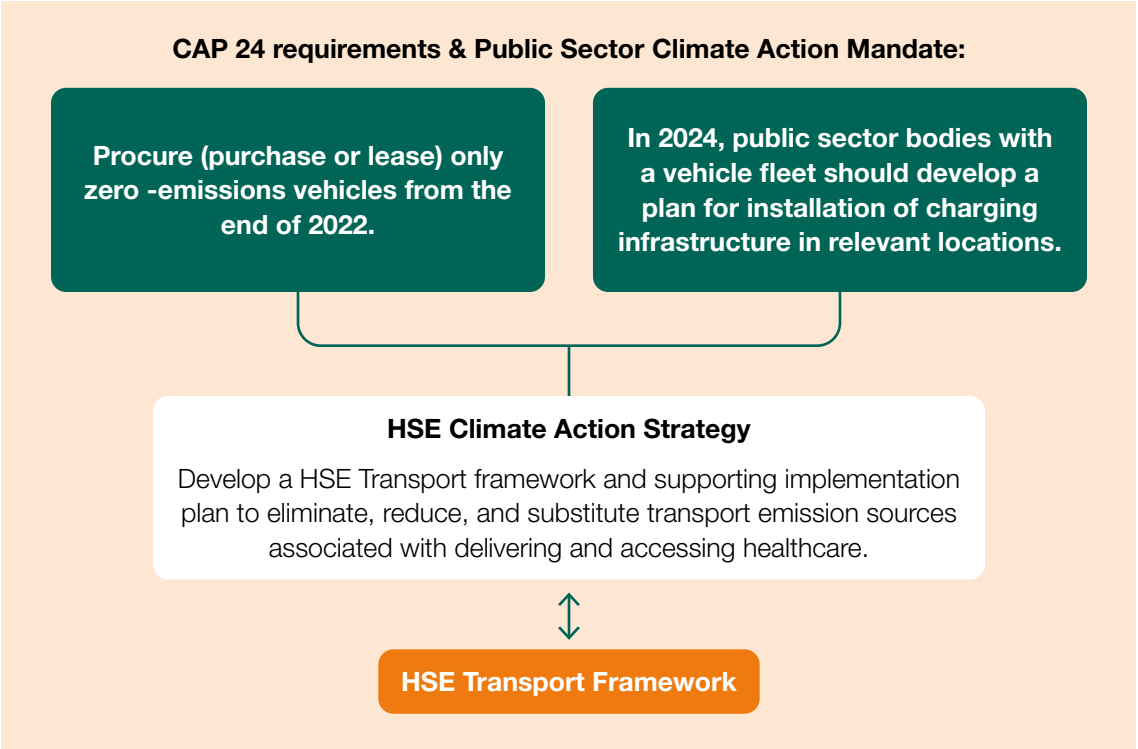
Each category includes a range of subtopics that cover various aspects, such as energy consumption, senior leadership roles, staff education via training and awareness programs, certifications compliance, green procurement activities, waste management, and construction and transportation sector.

The Avoid-Shift-Improve framework for transport sustainability was introduced in CAP 23 and this approach has been applied again in CAP 24 to categorise all actions. This framework emphasises the crucial role of designing transport systems that can support our net-zero ambition. With regards to sustainable transport, two key objectives to note are:

- Procure (purchase or lease) only zero-emissions vehicles from the end of 2022.
- In 2024 public sector bodies with a vehicle fleet should develop a plan for installation of charging infrastructure in relevant locations.

Therefore, to comply with our responsibilities under the CAP and Public Sector Climate Action Mandate requirements. The HSE has developed its HSE Sustainable Framework and supporting implementation plan to eliminate, reduce and substitute transport emission sources associated with delivering and accessing healthcare. In line with yearly updates to CAP, the framework will in turn be a live document which will be updated and expanded as required to reflect emerging CAP responsibilities in the future, industry best practices and emerging climate related responsibilities.

Figure 2. An Overview of the CAP 24 requirements, Public Sector Climate Action Mandate and HSE Climate Action Strategy



1.1.2 HSE Climate Action Strategy and HSE Transport Framework

With the publication of the HSE Climate Action Strategy, a commitment was made to work towards the decarbonisation of the HSE fleet and facilitate the transition to low carbon and active transport with HSE sites to become sustainable transport hubs in their respective communities. Nationally, the transport sector has been mandated to reduce emissions by 50% by 2030, which will be achieved by the transition to zero or low emission vehicles, coupled with the improvement and increased use of public transport and promotion of active travel. The HSE must meet all national and public sector energy transport and infrastructure obligations. The transport framework is to translate that HSE's vision for a net-zero health service that is environmentally and socially sustainable into a practical programme for delivery of the relevant strategic objective to eliminate, reduce and substitute transport emission sources associated with delivering and accessing healthcare.

A number of early mobilisation activities have been identified and explored such as the electrification of HSE Fleet and alternative fuels scoping. Several 'green' initiatives have been implemented by the National Ambulance Service (NAS) to reduce fuel burn and promote behavioural change to reduce fleet emissions. Ongoing efforts are being made to gather baseline data for both the emergency and non-emergency fleet. Collaboration with external organisations has been implemented and maintaining engagement going forward will be important for the delivery of the aims of this framework.

