

EV Summit 2024

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Ireland

Commercial Fleet

Goods Vehicles	HGV (+3.5T)	LCV (Vans)	Total	Total Share
Diesel	43444	360460	403904	98.61%
Electric	35	3066	3101	0.75%
Gas	98	35	133	0.03%

Transport Accounts for 21% of GHG Emissions
Commercial Fleets account for 51% of Total Transport Emissions



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Ireland's Freight Distribution

in numbers ...

- 42,782 HDVs (3.5 tonnes) were taxed in Ireland in 2023
 - 23,615 vehicles licensed for haulage
 - 19, 167 on own accounts
- 99% of Irish Heavy-Duty Vehicles (HDV) are currently Diesel
- 165 million Tonnes was carried by road freight in 2022
- 99% of inland freight is moved by road in Ireland
- Rail freight is <1% of total Tonnes per km
- 35 Electric HGVs are 'on the road'
- 128 Gas HGVs are 'on the road' ⁽⁰¹⁾
- Ten - T Network (Ireland)
 - 500km core network
 - 1,700 km comprehensive network



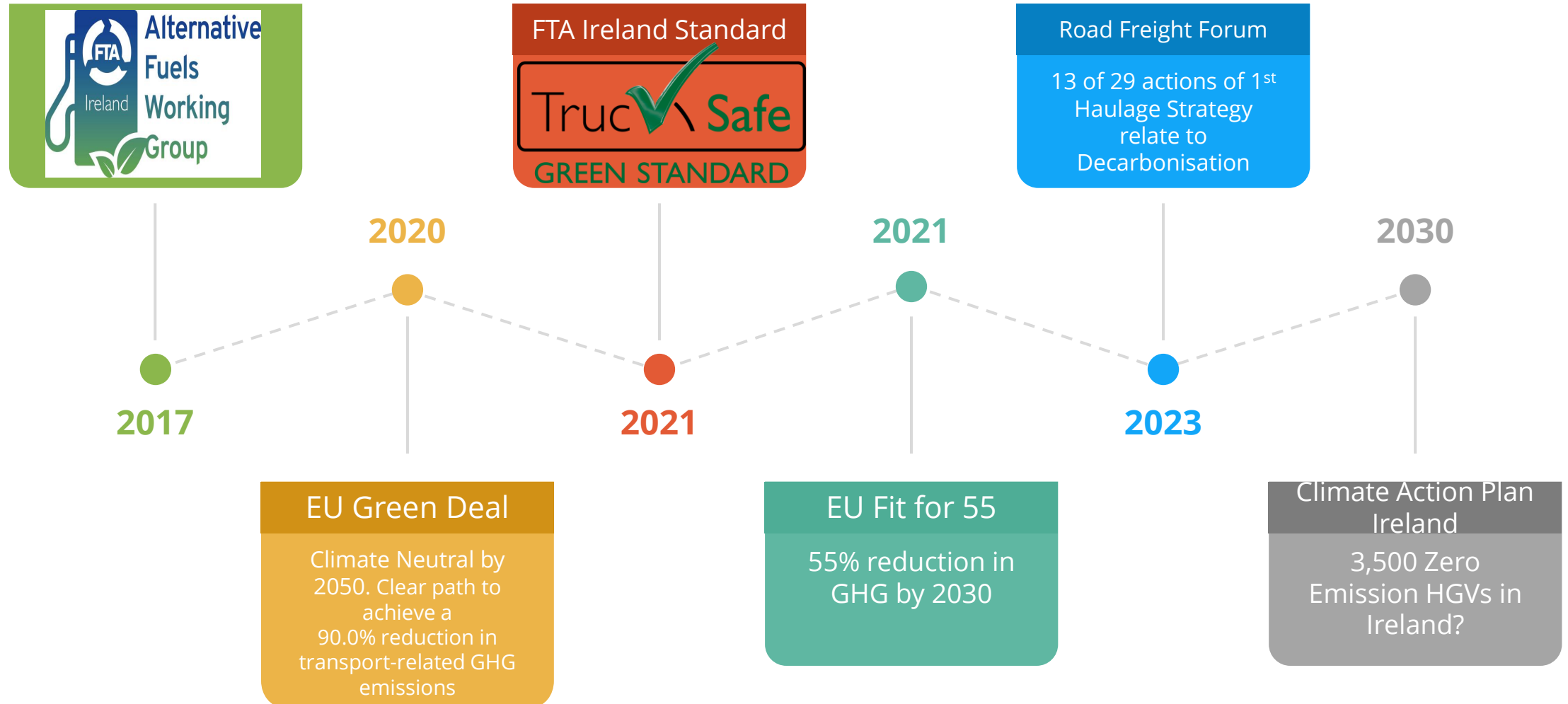
01 <https://stats.beepbeep.ie/heavy-commercial-vehicles>

