An Roinn Iompair
Department of Transport

Alternative Fuels for Transport Working Group

Report to the Minister for Transport

March 2026

Table of Contents

1 Introduction....2

2 The Working Group....2

2.1 Purpose....2

2.2 Key Priorities of the Working Group....2

2.3 Monitoring Progress....5

3 Key Outputs of the Working Group....5

3.1 Advancing National Policy Framework on Alternative Fuels Infrastructure....5

3.2 Renewable Transport Fuel Policy and Working Groups....8

3.2.1 Biofuels Sustainability Working Group....10

3.2.2 RES-T Working Group – supporting compliance with the NECP....11

3.3 Sustainable Aviation Fuel (SAF) Task Force....12

4 Sector Updates....13

4.1 Road Freight....13

4.2 Maritime Transport....14

5 Conclusions....17

6 Work Programme 2026....18

Appendix 1: Alternative Fuel for Transport Working Group Membership....20

Terms of Reference....21

Appendix 2: Activities of the Working Group....22

Glossary of Abbreviations....24

1 Introduction

This Report to the Minister sets out the activity and key outputs of the Alternative Fuels for Transport Working Group for the year ended 31 December 2025. The report points to a continued rationale for the role of the Working Group in progressing policy and implementation of action concerning transport decarbonisation through alternative fuels and identifies some priority areas for attention in 2026.

2 The Working Group

2.1 Purpose

The Department of Transport established the Inter-Departmental Alternative Fuels for Transport Working Group in 2023 with the purpose of:

- facilitating greater visibility on policy development and delivery across the transport and energy sectors in relation to the development of alternative fuels in transport,
- co-ordinating a variety of ongoing actions concerning alternative fuel infrastructure and renewable energy across the transport sub-sectors, land, aviation and maritime, and
- promoting greater alignment with policies of other Government Departments and sectors, including the Hydrogen Strategy, the Biomethane Strategy, and Ireland's Offshore Wind Industrial Strategy.
- The work of the Group concerns delivery on targets in the Climate Action Plan (CAP), as well as European Union (EU) and international requirements and targets. Membership and activities of the Group are set out in the Appendices.

2.2 Key Priorities of the Working Group

The conclusions and recommendations of the 2024 Report informed 8 key priorities for the 2025 Work Programme.

Priority 1: New areas of research and policy development relevant to Alternative Fuels for Transport.

- Research included the availability & use of Hydrotreated Vegetable Oil (HVO) in the Heavy Goods Vehicle (HGV) sector, which was published in November 2025 and can be accessed at the following link . Separately, the Department of Enterprise Tourism and Employment (DETE) commissioned a sectoral analysis of future hydrogen demand and end-uses in Ireland in Q3 2025, the results of which are currently under consideration.

Priority 2: Consider the hierarchy of use of certain renewable fuels across different economic sectors, and within transport sub-sectors.

- On foot of a recommendation made by the Climate Change Advisory Council (CCAC) in their 2025 Annual Review of Transport, that a coherent plan for the most efficient use of sustainable biofuels across all sectors should be developed, the Department of Transport has commissioned a study concerning the hierarchy of use of HVO across transport and other sectors. The rationale for the study is to ensure that State intervention through obligations and related incentives are aligned to the most efficient use of HVO across all transport modes, relative to available renewable energy alternatives across these transport modes and to demand for HVO use in non-transport sectors, within the context Climate Action Plan and of European regulatory targets and requirements to 2030 and beyond. Ricardo have been engaged to conduct this study and work has commenced. The research is expected to be completed in April 2026 and will be presented to the Working Group.

Priority 3: National Policy Framework (NPF) / Alternative Fuels Infrastructure Regulation (AFIR) - continue to input and guide development of NPF for AFIR following EU Commission (CION) engagement, with particular focus on identifying a suite of measures to support roll-out

- Updates have been provided at each meeting of the Working Group, with opportunities provided for working group members to input. A draft NPF was submitted to the CION and will be revised and updated following collation of data and review of other Member States NPF-AFIs. Will go out to public consultation as required as part of the Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) process.

Priority 4: Alternative fuel deployment in Maritime - consider outputs from various studies underway in the maritime sector relating to AFIR roll-out

- The research into alternative fuel use in shipping (Shipfuel.ie project) and feasibility of provision of alternative fuel infrastructure in Irish ports being conducted by the IMDO are ongoing and will be shared with the Working Group once they are completed.

Priority 5: SAF Policy Development to ensure overall coherence across transport modes

- On 21 August 2025 Minister O'Brien published Ireland's first Sustainable Aviation Fuel (SAF) Policy Roadmap, as committed to under the Programme for Government. The SAF Policy Roadmap represents an important first step in developing Ireland's national SAF policy, identifying several actions which will be built upon in future iterations, and setting a path for future SAF policy development. The Department of Transport continues to engage with stakeholders in relation to SAF policy development via the SAF Task Force.