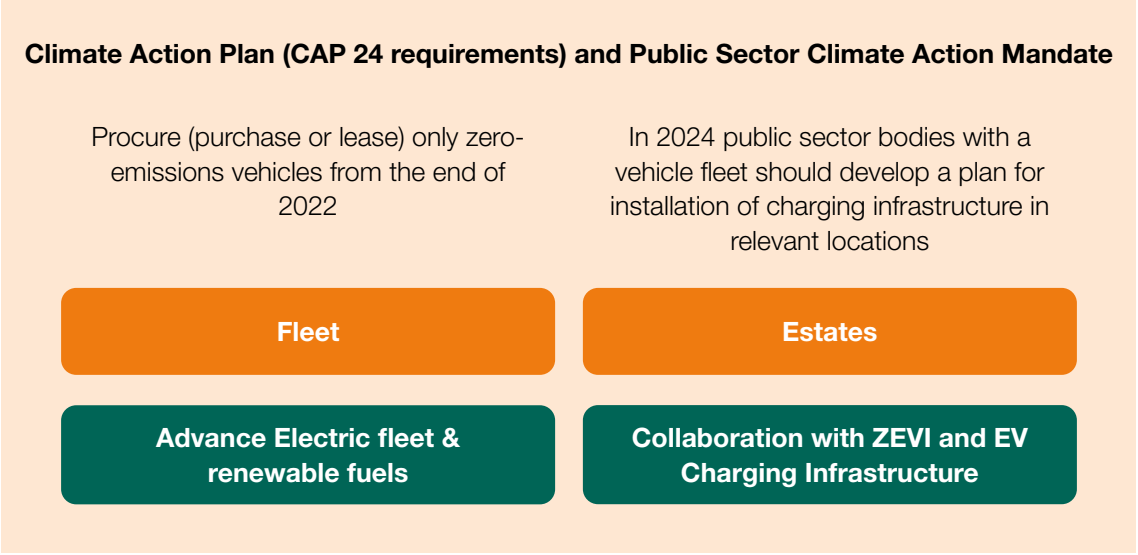
1.2 Structure of the Sustainable Transport Work Programme Group

To accelerate the delivery of the transport objective, a sustainable transport work programme group was established in 2023. The purpose of the group was to collaboratively address sustainable travel challenges within the HSE and guide the development of strategies and guidance to ensure the transition towards a sustainable transport HSE. The group is focused on decarbonising the HSE fleet which aims to help accelerate the transition towards sustainable transport and implementing EV charging infrastructure across HSE estates.

The sustainable transport working group membership list is located in the Appendix 1, along with the terms of reference. The transport working group of 15 members, representing HSE, NAS, Brothers of Charity, Stewarts Care and the Department of Health. Each member has garnered different levels of expertise and knowledge to ensure adequate coverage of the goals of the group.

The group is split into two subgroups — fleet and estates — to work between work programme meetings to achieve the strategic objectives outlined in the HSE Climate Action Strategy and Public Sector Climate Action Mandate. Group members sit on one, or both subgroups, based on their areas of expertise.

Figure 3. An Overview of the Structure of the Work Programme Group



1.2.1 Scope

A summary of sustainable transport initiatives in-scope in the current phase of the framework are shown in the table below. It is intended that the scope in future iterations of the framework will expand and develop accordingly.

The scope of the framework is defined as matters relating the HSE's and NAS' fleet and the infrastructure supporting the decarbonisation of these fleets.

Table 2. In-Scope Activities for the Transport Work Programme Categorised into their Key Focus Areas

Fleet	Infrastructure	Policy
• Current fleet inventory (NAS and HSE). • Office of Government Procurement (OGP) approved contractors.	• Charging infrastructure. • Conversion of existing facilities to charging infrastructure. • Co-location infrastructure.	• Fleet Replacement Policy (not in place). • Charging Use Policy (HSE staff). • Shared charging policy with other public bodies.

These initiatives are explored in more detail in this document.

While some additional activities are important for transport management in the HSE, they are not covered here by this programme. These out-of-scope activities and reasoning behind their exclusion are listed below.

Table 3. A list of Initiatives Out-of-Scope in the Current Phase

Initiative	Description	Reasoning behind exclusion
Cycling infrastructure	Facilities and amenities designed to support and encourage cycling including bike lanes, bike racks and parking, maintenance facilities.	Outside the scope of the transport work programme as it sits under the mobility work programme.
Active travel measures	Initiatives that promote forms of transportation involving physical activity primarily walking, cycling, and other non-motorised travel.	Outside the scope of the transport work programme as it sits under the mobility work programme.
Sustainable mobility policy	Policy requirements related directly to mobility.	Outside the scope of the transport work programme as it sits under the mobility work programme.
Short-term leases (less than 5 years)	Short-term leases (less than 5 years) are also out of scope.	This initiative falls outside the remit of the HSE Climate Action strategy.

1.3 Best Practice

Summary of sustainable initiatives from the case study locations and their associated co-benefits are contained in the table below.