* NB: above stats are for the 2022 - 2024 period

Decarbonising the Road Freight Sector, Ireland 2024

RoadMap to reduced GHG emissions

Key Milestones



FTA Ireland Reports 2024



Managers Guide to Distribution Costs 2024



Operational Costs



Drivers Account for
36.05% of costs



Fuel Accounts for
42.35%



Insurance Accounts for
3.55%



Other (incl Maintenance,
Tyres and Depreciation)
Accounts for 18.05%

Change in fuel costs

... average fuel costs per km

2019	2020	2021	2022	2023
€ 0.33	€ 0.33	€ 0.33	€ 0.38	€ 0.46



Table 15: Breakdown of operating costs: Rigid vehicles 3.5 - 18.0 Tonnes GVW

	2019	2020	2021	2022	2023	2024
Driver	42.6%	43.6%	45.4%	35.4%	40.1%	40.9%
Fuel	29.1%	27.5%	24.8%	41.1%	34.5%	36.5%
Insurance	5.8%	2.9%	5.1%	3.7%	4.4%	4.1%
Other	22.5%	26.0%	24.7%	19.8%	21.0%	18.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 16: Breakdown of operating costs: 46 Tonnes articulated vehicles

	2019	2020	2021	2022	2023	2024
Driver	34.5%	31.9%	33.1%	35.4%	31.6%	31.2%
Fuel	38.9%	42.0%	41.7%	36.8%	47.0%	48.2%
Insurance	3.7%	4.3%	3.7%	4.1%	3.3%	3.0%
Other	22.9%	21.8%	21.5%	23.7%	18.1%	17.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