Priority 6: RTP policy barriers and challenges identified in meeting RED targets

- The Renewable Transport Fuel Policy (link) was published in June following input from the Alternative Fuels for Transport Working Group, stakeholder engagement, and Government approval. The Policy sets out a pathway for achievement of Climate Action Plan biofuel targets and European targets for renewable energy in transport as set out in the EU Renewable Energy Directive (RED) and sets out 19 policy actions to 2027 to achieve EU requirements and national climate action objectives. The Alternative Fuels for Transport Working Group, the RES-T Working Group and the Biofuels Sustainability Working Group will continue to play a role in the implementation of the policy.

Priority 7: Raise the visibility / awareness of the role of alternative fuels in the decarbonisation of transport

Various opportunities have been identified as follows:

- The Department of Transport was represented at industry hosted events such as the SMBC Aviation Capital SAF Roundtable. Post release of the SAF Policy Roadmap, the Department presented the Roadmap at several forums including the International Conference on Sustainable Aviation Research and the Aircraft Leasing Ireland Summit.
- The Department is represented at interdepartmental working groups including the Hydrogen Task Force, Biomethane Implementation Group and Carbon Capture, Utilisation and Storage Taskforce.
- The Heavy-Duty Vehicle (HDV) Electrification Pathway Working Group was established by ZEVI to support the electrification of the heavy-duty fleet in Ireland. The purpose of the Group is to ensure strong industry input into the development of a HDV Electrification Pathway and share knowledge and learnings with a view to progressing HDV electrification. The Working Group report is now being prepared for publication in the coming months.

Priority 8: Corrective Action Modelling Project in context of CAP26

- Complete: Workshops have taken place on the role of alternative fuels between the Department of Transport and agencies on alternative fuels infrastructure (AFI) measures, data, alternatives considered, and environmental impact of AFI measures. As a result of this work, as well as engagement with DCEE no unallocated savings from alternative fuels have been identified out to 2030. The findings of this work will be included in the final DCEE report on unallocated savings.

2.3 Monitoring Progress

The Working Group also co-ordinates a suite of actions under existing policy commitments falling within the scope of alternative fuels in transport. In 2025, 10 actions were marked as complete, highlights included publication of Ireland's first Sustainable Aviation Fuel Policy Roadmap and publication of the En-Route EV Charging Plan and the Regional and Local EV Charging Network Plan. A further 10 actions were reported under ongoing progress and will continue to be progressed in 2026.

3 Key Outputs of the Working Group

The key outputs of the Working Group are set out in this Section.

3.1 Advancing National Policy Framework on Alternative Fuels Infrastructure

In 2025, the Department continued work on revising the National Policy Framework (NPF) for Alternative Fuels Infrastructure, undertaking research and analysis along with extensive engagement with alternative fuels stakeholders. CION feedback on the draft NPF was received in November 2025 and is being addressed.

This year, the Department will complete the required Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA). The findings will inform the draft policy Framework, which will then proceed to public consultation prior to publication.

The updated National Policy Framework is scheduled for publication in 2026. It will support industry in identifying the most appropriate decarbonisation technologies, including electrification, hydrogen, biomethane and other sustainable fuels.

The Framework will set out plans for:

- Electric vehicle charging infrastructure for light- and heavy-duty vehicles
- Hydrogen refuelling infrastructure for road transport
- Onshore power supply for specified vessels in Irish maritime ports
- Electrical power provision for stationary aircraft at airports

Electric Vehicle Infrastructure

The Government understands that having an effective and reliable charging network is an essential part of enabling drivers to make the switch to electric vehicles. In that context, ZEVI is fully committed to supporting a significant expansion and modernisation of the EV charging network over the coming years. While over 80% of charging is expected to happen at home, there

is a vital need for a seamless public charging network that will provide for situations or instances where home charging is not possible. The National EV Charging Network Plan outlines the requirements for publicly accessible charging, the objective of which is to be ahead of demand and deliver on the EU's Alternative Fuels Infrastructure Regulation requirements and install EV Infrastructure that is capable of meeting user needs. A range of policies have been published, including the *National En-Route EV Charging Plan and the Regional and Local EV Charging Network Plan*.

In line with commitments under the Programme for Government, the Draft National EV Charging Infrastructure Strategy 2026–2028 was published for public consultation on 26 February 2026, setting out the next phase of Ireland's approach to expanding and future-proofing the national charging network. This draft strategy will guide the continued rollout of accessible, reliable and comprehensive charging infrastructure through to 2028, with a final strategy to follow later in the year after consultation. A range of new charging infrastructure schemes have been launched which will help provide another critical link in the overall network for public charging.

EV Recharging Infrastructure LDV En-Route Grant Schemes

The Light Duty Vehicle (LDV) charging programmes will be administered by Transport Infrastructure Ireland (TII) and will significantly expand high power charging availability across the national, regional and local road network, creating a more convenient and reliable system for drivers nationwide.

LDV Grant Scheme Phase 1

The first ZEVI EV Recharging Infrastructure LDV National Road Grant Scheme was launched by TII and ZEVI in February 2024. In July 2024 the locations of 17 new high-powered recharging pools to be rolled out under this scheme on the National Road Network were announced.