Table 4. Best Practice Measures Undertaken Across the Health Services in the UK and New Zealand

Best Practice Location	Best practice measures undertaken/in progress	Co-benefits		
		Climate	People	Health
NHS England	**Commitment that all vehicles purchased or leased for the NHS transport fleets are low and ultra-low emission (ULEV),** with an aim to have 90% of the NHS fleet to use low, ultra-low and zero emission vehicles by 2028.	✓		
	Undertake green fleet reviews to identify areas of action at the individual trust level to transition the fleet to low and ultra-low emission vehicles and to ensure that the appropriate charging infrastructure is in place.	✓		
	Incentivise Staff to use electric vehicles by increasing access to these and by improving infrastructure and adding more charge points across NHS sites to allow for greater uptake of electric vehicles.	✓	✓	✓
	Develop and test the world's first hydrogen-electric hybrid double-crewed ambulance through the London Ambulance Service as part of project ZERRO (Zero Emission Rapid Response Operations Ambulance).	✓		✓
NHS Scotland	**Explore options for using eCargo bikes** to transfer goods between NHS sites.	✓	✓	✓
	Improve access to NHS electric pooled vehicles for business use.	✓		✓
	Use GIS for better route planning and freight consolidation as a way to minimise travel in the delivery of goods and services.	✓		
	Phase out the purchase and leasing of large fossil-fuelled vehicles by 2030.	✓		
NHS Wales	**Explore options for using eCargo bikes** to transfer goods between NHS sites.	✓	✓	✓
	Improve access to NHS electric pooled vehicles for business use.	✓		
	Use GIS for better route planning and freight consolidation as a way to minimise travel in the delivery of goods and services.	✓		
	Phase out the purchase and leasing of large fossil-fuelled vehicles by 2030.	✓		
NHS New Zealand	**Electrifying the passenger transport fleet** (with 100 out of 270 passenger vehicles as EVs by the end of the financial year 2022).	✓		
	Pilot the use of ebikes to several services, which allows staff members to access a healthier and more economical way of getting around.	✓	✓	✓

1.4 Current State Assessment

The current state assessment was designed to collect data for fleet and estates with respect to HSE and NAS.

Data points listed in were used to complete the assessment and present the current state.

Table 5. Data Points required to complete the current state assessment

Fleet	Estates
• Location (including location parked at night). • Purpose of vehicle. • Year, make, model, mileage, fuel type. • Person(s) accountable for vehicle. • Last service date. • Last tax date. • Last Commercial Vehicle Roadworthiness Test (CVRT) date.	• Number of staff on site night/day. • Number of patients calling night/day. • Number of car park spaces for staff. • Number of public spaces. • Is the parking free or charged? • If charged where does the revenue go? • Site ownership (owned, rented or partnership). • Is there sufficient energy capacity on the grid/network? • How many charges already exist?

The findings of the data collection done are outlined below.

1.4.1 HSE Fleet

To deliver high quality care, the HSE makes use of a large and varied fleet of clinical and non-clinical vehicles, ranging from small cars and light commercial vehicles to non-emergency response vehicles, rapid response vehicles and emergency ambulances. At present, there is no standard mechanism for ownership/ governance of HSE Fleet with differing mechanisms working across the HSE responsible for management of the HSE's fleet or an existing inventory of all vehicles in use across the organisation. This was highlighted with HSE Senior Management and as of a result the management of the HSE fleet is devolved to the HSE regions in line with HSE Sláintecare reform.

To replace this knowledge gap, the sustainable transport work programme group contacted the HSE's indemnity office to obtain a list of vehicles with known insurance. The data provided was compared against the list of known NAS vehicles, which identified discrepancies between both datasets and therefore determined to be an unreliable data source for the purpose of the current state assessment.

Under the 'Clean Vehicles Directive' directive (EU) 2019/1161, the Department of Transport has mandated reporting obligations upon all public sector bodies to the SEAI which requires a breakdown of vehicle fleet, and details on all vehicle procurements since 2021. With an absence of a centralised fleet governance structure, there is a risk that the HSE will not be compliant with this directive and must address this gap urgently to ensure delivery of these requirements.

1.4.2 HSE Estates

A survey was designed in collaboration with the sustainable mobility Work (S04) programme, due to overlapping data requirements, to collect the necessary data on HSE sites. This survey was circulated and conducted through a survey platform between December 2023 and February 2024.

The aim of the survey was to understand the availability of active travel options across the Community Health Organisations (CHOs).[4] The survey was completed by 130 participants from Primary Care Centres.[5]

The survey found that:

- The number of patients attending daily varied across CHOs, with the highest attendance noted at CHO 2 and the lowest at CHO 5.
- Attendance at night was significantly lower in comparison to daytime attendance across most CHOs, with the exception of CHO 9 which had little variance between day and night.
- There are significantly more parking spaces allocated to the public in comparison to staff. It was also noted that there is a lower proportion of car parking spaces to the number of staff.
- The majority of staff members across CHOs do not pay for parking.
- There are 14 Electric Vehicle charging ports (three ports in CHO 1 & CH03, two ports in CHO 6, six ports in CHO 7).

It is evident from the above that there is a need for standardisation in this space. There are varying levels of readiness/access to sustainable active travel options across the HSE. Additionally, there is a need for further surveys to be done to gain insight into other divisions of the HSE but also to track improvements.

1.4.3 NAS Fleet

The NAS fleet consists of 1,370 vehicles as at 31/12/2024 and is updated on a periodic basis. Data contains the following information on NAS vehicles:

- Vehicle base.
- Vehicle type.
- Year, make, model, mileage.
- Cost centre responsible for vehicle.
- CVRT, tax and service due dates.
- Vehicle status.

4 At the time of the survey, the Regional Health Areas (RHAs) were not implemented.
5 The survey has not been distributed to hospitals yet.