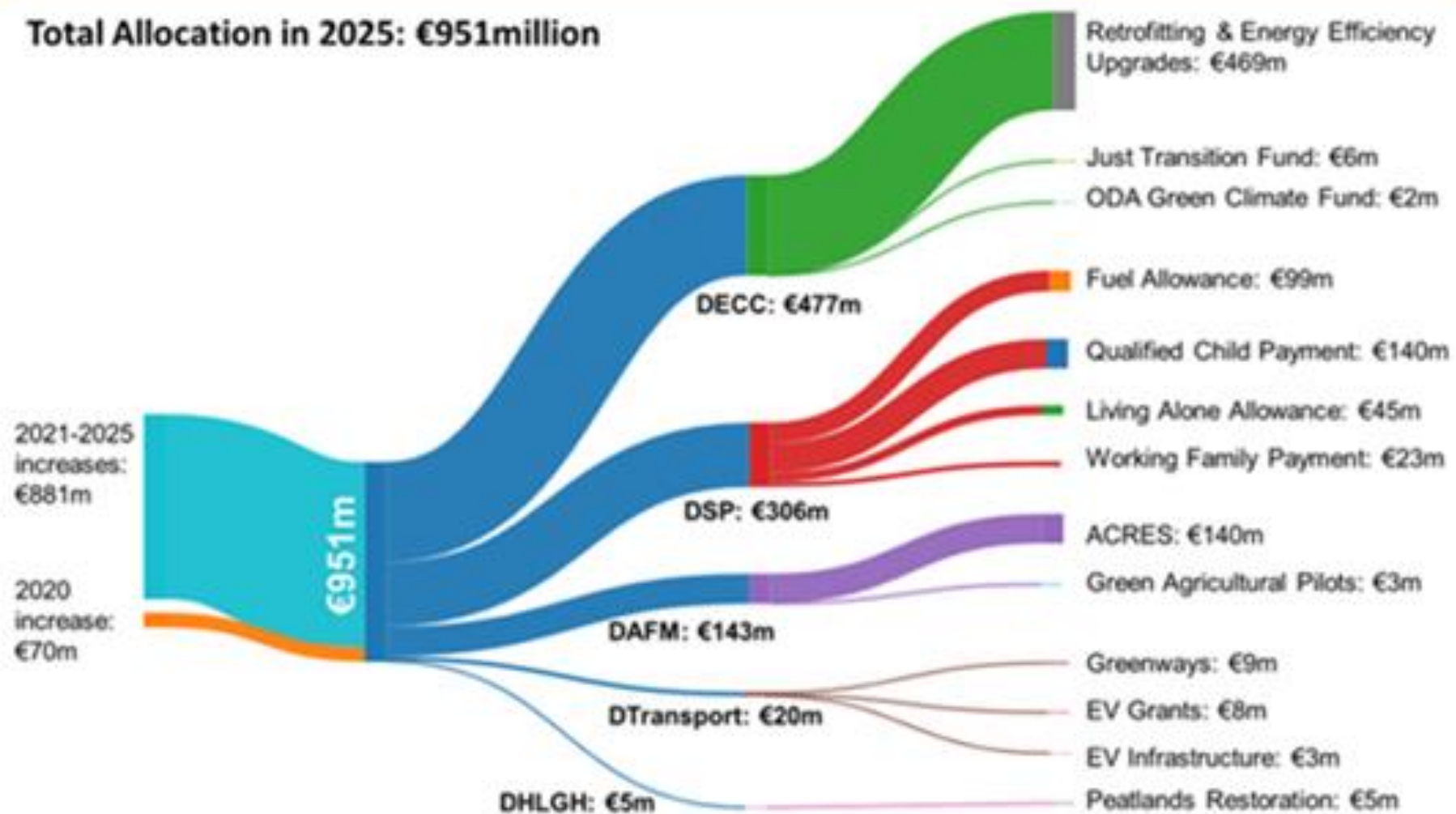
Fuel Tax



Average Per HGV	Excise Duty €0.4257 per litre	NORA €0.019 Per Litre	Carbon Tax €0.17 Per Litre	Better Energy €0.012 per Litre	VAT €0.3067 per Litre	Total
84 Litres Per Day	€35.76	€1.60	€14.28	€1.01	€25.76	€78.41
21,840 Litres Per Year(*260days)	€9,297.29	€414.96	€3,712.8	€262.08	€6,698.33	€20,385.43
National Fleet HGVs Approx 43,000	Carbon Tax per annum for the national fleet		€160,000,000	2.68kg of co2 per litre of diesel	Average Truck Emits 79Tonne of Co2 PA	

2025 Allocations by Department & Programme²

Total Allocation in 2025: €951million



Government Plan



Climate Plan 2023/24 - new KPIs have been set out targeting 30% of new registrations of medium and heavy-duty vehicles (MHDV)⁴⁷ to be zero-emission by 2030, in line with Ireland becoming a signatory to the Global - Memorandum of Understanding on Medium- and Heavy-Duty Vehicles at the recent COP27

2025

175,000 passenger EVs

20,000 commercial
vans

700 low-emission HGV

300 EV buses in PSO
bus fleet


Expansion of electrified
rail services

2030

20% EV share of total LGV fleet.

95,000 commercial EVs

3,500 Zero Emission HGVs by 2030



Ireland
(partially prepared)

Overview

- Ireland's geographical position complicates the decarbonization of electricity generation.
- The country has relatively ambitious targets for intermittent renewables.
- New balancing capacities (such as demand response and batteries) will be limited, with Ireland expected to primarily rely on natural gas for balancing.

Current Challenges and Electricity Markets


- More than half of Ireland's electricity generation comes from natural gas, and its capacity is forecasted to grow mildly by 2030.
- The results in peak load, load variability, and negative pricing are significantly better than the EU average.
- Low accuracy of load forecasting remains a problem.

Challenges in 2030

- Ireland forecasts higher integration of new intermittent renewables compared to the EU average.
- However, the adoption of batteries (550 MW) and demand response (182 MW) will be below the EU average.

Opportunities

- Ireland has limited interconnectors, which adds to the complexities of its decarbonization efforts.
- Despite these challenges, the Recovery and Resilience Facility does not include significant investments or reforms to support grid transition.



IRELAND
UNITED KINGDOM
NETHERLANDS
FRANCE
LUXEMBOURG

Overall ranking: 16th / 25

Current challenges and electricity markets ranking: 15th / 25

Challenges in 2030 ranking: 21st / 25

Opportunities ranking: 8th / 25

Strengths for Grid Transition

- Low peak load (the best)
- Low average deviation of load (the 4th)

Difficulties for Grid Transition

- Reliance on generation from nat 2nd worst)
- Low interconnector capa

The content of this factsheet is based on quantitative data analysis from the GLOBSEC reflect normalized data according to the methodology's specified variables, unless comparisons are made within a group of 25 EU countries, excluding Cyprus and "Difficulties for Grid Transition" sections, multiple countries may share the identified as the "best" or "worst."



ireland to miss 2030 climate targets by wide margin, EPA r

Latest projections suggest all sectors agriculture, industry, electricity and transport on course to m targets