A total of 131 high-powered recharging points will be built across 17 recharging pools providing an additional 24,260 kilowatts (24 megawatts) recharging capacity.

LDV Grant Scheme Phase 2

Phase 2 of the ZEVI EV Recharging Infrastructure LDV National Road Grant Scheme programme, focusing on 1200km+ of national single carriageway roads, was launched by TII and ZEVI in October 2024. In June 2025 the locations of 53 new high-powered recharging pools to be rolled out under this scheme on the National Road Network were announced.

A total of 175 high-powered recharging points will be built across 53 recharging pools, providing an additional 20,000 kilowatts (20 Megawatts) of recharging capacity.

LDV Grant Scheme Phase 3

Phase 3 of the TII EV Recharging Infrastructure LDV National Road Grant Scheme programme, focusing on 3,000km of non-Ten-T national single carriageway roads, was launched by TII and ZEVI in February 2025. In October 2025, the locations of 90 new high-powered recharging pools to be rolled out under this scheme on the National Road Network were announced.

A total of 192 high-powered recharging points will be built across the 90 recharging pools, providing an additional 22,000 kilowatts (20 Megawatts) of recharging capacity.

Local Authority Pilot Schemes

ZEVI have developed a Local Authority EV Charging infrastructure Pilot Programme. The aim of this pilot programme is to develop knowledge and understanding and explore innovative solutions for EV charging infrastructure across our Local Authorities. Work will continue on the roll out of 26 pilot projects across 15 Local Authorities. These pilots include new innovations in renewable, battery backup, behind the meter solutions and flexible payments such as discounted off peak Neighbourhood Charging. The roll out of these pilots will be complete in 2026 and follow the delivery of the first pilot in Westside, Galway City in 2025.

Shared Island Sports Club Scheme

The Shared Island funded Sports Club EV Charging Scheme provides funding to install a network of publicly accessible chargers in communities nationwide through their local sports clubs. Included in the scope of the Scheme are 227 clubs of which 179 are in Ireland and 48 in Northern Ireland. With procurement frameworks now in place, 2026 will see physical installation works begin under the Shared Island Sports Club EV Charger Scheme. Sports Clubs from across Ireland, north and south, will start hosting community-based chargers, making EV charging more accessible in everyday locations.

The shortlisted clubs which are all affiliated with a recognised national governing body and meet the scheme requirements took part in national webinars run by Pobal and ZEVI in August and November where the next steps of the scheme and the processes to draw down funding were outlined.

All clubs are now eligible to enter a mini-tender process with each of the three approved Charge Point Operators (CPOs) for the installation and operation of charge points at their clubs. All clubs are assessed on a first-come first-served basis.

Hydrogen

Renewable and low carbon hydrogen is seen as offering opportunities for Ireland to position itself at the forefront of a developing European hydrogen economy while also mitigating some of the

risks presented by grid capacity constraints and assisting in Ireland's decarbonisation of hard to abate sectors such as HGVs and aviation. The AFIR requires that by 2030, a network of 5 hydrogen refuelling stations will need to be in operation in Ireland. That is four hydrogen refueller stations in urban nodes: Dublin, Cork, Limerick, Galway and one hydrogen refueller station at an intermediate location on the TEN-T core network. Progress on commencement of this requirement must be demonstrated by 2027.

Under the Shared Island Initiative, the Department of Transport, in cooperation with the Department for Infrastructure in Northern Ireland, is seeking to develop a hydrogen refuelling corridor from Dublin to Belfast with the delivery of two demonstrator public hydrogen refuelling stations, one in each jurisdiction. Phase III of the project to develop a pre-procurement strategy and preliminary business case is being conducted by HyEnergy Consultants and due to be complete in Q2 2026.

Liquefied methane [1] for road transport requirements

The repealed Alternative Fuel Infrastructure Directive 2014/94/EU recommended that refuelling points for liquified methane in road transport be deployed every 400 km along the TEN-T core network. The Alternative Fuel Infrastructure regulation (AFIR) requires Member States achieve this and complete and remaining refuelling network gaps by 2025. The draft current National Policy Framework does not support further refuelling infrastructure for liquefied methane in road transport in Ireland but will be kept under review in the context of the finalisation of the National Policy Framework in 2026.

Liquefied methane in Irish Ports

The AFIR requires an appropriate number of refuelling points for liquefied methane within TEN-T core maritime ports available by 2025, and that deployment of this infrastructure should be driven by market demand. Refuelling points for liquefied methane includes liquefied methane terminals, tanks, tank truck trailers, truck tankers, mobile containers, bunker vessels, and barges. While there is currently no such infrastructure available at Irish Ports, Ireland will consider, subject to market demand, whether cooperation with neighbouring States could assist Ireland in fulfilling more broadly the requirements under the AFIR.

3.2 Renewable Transport Fuel Policy and Working Groups

The State-level working groups established in 2023 by the Department of Transport support delivery of Renewable Transport Fuel Policy 2023-2025 concerning biofuel sustainability and achievement of revised European targets and requirements for renewable energy in transport.