1.4.4 NAS Estates

The NAS car parking and charging facilities survey 2023 was open from November 2023 till March 2024 in an effort to capture as much additional site information as possible. NAS currently has 126 locations across the island of Ireland. From the responses returned, it was noted:

- The survey found that there is an insufficient number of parking bays to facilitate NAS and staff vehicles on site across the NAS estates portfolio.
- There is a total of 24 charging points across NAS estates.

1.4.5 Learnings from the Current State Assessment

As mentioned, there is no standard mechanism for ownership or governance of the HSE Fleet with differing mechanisms operating across the HSE. There is a dissolved responsibility for fleet management and no inconsistent oversight of the existing inventory and infrastructure of all vehicles in use across the organisation. There is a risk that the HSE will not be able to accurately report under the mandated compliance obligations.

In addition, with the lack of a standardised approach to the installation of EV chargers at new and existing points based on data from HSE locations. Work should be undertaken to acquire the required knowledge of suitable EV charging point installers that are OGP-approved contractors, as well as the types of vehicles, based at each location to ensure compatible charging infrastructure is considered.

This framework explores the necessary building blocks that the HSE should use on its path to a more sustainable transport network within the health service. These include appropriate management of the fleet, sustainable policies, meaningful data and communications. These are detailed further throughout.

2 Approach

This section outlines the terms on which the work programme operates – its design principles, structure, and methodology.

2.1 Design Principles

The work programme relies on a set of design principles to ensure consistency in its decision-making and remain aligned to the strategic objective of the work programme. The following design principles are applied.

Table 6. Overview and Description of Design Principles

Principle:	Description:
Availability of data	Access to reliable and accurate data will inform the HSE design of effective solutions and strategies to eliminate, reduce and substitute transport emission sources associated with delivering health care services.
Reliability	Reliable design ensures that the initiative will be consistent and will deliver expected results and an important principle as it builds trust among service users and will enhance the HSE's reputation as an organisation.
Value for money	Cost effectiveness is crucial in the design of any initiatives. It is important that the highest possible quality within the budgetary constraints is achieved. This implies that the design is durable, efficient, and effective. Resource optimisation and maintaining focus on value for money will result in sustainable outcomes.
Patient and service user centered	A patient and service user centered design typically involves a holistic view of patient and service user health and considered all aspects of the patients and service user well-being.
Future proof	Designing initiatives that are future-proof means adapting core concepts of adaptability, scalability, sustainability, user-centric, enhancing new technological advancements and compliance with new regulations and standards.
Sustainable and upgradable	Design services/systems that have minimal impact on the environment but are also designed in a way that allows for future upgrades/improvements.
Compliance with policy (climate and other)	Ensures that the design of all initiatives adhere to policies, regulations, standards, and guidelines relevant to transport.
Regardless of resources or funding efforts to help with climate action will always be key	This design principle emphasises the need to incorporate sustainability and climate action in all aspects of design cognisant of the resources or funding. Any efforts towards climate action reflects an organisations commitment to environmental stewardship and responsibility.
Leverage existing solutions	Make smart use of existing resources, knowledge, and solutions to improve efficiency and reduce cost. Not compromising on existing structural developments is also a requirement of this design principle.

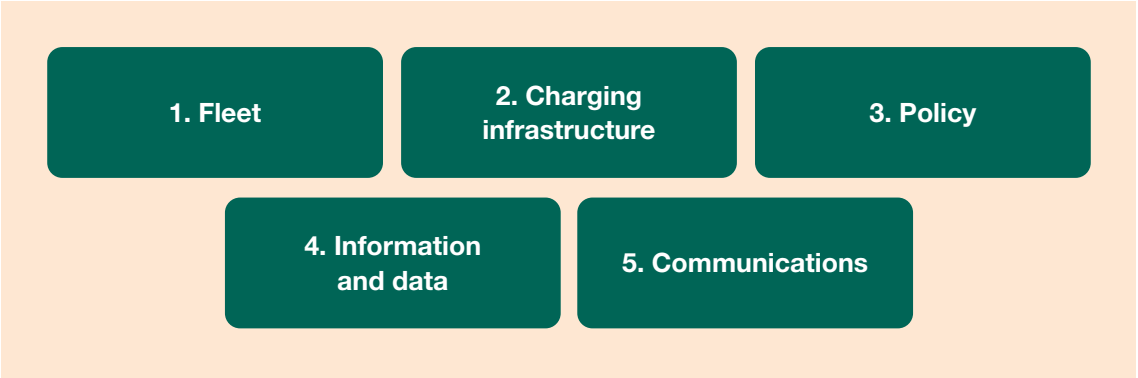
2.2 Process towards Implementation

The work programme focuses on four key areas: best practice, current state assessment, framework development and early mobilisation initiatives.

Best practice examples from the NHS England are used to target key decarbonisation opportunities in the HSE and NAS fleets. The two subgroups (fleet and estates) are designed to concentrate the group's skills in their areas of expertise and streamline the data collection process. Data collated during the current state assessment used a combination of surveys, known data sources and investigations into missing data. While the assessment strives to create a full dataset, it identified gaps. It also identified early mobilisation initiatives for the HSE to use in communication campaigns (i.e. showcasing the success of existing on-site EVs and charging points).

The key building blocks necessary to deliver the strategic objective were identified. The building blocks are presented in the figure below and are explored in more detail in the following section.