The Renewable Transport Fuel Policy sets out the pathway to the achievement of Climate Action Plan decarbonisation targets and European renewable energy targets and obligations, including European sustainability and greenhouse gas reduction criteria. The EPA[1] projects that the consumption of biofuels will achieve GHG emissions abatement of 1.61 MtC02eq in 2030, exceeding the CAP23 target of 1.08 MtC02eq.

The 2030 targets in the CAP5 and the RED III are implemented through a trajectory of annual increase the Renewable Transport Fuel Obligation (RTFO) rates, provided for under Part 5A of the National Oil Reserves Agency Act 2007, which places an obligation on fuel suppliers to ensure that road transport fuel contains a minimum proportion of renewable transport fuel.

The RTFO rate of renewable transport fuel as a proportion of road transport fossil fuel supply was 25% in 2025, with a sub-target obligation of 1.5% in 2025 for supply of advanced biofuel as defined in the Renewable Energy Directive. The blending obligation in petrol and diesel continues to contribute positively to road transport decarbonisation.

The trajectory of increase in renewable transport fuel obligation rates was revised and updated in the Renewable Transport Fuel Policy 2025-2027, taking account of increased European 2030 targets for renewable energy in transport (in fuel and electricity supply), as well as a new sub-target obligation for supply of renewable fuels of non-biological origin (RFNBO) in transport of a minimum 1% by 2030. Regulations at the end of 2025 set the revised RTFO rate for 2026 at 32% with a sub-target combined advanced biofuel and RFNBO obligation rate of 5% for 2026.

The industry expert panel was also established in 2023 to support the renewable transport fuel working groups, will continue to provide valuable inputs and expertise concerning future policy review and implementation. The Industry Expert Panel incorporates biofuel and biogas producers and suppliers – renewable transport fuel obligation account holders and obligated parties, and the representative bodies for these economic operators, Fuels for Ireland, IRBEA and Liquid Gas Ireland.

[1] 1 EPA, 'Ireland's Greenhouse Gas Emissions Projections 2024-2055', May 2025

3.2.1 Biofuels Sustainability Working Group

Work Programme

In 2025, the activities of the Working Group followed the agreed work programme, as follows:

The Working Group oversaw the implementation of actions and improvements identified in the vulnerability assessment undertaken in 2024. Action taken in 2025 includes the development by NORA of developed a reporting format and guidance on their website outlining the process concerning allegations/suspicions of biofuel fraud or non-conformities, ongoing engagement with the European Commission concerning operationalisation of the Union Database, and work by Revenue in relation to oversight of the biofuel supply chain.

Throughout 2025 the Working Group considered the ongoing revision of the EU implementing regulation on sustainability certification, noting comments from Ireland on the critical role of voluntary schemes and their oversight, seeking clarification of the different actors in the system, and calling for a formal mechanism by which Member States can agree a common basis on which to implement these regulations.

Regarding the role of the BSWG in supporting coordination on sustainability across transport modes, the Working Group heard a presentation from DOT's Sustainable Aviation Policy Division on sustainability considerations in ReFuelEU Aviation (July 2025).

The Group noted progress on the Renewable Heat Obligation, the General Scheme of which was approved by Government on 15 July. DCEE updated the Working Group as to key deliverables, priority drafting of legislation, scheme design, and EU TRIS notification concerning a proposed multiplier for domestic biomethane (October 2025).

The Working Group heard a presentation from the UK Department for Transport on biofuel sustainability matters in the UK and forthcoming guidance to UK economic operators in this regard (December 2025).

As the competent authority with responsibility for biofuel sustainability in Ireland, the NORA informed the Working Group throughout 2025 on the implementation of sustainability criteria and provided input to the Irish position on the ongoing development, review, and implementation of the EU regulatory regime for biofuel sustainability. In 2025 the NORA developed an online form for reporting of non-compliance in line with the vulnerability assessment undertaken by the BSWG and appointed six authorised officers under the NORA Act 2007 to ensure compliance with the RTFO. NORA also provided updates on the Renewable Fuels Regulators Club (REFUREC),

agenda items for which include fraud prevention and the supervision of certification bodies (September 2025).

Next Steps

The vulnerability assessment undertaken in 2024 and stakeholder engagement indicates scope for further work to continue to ensure a robust administration and legal grounding for sustainability oversight within Ireland. This includes ensuring comprehensive coverage of all biofuel supply into the State for use in transport supporting detection of any non-conformities and providing opportunity for reporting and appropriately addressing any suspicions or allegations of biofuel fraud. The Working Group will continue to oversee implementation of actions identified in the 2024 vulnerability assessment.

The Working Group will continue to provide input as appropriate to EU proposals regarding sustainability certification, oversight, and related matters, noting Ireland's contribution to the ongoing development, review, and implementation of the EU regulatory regime for biofuel sustainability. In particular, the Working Group will provide input into DoT and DCEE engagement with the EU Commission on delivery of the Union Database, full implementation of which is critical to biofuel sustainability oversight in the EU.

The RTFP 2025-2027 includes a commitment for DoT to undertake a review of legislation relating to sustainability in 2026, which will address a number of actions in the BSWG's vulnerability assessment. The Working Group will provide input and feedback on this review.

3.2.2 RES-T Working Group – supporting compliance with the NECP

Work Programme

The focus of the Working Group work programme is on steering appropriate modelling and research supporting the achievement of RES–T requirements by 2030. Specifically, the research is required to address the quantum of the various renewable fuels and feedstocks which will be required to meet demand under EU renewable energy targets for advanced biofuel and RFNBO in the road and rail sector and where these fuels and feedstocks will be sourced.

The Working Group considered and agreed several topics for research, set out in four phases:

- Phase I modelling the demand for renewable fuel envisaged in EU 2030 targets under the Renewable Energy Directive (RED) across all transport sub-sectors – land, air and maritime.

- Phase II assessment of supply and availability to meet 2030 targets of renewable transport fuels and their feedstocks, focussing on advanced biofuels and future RFNBO supply.
- Phase III assessment of the supply-side availability of biodiesel and Hydrotreated Vegetable Oil (HVO) to in a B30 by 2030 target scenario, and the impact on other modelling variables in achievement of RES-T targets and limits.
- Phase IV assessment of the appropriate hierarchy of use of certain renewable fuels across different economic sectors, and even within transport sub-sectors. This will be a critical input to the overall work of the Alternative Fuels for Transport Working Group.

Phases I to III were conducted by Byrne O'Cleirigh on behalf of the NORA, supporting the RTFO. The Phase IV assessment commenced in Q4 2025 and is expected to be completed in April 2026.

The RES-T Working Group has continued to provide a focal point for sharing information and engagement with subject matter experts from the agencies involved in technical modelling, and reporting activities, with the policy holders and agencies experts in the different transport sub-sectors.

Next Steps

The continued rationale and priority focus for this Working Group will be considered within the context of the next iteration of the Renewable Transport Fuel Policy 2025-2027, subject to consultation. The modelling and research carried out under the Working Group will inform the approach to implementation of the RED through the Renewable Transport Fuel Policy 2025-2027.

The Working Group can continue to provide a valuable touchpoint for the key subject matter experts and technical and policy actors in the ongoing cycle of revising projections and models toward achievement of current 2030 targets and consideration of future 2040 targets in development for the transport sector.

3.3 Sustainable Aviation Fuel (SAF) Task Force

In August 2025, Minister O'Brien published Ireland's first Sustainable Aviation Fuel (SAF) Policy Roadmap, as committed to under the Programme for Government. It identifies opportunities and barriers for Ireland in relation to aviation fuel suppliers importing SAF, and exploring future potential production opportunities, taking existing national and EU policies into consideration. The roadmap is an important first step in developing national SAF policy, identifying several actions in the immediate term and setting a path for future SAF policy development.

The roadmap sets out four SAF Policy Pathways to advance:

- Market certainty;
- Collaboration;
- Supporting uptake; and
- Supporting production.

For each pathway, the roadmap sets out a direction of travel and several actions to progress, that build upon a suite of EU initiatives. These actions are initial steps and will be built upon in future iterations of the roadmap.

To assist with the development of the roadmap, which is recommended by the International Civil Aviation Authority (ICAO) within State Action Plans[2], the Department of Transport established the SAF Task Force in December 2023. Membership of the Task Force includes government departments and agencies, airlines, airports, academia and representative bodies.

4 Sector Updates

4.1 Road Freight

Decarbonisation continues to be a challenge for the Road Haulage Sector in the Short and Medium term. Despite a 125% increase in the number of Electric (Battery Electric Vehicles) HGVs between 2024 and 2025, the Irish Heavy Goods Road Freight sector remains almost exclusively fuelled by diesel. However, mandates placed on HDV manufacturers to incrementally reduce their CO2 emissions between 2025 and 2040 are expected to improve the availability and upfront cost of zero emission vehicles.

To support the uptake of Zero Emission ('ZE') vehicles in Ireland, infrastructure development remains a critical element to overcoming the challenges of decarbonisation for the sector. The provision of charging infrastructure and ZE vehicle upfront cost will remain a key challenge for the sector, with the Zero Emission Vehicles Ireland's ('ZEVI') team considering several policy pathways for the provision of electrification for the transport sector. In response to the challenges, the continuation of financial supports for Fleet Assessments, the purchase of zero emission vehicles

[2] *States are encouraged to include their respective policies, actions and roadmaps for the development and deployment of SAF, LCAF and other aviation cleaner energies, in their State Action Plans*

and charging infrastructure for HDVs for depot or business-based charging are beginning to be utilised by the sector and should be sustained and/or strengthened.

The HDV Electrification Pathway Working Group, which consists of representatives from groups including the road transport and logistics sector, charge point operators, vehicle manufacturers, motor industry representatives, academia and public policy officials, was established by ZEVI to support the electrification of the heavy-duty fleet in Ireland. The Working Group was tasked with producing the 'HDV Electrification Pathway - Navigating the Path to Heavy Duty Electrification in Ireland' report for the Minister for Transport. The draft report which aims to support the electrification of the heavy-duty fleet in Ireland, offer practical solutions and a roadmap towards 2040 was circulated to working group members with publication planned for the first quarter of 2026.