Figure 4. Sustainable Transport Building Blocks



2.2.1. Fleet

An environmentally sustainable fleet involves integrating environmentally conscious practices into all aspects of fleet operations, from vehicle acquisition and maintenance to fuel consumption and reducing emissions. This is fleet decarbonisation. The overarching goal is to create a balance between economic viability and environmental responsibility. The HSE has piloted hybrid and EVs for the emergency fleet, such as ambulances, to varying degrees of success with certain challenges identified from weight to range issues for regionally based services. In addition, several 'green' initiatives have been implemented by the NAS to reduce fuel burn and promote behavioural change to reduce fleet emissions.

Initiative applicable to			
Initiative Theme	**Key Initiative**	**Staff**	**Service users**
Fleet	**Reducing CO2 emissions** – develop a sustainable travel strategy to be incorporated into future planning to reduce impact on the planet.	✓	✓
	Eco-Focused Driver Training – providing driver training programs that emphasize eco-driving techniques is a way to benefit the environment and ensure that fleet drivers are engaging with their routes in an efficient way. Educating drivers on the benefits of avoiding high acceleration and harsh braking, maintaining a consistent speed and reducing idling time.	✓	✓
	Green Procurement – These policies can have a substantial long-term impact on the sustainability of fleet. By committing to the purchase of more environmentally friendly vehicles, it contributes to the broader shift toward sustainable transportation and reducing fleet's environmental footprint.	✓	✓

2.2.2 Charging Infrastructure

The majority of EV charging (c.80%)[6] is done at home, and access to and installation of home-charging infrastructure is relatively well established in Ireland. A more significant gap exists in relation to the provision of publicly accessible charging infrastructure. In tandem with the ongoing support to the development of a HSE national plan, HSE Capital and Estates are monitoring changing requirements for public sector obligations under the energy Performance of Buildings Directives. Specifically investigating options for HSE to address public sector obligations with capital investment and resourcing efforts in keeping with government's key requirement that home charging is the lynchpin of the National EV Charging Strategy.

HSE Capital and Estates have developed an EV Charging Infrastructure Position Paper. The paper highlights the following important considerations in relation to EV Infrastructure:

1. HSE need to keep electrical capacity on our healthcare sites specifically for healthcare requirements. This includes ongoing and new capital developments including zero-carbon-enabled design and decarbonisation of existing building stock. Considerable upgrades of existing electrical capacity and infrastructure is a requirement in most healthcare campuses to support this need.
2. The majority of our healthcare campuses provide both staff and service user parking. This provide a viaible 'captive audience' that make it possible to leverage input from private operators who have speciality expertise and capacity in the installation and management of EV charging infrastructure.
3. There are several different 'partnering' options available for HSE to consider. This includes varying options for HSE to buy, rent or fully outsource provision of EV charging intrastructure.

The Position Paper proposes the following in light of the considerations above:

- HSE should implement a common national strategy, rather than regional and ad-hoc variation.
- HSE should develop a specific 'concession contract' that will enable enable hospital / facility managers contract the services of a third party operator under a standardised concession contract to provide and manage an EV charging service on healthcare sites.

6 Electric Vehicle Charging Infrastructure Strategy: Executive Summary 2022-2025.

- The third party provider will enage with ESB, install a stand-alone electriity supply under a new Meter Point Reference Number (MPRN) and thereafter operate and maintain this service with no implications for the existing campus electrical systems.
- The charge points will be restricted to surface carparks initially untill the implication of EV fire risks are more fully known.
- Installation of EV charging points at top / open floor of multi-story carparking to be considered further.
- The charge point locations need to be coordinated with a formal Dedicated Charging Port (DCP), so if no DCP, then no charge point and this must be signed off by a Regional Estates Manager.
- A formal Personal Reader Grant (PRG) application needs to be made and approved in support of any application. This will include a standard licence agrement and a standard concession contract that is tailored specifically for this purpose.
- This 'standard pack' needs to be developed and tailored. It is proposed to develop this through a market engagement process and therafter progressing a pilot project on one to three HSE sites.
- It is proposed that HSE should publish a prior information notice for a number of pilots – invite discussion with interested 3rd party vendors and use this engagement to develop the draft proposal and tease out the specifics of the concession contract. Subsequently, HSE would engage legal support for this process and then invite tender for the pilot.
- There will be some profit share for HSE under this arrangement. This will be part of the ultimate evaluation along with minimum contract length and capacity to upscale.

Initiative Theme	Key Initiative	Staff	Service users
Charging Infrastructure	Developing an **HSE Framework on Charging Infrastructure** will allow the HSE continue to offset the carbon that would have been emitted from an equivalent petrol or diesel vehicle. This CO2 saving will supports goals outlined in the HSE Climate Action Strategy and will continue towards achieving the carbon net zero goals. The HSE Framework will be developed in line with the HSE Capital and Estates – EV Charging Infrastructure Position Paper	✓	✓

2.2.3 Policy

A policy for sustainable transport addresses how an organisation manages and monitors its impact on the environment, both in its own operations and those of its supply chain. By adopting a sustainable transport policy, the HSE highlights its commitment to implementing and promoting sustainability practices nationally across its fleet and reducing its own carbon emissions.