For heavy goods road transport, renewable fuels are one of several transitional measures which will assist in emissions reduction until such time as zero emission HGVs are more widely available and the upfront cost is competitive with Internal Combustion Engine vehicles. On 11 November 2025, the Department published a study prepared by International Economic and Strategic Consultants ('Indecon') on HVO use in the HGV sector. The study aimed to increase data on the use of HVO and has assessed the current and potential role of HVO in supporting the decarbonisation of Ireland's HGV sector. The analysis carried out on behalf of the Department, explores whether increased HVO use can offer substantial emissions reductions in the medium term and what policy instruments could support this shift without undermining longer-term goals.

The results of the study suggest that it would be challenging and very costly to incentivise greater use of HVO in the HGV sector beyond what is already planned to be achieved by the Renewable Transport Fuel Obligation. The study forecasts that a subsidy to equalise the price of HVO with diesel in the year 2030 would cost the Exchequer €502m. This is a single year cost with additional costs incurred if the subsidy was provided for more than one year. The report indicates that, without accompanying reform of the Renewable Transport Fuel Obligation, increasing the use of HVO in the HGV sector will shift biofuel use away from other road users, thereby resulting in modest reductions in overall emissions compared to the baseline.

4.2 Maritime Transport

The requirements for alternative fuel infrastructure relevant to Irish Ports is set out in the AFIR as follows:

- AFIR requires the mandatory installation of onshore power facilities infrastructure at European core and comprehensive TEN-T ports by 2030.

- Only ships that remain two hours or more at berth must be supplied with shore-side electricity.
- The number of annual calls at the port (100 for container ships, 40 for passenger ships and 25 for cruise) triggers the obligation to have On Shore Power Supply (OPS) in the port.

The Development of Alternative Fuel Infrastructure in Irish Ports

A 2019 study by the Irish Maritime Development Office (IMDO) on "The Development of Alternative Fuel Infrastructure in Irish Ports" indicated that Ireland's Shipping Industry lacked the scale and demand required to make investments in SSE facilities commercially attractive. Considering the changing regulatory requirements, the IMDO updated this study in 2025 and found that "the business case for installing OPS in Irish ports is not currently viable. The additional costs of upgrading the grid and the uncertainties in demand growth are the key barriers to be addressed."

In addition, the IMDO have noted in their 2025 study that demand is low in Ireland for alternative fuels in the maritime sector and that the transition to alternative fuels will be challenging for Ireland because of:

- Relatively small scale of operations in Ireland.
- Remoteness of some Irish ports and limited industrial demand for alternative fuels in the ports' environs.
- Ireland's inordinate reliance on maritime transport because of its island status and peripherality.

The supply of alternative fuels for maritime is at a very low level and it is unclear when, and at what cost, these fuels will be available to meet the fuel demands of Ireland's shipping needs. Careful management of the transition to alternative fuels in the maritime industry will be essential to ensure that competitiveness and economic growth are not negatively impacted.

Onshore Power Supply

Electrification represents a critical pathway in the decarbonisation of Irish ports. Onshore power will be crucial in assisting Ireland to meet its obligations under AFIR.

Onshore power refers to the supply of land-based electrical power to ships while at berth in port. The European Maritime Safety Agency describes it as '*the supply of electrical power to ships at berth, directly to the receiving ship, from a shore-side electrical power source, at a given voltage and frequency, feeding the onboard main distribution switchboard. Onshore power supply replaces primarily the onboard electricity generation from auxiliary generators.*'

In practice, the design of each on shore power system will be different for each port, depending on the requirements and layout of each port as well as the type and size of ship. The power supply to ships may be delivered in several ways, depending on vessel type. In addition, the average power demand (MW) for vessels using on shore power differs depending on vessel type. A container vessel weighing less than 10,000 gross tonnes will on average need a power demand of 1.5MW, however an oil tanker will need 4MW. A cruise ship of less than 50,000 gross tonnes will have an average power demand of 9MW.

Electrification of Ports and OPS

With the regulations in mind, the port sector is already making its plans to implement onshore power infrastructure to align with EU decarbonisation objectives and to support the maritime sectors broader transition to cleaner energy sources.

It is recognised that there are significant costs associated with the installation of onshore power supply for the sector dependent on the size of the port, the number of terminals and the size of ships. However, there will also be significant challenges to be overcome in terms of grid capacity and local connectivity.

Early indications are that the scale of energy required by onshore power presents a challenge for the electricity network as ports are already large-scale energy users. The delivery of onshore power will require new connections able to support significantly higher power demands on the network by 2030.

Each port has a unique network footprint. Depending on the location, substantially different levels of work and upgrades to the electrical network will be required to support the ports in meeting the AFIR requirements.

At present, it is anticipated that onshore power supply infrastructure will be required at Dublin Port, Port of Cork and Rosslare Europort by the end of 2029, while other ports on the TEN-T network in Ireland may be required to provide these facilities in the future if their traffic exceeds the thresholds as outlined in Article 9 of AFIR.