Initiative Theme	Key Initiative	Staff	Service users
Policy	With a **sustainable transport policy,** the HSE can align itself with government policies and international sustainability principles, focusing on three main goals: **Avoid** and reduce, **Shift** to sustainable transport, and **Improve** energy efficiency.	✓	✓
	By **incorporating sustainable management,** the HSE can continue to deliver on our commitment to become a leading sustainable organisation delivering low carbon quality sustainable healthcare, with the purpose of preserving natural resources, reducing carbon emissions, mitigating the effects of climate change and safeguarding high quality patient care.	✓	✓

2.2.4. Information and Data

Information and data play a crucial role in advancing sustainable transport by informing decision-making, optimizing transportation systems, and empowering service user and staff to make more sustainable travel choices. In addition there is a requirement to ensure information and data are available in accessible ways for government mandated reporting.

Initiative Theme	Key Initiative	Staff	Service users
Information and data	**Establish a baseline** on fleet and measure EV charging infrastructure. In addition, formulate an ongoing measurement plan with targets.	✓	✓

2.2.5. Communications

Communication strategies play a crucial role in promoting sustainable transport by raising awareness, fostering behaviour change, facilitating informed decision-making among staff and service users and to be accessible for all potential users. Effective communication campaigns can educate staff and service users about the environmental, social, and economic benefits of sustainable transportation options. By highlighting the advantages of these alternatives, communication initiatives can encourage service users and staff to reconsider their travel habits and embrace more eco-friendly modes of transportation.

Initiative Theme	Key Initiative	Staff	Service users
Communications	**Communication strategy** to inform staff, service users and visitors of commuting options to healthcare facilities.	✓	✓

The success of the work programme is reliant on buy-in from key management stakeholders. To support its ambition, the work programme will identify "good news" stories to be publicised both internally and externally, in conjunction with the HSE communications team. An important aspect of gaining stakeholder support is leveraging existing relationships to improve credibility.

Table 7. External Stakeholder Engagement in the Transport Work Programme

Stakeholder	Nature of engagement	Status
ZEVI	Zero Emission Vehicles Ireland (ZEVI) a dedicated Office within the Department of Transport were engaged to assist the group in understanding the funding options available for public sector bodies looking to procure EVs and best practice methods of transitioning to a zero-emission fleet.	Ongoing
ESB	ESB were engaged to give the group an update on the rollout of hydrogen fuel options for low- and heavy-duty vehicles across Ireland. The Work Programme will continue to engage with ESB on alternative fuel options for ambulances.	Ongoing
Motability Ireland	Motability Ireland have been supporting Stewarts Care on modifying their EV fleet to become accessible vehicles. They were engaged to understand what the group need to consider for future electric patient transport vehicles.	Ongoing
Department of Health	Department of Health engaged with the work programme to submit a joint response to ZEVI's public consultation on their EV Charging Network Plans. A representative from the DoH joined the membership of the Work Programme to ensure alignment between the HSE and Department of Health on sustainable transport initiatives in the health sector.	Ongoing
An Garda Síochána	The Work Programme aims to engage with An Garda Síochána understand more about their fleet transition.	To be engaged

As the work programme's ambition expands, it will incorporate additional considerations for further fleet decarbonisation, such as exploring the use of biofuels as transitional instruments to reduce emissions where a zero-emission alternative is not available. This will be particularly important for the ambulance fleet as NAS conducts trials on the suitability and availability of zero-emission ambulances.

This methodology may develop during the course of the HSE's Climate Action Strategy, subject to expansion of the work programme's scope and availability of new alternatives for fleet decarbonisation.

3 Implementation

In order to satisfy the objectives laid out in the HSE Climate Action Strategy and the mandated requirements as laid out in the Governments Climate Action Plan, the working group has recommended the below:

3.1. National Implementation Plan

Climate and Sustainability Programme				
Initiative Theme	**Action**	**Owner**	**Support**	**Timeline & Output**
Charging infrastructure	Continue to **work with HSE Capital and Estates on a path to charging infrastructure** to facilitate electric vehicles, via HSE sustainable transport working programme.	Climate and Sustainability Programme	HSE Regional Green Committees	Ongoing
	Continue to **work with HSE Procurement on electrifying HSE fleet**, via HSE Sustainable Procurement working programme.	Climate and Sustainability Programme	HSE Regional Green Committees	Ongoing
Information and data	Investigate and **establish baseline green fleet reviews & electrifying HSE fleet** with HSE Procurement and HSE Regional Green Committees.	Climate and Sustainability Programme	HSE Regional Green Committees	Ongoing
	Report and comply with all Public Sector Climate Action Mandate obligations as required by SEAI.	Climate and Sustainability Programme	HSE Regional Green Committees	Ongoing
	Mobilise feedback from patient groups, wider community, public body representatives, and others.	Climate and Sustainability Programme	HSE Regional Green Committees	Ongoing
Communications	Continue to cascade **internal communication strategies** and campaigns to inform staff, service users and visitors of commuting and sustainable transport options to healthcare facilities.	Climate and Sustainability Programme	HSE Internal Communications	Ongoing