The Department of Transport is working closely in collaboration with the ports and others to conduct detailed feasibility studies into the provision of onshore power to meet AFIR requirements at the relevant ports.

Other Measures being undertaken to Promote Alternative Fuels Infrastructure

In relation to the general promotion of alternative fuels in the Irish maritime sector, the Department of Transport is currently co-funding a project, ShipFuel-IE, which is examining the development of pathways for a sustainable shipping and maritime fuel value chain in Ireland. The

project will assess a range of potential energy carriers (hydrogen, ammonia, methane, methanol, renewable diesels) produced either from biomass or renewable electricity as fuels for the shipping sector. It will also examine the infrastructural requirements of Irish ports needed to deliver such low carbon fuels and vessel technologies.

ShipFuel-IE involves stakeholder engagement from across the Irish maritime sector. Its work is arranged into three technical work packages assessing the socio-techno-economic and environmental impact of: fuel production routes; refuelling infrastructure required at Irish ports and vessel technology, including the option of retrofitting existing vessels. The results of this study are expected in Q4 2026 and will aid Ireland in developing policy in this fast-moving area.

5 Conclusions

Among the key conclusions of the Alternative Fuel for Transport Working Group are the following:

- There continues to be growing competition for alternative fuels nationally and internationally and between transport modes and in different sectors. There is also significant potential for development of indigenous production of alternative fuels to meet this demand, and thereby contributing to wider goals in relation to energy security as demand for scarce resources increases. There is a continued need to ensure coherence across the various policies and strategies in this space.
- There is broad alignment across policy areas as well as national and international energy and transport policy.
- As a consultative forum the Working Group continued to strengthen coordination and policy coherence across a range of relevant strategies, policies, and plans, including consultation on the final report to the Minister.
- Industry consultation has also continued through the Industry Expert Panel supporting the work of the Renewable Transport Fuel Policy working groups. There has also been consultation with industry as part of the process to develop a draft National Policy Framework for alternative fuel infrastructure.
- It had been identified that work on the economic and social benefits of the shift to alternative fuels would be useful and elements of this work are being carried out as part of the Climate Action Modelling Project.
- The work regarding the hierarchy of use of HVO relative to other alternatives which is expected to be completed by end of Q1 2026 will be a very important output for several transport and broader sectors, and as an input to the further activity of this Working Group in 2026.

6 Work Programme 2026

- Convene workshops focusing on alternative fuels relevant to the specific transport sub-sectors, acknowledging the different requirements of each mode. One has already been held in March on the decarbonisation of Maritime Transport.
- Establish two new sub-groups focusing on finalising the National Planning Framework for alternative fuel infrastructure (NPF/AFI) and focusing on the unique challenges of decarbonising public transport operations. Each sub-group will have a terms of reference and membership, reporting into the Alternative Fuels for Transport Working Group.
- The Group will provide input into a planned mid-term review of the Road Haulage Strategy, specifically in terms of the potential for greater alternative fuels deployment and measures to support that.
- Continued engagement with International and European counterparts concerning best practice, specifically how EU funding can be harnessed to support development of alternative fuel technology for transport use in Ireland. For example, the Department will host the Member States Government Support Group on AFIR in April 2026.
- The Group will seek to develop a coherent communications approach concerning the benefits of alternative fuels in transport decarbonisation and other co-benefits, for example future skills and jobs (and it is intended to engage with DFHERIS in this regard), as well as connecting with other fora developing related policy.
- Further consideration of social and economic benefits of an accelerated shift to alternative fuels, and consideration of opportunities and barriers.
- Refresh actions to capture developments in research and policy relevant to alternative fuels for transport.
- Consider the output of the hierarchy of use of HVO study for alternative fuel policy across sectors.
- Continue to input and guide development of NPF for AFIR following European Commission (CION) engagement, with particular focus on identifying suite of measures to support roll out.
- Consider outputs from various studies underway in the maritime sector in terms of AFI roll-out.
- Continue to engage with the SAF Policy Roadmap to ensure overall coherence across transport modes.
- Continue to input and guide development of RTP policy regarding barriers and challenges identified in meeting RED targets.
- Seek opportunities to raise the visibility / awareness of the role of alternative fuels in the decarbonisation of transport, leveraging opportunities through the EU Presidency in 2026.

It is envisaged that the suite of actions currently coordinated within the Terms of Reference of the Working Group will continue to be monitored and progressed through 2026, especially the key actions referred to in this report which also have continued policy relevance. It is also expected that there will be an annual year-end report to the Minister on the activity of the Working Group.

Appendix 1: Alternative Fuel for Transport Working Group Membership

The Working Group brings together key actors with policy responsibility for alternative fuels in transport, encompassing policy concerning zero-emissions energy, renewable fuel, and low carbon fuel, from international and national policy on future energy and fuel production, infrastructure requirements and vehicle technology, to specific use case in transport. The Working Group membership includes representatives with relevant policy responsibility across the transport sub-sectors in the Department of Transport, and relevant energy and industrial policy in other Government Departments, as well as several State Agencies responsible for delivery under these policy areas. The list of Working Group members is set out below. The Working Group also invited other subject matter experts to attend the meetings of the Working Group from time to time as required.