3.2. Regional Implementation Plan

HSE Regional Green Committees				
Initiative Theme	**Action**	**Owner**	**Support**	**Timeline & Output**
Fleet	Perform a **regional fleet review** of all HSE vehicles in the regions.	Regional Executive Officer	HSE Regional Green Committees	Ongoing
	Collaborate with local teams and HSE Procurement on purchasing HSE vehicles via OGP approved contractors going forward.	Regional Executive Officer	HSE Regional Green Committees	Ongoing
Charging infrastructure	**Collaborate and liaise with HSE Capital and Estates on charging infrastructure** for the region. This includes, but not limited to, the below: • Conversion of existing facilities to charging infrastructure. • Location of charging infrastructure for all stakeholders.	Regional Executive Officer	HSE Regional Green Committees	Ongoing
Policy	Develop a **regional sustainable transport action plan** with in consultation with the National Office of Climate and Sustainability. The action plan should include, but not limited to: • Sustainable fleet replacement. • Charging use for HSE staff. • Shared charging policy with other public bodies (if applicable).	Regional Executive Officer	HSE Regional Green Committees	Ongoing
Information and data	Perform a **regional fleet review** of all HSE vehicles in the region to obtain required information, as mandated by SEAI and Public Sector Climate Action Mandate.	Regional Executive Officer	HSE Regional Green Committees	2025
	Staff travel survey to establish base line data and monitor progress.	Regional Executive Officer	HSE Regional Green Committees	Ongoing
Communications	Work with the Climate and Sustainability Programme to develop a **regional communications plan** on public transport information to inform staff, service users and visitors of sustainable transport.	Regional Executive Officer	HSE Regional Green Committees, HSE Communications	2025

3.3. Local Implementation Plan

HSE Local Green Team				
Initiative Theme	**Action**	**Owner ***	**Support**	**Timeline & Output**
Fleet	In collaboration with the Regional Green Committee perform a **regional fleet review** of all HSE vehicles within the local site.	Facility/ Service Manager	HSE Local Green Team	Ongoing
	Collaborate with HSE Procurement on purchasing HSE vehicles via OGP approved contractors going forward.	Facility/ Service Manager	HSE Local Green Team	Ongoing
Charging Infrastructure	Across the local site, **identify appropriate location for charging infrastructure.** This should be in collaboration with HSE Capital and Estates and the Regional Green Committee.	Facility/ Service Manager	HSE Local Green Team	Ongoing
Policy	Collaborate with the Regional Green Committee on a **regional sustainable transport action plan** with in consultation with the Climate Action and Sustainability Programme.	Facility/ Service Manager	HSE Local Green Team	Ongoing
Communications	Work with the Climate and Sustainability Programme to promote and enable a regional **communications plan** on public transport information to inform staff, service users and visitors of sustainable transport.	Facility/ Service Manager	HSE Local Green Team, HSE Communications	2025

* Assign owner based on relevant expertise and responsibilities within facility/service.

4. Support for Implementation and Next Steps

The HSE Climate and Sustainability Programme, along with HSE Capital and Estates Sustainable Infrastructure Office, will continue to support and enable regional green teams, regional climate and sustainability leads and local green teams in whatever way required to ensure that together real tangible progress on this critical issue is made and the HSE continues on our path to sustainability as a whole. This will include guidelines, training, tools and templates to assist with implementation of the Climate Action Strategy.

Moreover, in the immediate term, each region should focus on the below implementation enablers to build and sustain momentum.

Implementation Enabler 1

Governance: Transport sub-committee

- As part of your regional green committee establish a transport sub-committee as per Regional Climate Action Implementation Structures guidance issued by the Climate and Sustainability Programme.
- Members of the committee should include, but not limited to:
  - » Representation from clinical staff.
  - » Capital and Estates staff.
  - » Facilities Management staff.
  - » Health Promotion staff.
  - » Ward staff.
  - » Fleet management staff.
  - » Procurement staff.
- As per regional implementation plan mentioned, regional green teams should develop a regional sustainable transport action plan.

Implementation Enabler 2

Measurement and assurance

- The Climate Action and Sustainability Programme will:
  - » Guide measurement plan initially to focus on 2030 target as minimum targets and all other CAP 24 requirements. The programme will assist regions with guidance and materials on this shortly.
  - » Develop a suite of KPIs for regional reporting.

Implementation Enabler 3

Communications and training

- The Climate Action and Sustainability Programme will be supporting regions and services with:
  - » Ongoing communications materials to support action, enable shared learning and awareness in this space.
  - » Various training opportunities such as health sector specific training provided via HSELanD and other e-learning platforms, Senior Leadership Sustainability training and Green Team training.
  - » See below a tile developed as part of an internal staff campaign providing staff simple actions that they can take.

Appendix Terms of Reference

Sustainable Transport Work Programme

Introduction

The Chief Strategy Officer, on behalf of the Executive Management Team (EMT), has initiated the implementation of the Climate Action Strategy for the HSE (the "Strategy"). The overarching objective of the Strategy is to support the delivery of key HSE strategic goals as they relate to Climate Action. The Strategy addresses and goes beyond the mandated climate targets for public bodies as set out in the Government's Climate Action Plan 2023. The programme of work to implement the Strategy (the "Programme") will be a multi-year, sustained Programme 2023-2050 (with yearly reviews and updates) that requires appropriate investment in terms of time and resources.

This will involve setting up a number of Work Programmes, including the Transport Work Programme. The work of each Work Programme will be to drive implementation of the Strategy by setting a baseline, developing implementation plans, filling key data gaps, identify principles for implementation and resource requirements, map risks associated with delivery and provide mitigations, etc.

Implementation of the Strategy will be an ongoing process.

Scope

The Work Programme will be overseen by a broad advisory group whose scope is centred on providing direction to the activities related to transport that is required to develop and implement the Climate Action and Sustainability Strategy (2023-2050). These include actions relating to Strategic Objective 3, Transport: Develop a HSE transport framework and supporting implementation plan to eliminate, reduce, and substitute transport emission sources associated with delivering and accessing healthcare.

To deliver this Strategic Objective, in addition to an overarching, broad advisory group, the Work Programme has two associated work streams:

Work stream A: Transport

- Identify what best practice looks like for decarbonising emergency fleets through desk research, peer benchmarking, and engaging with the NHS [Key Action 1].
- Baseline fleet data across the HSE for both emergency and non-emergency vehicles (to follow) [Key Action 2].
- Consider fleet inventory and replacement cycles
- Identify regions suited to uptake of low or zero-emission vehicles
- Obtain and review data gathered by the National Ambulance Service hybrid ambulance pilot projects, and review options to purchase only zero-emission vehicles from the end of 2022 onwards.
- Consider how the organisation can consolidate the acquisition and maintenance of all vehicles.
- Forecast potential low-carbon fleet procurement in line with the delivery of service, considering the current fleet inventory and replacement cycles [Key Action 3].
- Develop a transport framework and implementation plan with high-level costings – to address issues with existing estate and inefficiencies in NAS fleet [Key Action 4].

Work stream B: Infrastructure

- Identify what best practice looks like for decarbonising emergency fleets through desk research, peer benchmarking, and engaging with the NHS [Key Action 1].
- Identify key challenges/opportunities around moving to low and zero emission vehicle fleets, with regard to the impact of the Government Electric Vehicle Infrastructure Strategy 2022-2025 and the Climate Action Mandate on HSE operations, considering:
  a. Power requirements and grid capacity
  b. Charging accessibility for staff/patients/visitors
  c. Availability and eligibility of funding
- Ensure appropriate consideration of charging infrastructure requirements is integrated into the transport framework and implementation plan [Key Action 4].

Other items which are deemed by the Chair as in scope during the course of the work programme may be added as required.

Purpose

The purpose of the Transport Work Programme is:

- To provide oversight and guidance on elements relating to transport required for the delivery of the HSE Climate Action Strategy (2023-2050).
- To ensure the related requirements laid out by the Climate Action Steering Group are met.
- To remain within agreed scope and remit of work.
- To manage the resolution of risks and issues relating to transport elements in the development of Climate Action Strategy (2023-2050) to mitigate delays.
- To liaise and work closely with the other Work Programmes and ensure findings are not in conflict.
- With respect to the potential transition of Fleet Vehicles to alternative fuel sources such as electric vehicles and the potential associated infrastructure requirements that could result under Strategic Objective 3, Transport, to liaise with the Sustainable Buildings and Green Environment Work Programmes.
- To ensure appropriate reporting with related governance structures are in place as needed.
- To ensure that appropriate stakeholder engagement (including external stakeholders) is incorporated.
- To ensure on-going alignment of projects and works with HSE and National Policy and Strategy.

Work Programme Team Members

The proposed membership of the Work Programme is as follows:

Name	Role	Title	Fleet Subgroup	Estates Subgroup
Johnny Dicker	Chair	Head of Service Fleet and Logistics, NAS	✓	✓
Niall Walsh	Project Manager	HSE Climate and Sustainability Programme	✓	
Noel Rigney	Team member	General Manager Fleet and Logistics, NAS		✓
David Willis	Team member	Project Manager PMO, NAS		✓
Michael Martin	Team member	Estates Office, NAS	✓	✓
Peter McGowan	Team member	Procurement Category Specialist		✓
Vincent Brennan	Team member	Estates Manager		✓
Damien Clarke	Team member	Capital and Estates Rep	✓	✓
Kevin Sheridan	Team member	Estates Manager (Energy)	✓	✓
Deidre Oman	Team member	Finance Representative	✓	✓
Martin Doran	Team member	Transport Manager, Stewarts Care		
Gina Magliocco	Team member	National Head of Risk & Regulation and Health & Safety	✓	✓
Joan Tallon	Team member	Fleet and Assets NAS	✓	
Colin O'Hehir	Team member	Head of Climate Change Unit, DoH	✓	
Anthony Graham	Team member	Fleet & Equipment Manager, NAS	✓	

Membership will be reviewed regularly, and new members may be requested to join as required. Other individuals may be invited by the Chair to attend Work Programme meetings as needed.

Work Programme membership substitutions are only permitted in cases of short-term absences (for example annual leave or illness). In cases of longer-term absences, adjustment of Climate Action Steering Group membership will be required, with the transfer of role(s) formally recorded.

Work Programme team members should:

- Understand the goals, objectives and desired outcomes of the programme of work.
- Raise matters of concern as they arise.
- Have a good working understanding of the legislation and statutory demands its implications for staff, service users and the public.
- Attend and participate in Work Programme meetings as required.
- Support open discussion and respectful debate at all Working Programme meetings.

Meetings

The Work Programme team will meet at least once every 6 weeks.

Decisions, Approvals and Escalations

A quorum of the Work Programme is required for decision-making purposes and to ensure meetings are valid and decisions are binding. A meeting quorum will be [6] attendees.

Decisions and approvals will require support from a majority of Work Programme members who attend the meeting, provided there is a quorum. In cases where there is an even number of attendees, the Chair has the final decision-making authority.