Department/Agency
Climate Adaptation Research and Energy Division
Climate Engagement and Governance Division
Zero Emissions Vehicle Ireland (ZEVI)
Sustainable Aviation Policy Division
Maritime Environment Policy Division
National Transport Authority (NTA)
Road Transport & Freight Policy Division
Public Transport Investment & Policy Division
Public Transport Corporate and Services Division (PTCSD)
Sustainable Energy Authority of Ireland (SEAI)
Department of Environment, Climate and Communications
Department Of Enterprise, Trade and Employment

Department/Agency
Department of Finance
Department of Agriculture, Food, and the Marine
Transport Infrastructure Ireland (TII)
Gas Networks Ireland (GNI)
National Standards Authority of Ireland (NSAI)
National Oil Reserves Agency (RTFO Team)

Terms of Reference

The Terms of Reference sets out the purpose, membership, work programme, and objectives of the Working Group. The Terms of Reference were approved by the Minister and adopted by the Working Group at its first meeting in September 2023. An updated Terms of Reference together with a revised work programme for the Group were approved by the Working Group in March 2025.

Appendix 2: Activities of the Working Group

Working Group meetings were held quarterly, chaired by the Assistant Secretary for Climate Action at the Department of Transport. Secretariat support was also provided by the Department of Transport. Several standing agenda items for Working Group consideration concerned updates on the progress of the National Policy Framework, the RTF Policy Working Groups on Biofuel Sustainability and Renewable Energy Share in Transport (RES-T), and the SAF Task Force. The Working Group approved a revised Terms of Reference including an updated Work Programme for 2025. A summary of activity throughout 2025 is set out below:

Presentations and updates concerning renewable energy and alternative fuel infrastructure were considered as follows:

- Hydrogen Implementation Plan Update provided by Department of Climate, Energy and the Environment (DCEE)
- The National Energy and Climate Plan Reporting (NECPR) provided by Department of Climate, Energy and the Environment (DCEE)
- Corrective Action Plan Project Update by the Department of Transport
- International Perspective and Update from International Energy Agency (IEA)
- The National Policy Framework (NPF) implementing the EU Alternative Fuel Infrastructure Regulation (AFIR) by the Department of Transport
- Ireland's first National Sustainable Aviation Fuel Policy Roadmap – Department of Transport
- Report on the Availability of HVO for the Irish Heavy Goods Freight Sector – Department of Transport
- Programme for Government Commitment to Examine the Taxation of HVO - Department of Finance
- Renewable Heat Obligation Update – Department of Climate Energy and the Environment
- Presentation on the Renewable Transport Fuel Policy (RTFP) 2025-2027 - Department of Transport
- Renewable Gas in Transport - Gas Networks Ireland (GNI)
- Hydrogen Implementation Plan Update - Department of Climate Energy and the Environment

- RES-T Working Group Phase III Research - Consideration of a B30 by 2030 Scenario RTFO Team
- Biomethane Strategy Implementation Update - Department of Climate Energy and the Environment
- Update on Shared Island Hydrogen Refuelling Corridor - Department of Transport
- Update on research by CIE & HMI re using Hydrogen for coaches - Department of Transport
- Future Hydrogen Demand Study Update provided by Department of Enterprise, Trade and Employment
- Updates on Biofuel Sustainability Working Group provided by Department of Transport
- Updates on RES-T Working Group provided by Department of Transport

Glossary of Abbreviations

AFIR	Alternative Fuels Infrastructure Regulation
CAP	Climate Action Plan
CARED	Climate Adaptation Research and Energy Division
CCAC	Climate Change Advisory Council
CEF	Connecting Europe Facility
CEGD	Climate Engagement and Governance Division
DAFM	Department of Agriculture Food and Marine
DCEE	Department of Climate, Energy and the Environment
DETE	Department of Enterprise Trade and Employment
EED	Energy Efficiency Directive
EUID	EU and International Division
EV	Electric vehicles
HDV	Heavy Duty Vehicle
HVO	Hydrotreated Vegetable Oil
IEA	International Energy Agency
IFM	Ireland Freight Model
IMDO	Irish Maritime Development Office
ISCC	International Sustainability and Carbon Certification
LDV	Light-Duty Vehicle
NECP	National Energy and Climate Plan
NORA	National Oil Reserves Agency
NPF	National Policy Framework
NRMM	Non-Road Mobile Machinery
OPS	On Shore Power Supply
ORE	Offshore Renewable Energy
RED	Renewable Energy Directive

RES-T	Renewable Energy Share in Transport
RFNBO	Renewable Fuel of Non-Biological Origin
RHO	Renewable Heating Obligation
RTF	Renewable Transport Fuel
RTFO	Renewable Transport Fuel Obligation
SAF	Sustainable Aviation Fuel
SEAI	Sustainable Energy Authority of Ireland
TEN-T	Trans-European Transport Network
TII	Transport Infrastructure Ireland
UDB	Union Database
ZEVI	Zero Emissions Vehicle Ireland