Environment

10 Ireland

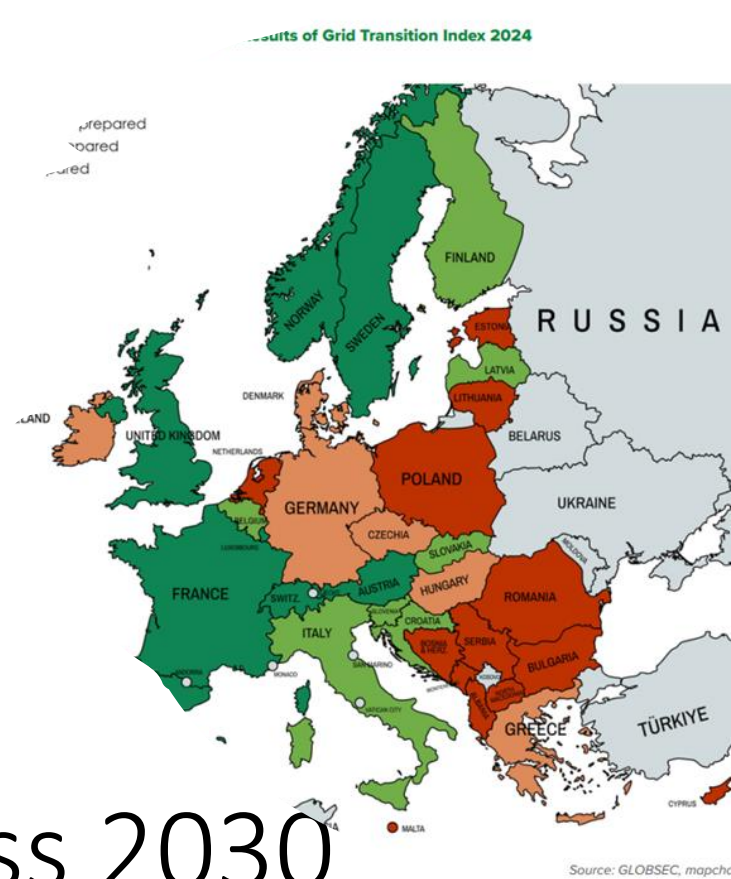


100% per cent in its greenhouse gas emissions by 2030, according to the EPA's latest projections.

LATEST STORIES >

- Australian woman jailed for 20 years children murdered
- Rates €100 per child added to benefit
- New Lotus LUX crossover aims to swap up eco-typo
- Russia claims it downed major Ukrainian
- Race for A11 Ireland electricity knock-out phase





EPA - Ireland to miss 2030 Climate Targets!

- Ireland will achieve a reduction of only 29 per cent in its greenhouse gas emissions by 2030, far short of a legally-binding target of 51 per cent
- Almost all sectors are on a trajectory to exceed their national ceilings – including agriculture, industry, electricity and transport

Challenges

Cost

What to do
now?
(Uncertainty)

Ireland is behind other EU
Countries

Countries
Ireland is behind other EU

Lack of
Incentives?

Misunderstood

Infrastructure

Vilified

Politically Set
Deadlines

Skills and
Education

Level of
Understanding of
Commercial Fleet
Operations

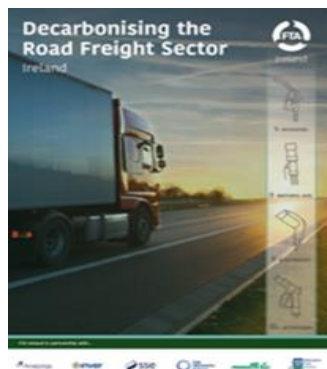
Alternative Fuel
Competition with
Each Other

Fear of Change

Green Energy
availability
(lack of Grid
Access)

Total Cost of
Ownership

Image



Decarbonising Road Freight Sector Ireland – Report

New Energy Sources

- Availability of green energy for Transport
- Ability to supply energy that is affordable for transport
- Ireland currently imports over 80% of energy.



Electricity

- Report published by Eirgrid in October 2022 – Generation Capacity Statement (GCS) - predicts challenging outlook for Ireland with capacity deficits identified up to 2031
- By 2031, 28% of all electricity demand is expected to come from data centre's and other new large energy users (Data center's currently account for 21% of all electricity consumption)



Hydrotreated Vegetable Oil (HVO)

- DoT commissioned report on demand
- Concern over certification - - Irish Government call on the European Commission to examine imports of biofuels from outside the European Union as concerns grow about sustainability



Bio(CNG)

- The Irish Government has allocated €3m in state investment in budget 2023 to help reach a target of 150 – 200 operational anaerobic digestion plants by 2030. EU Policy is to diversify the EU's gas supplies, phasing out Europe's dependency on Russian fossil fuels and reducing the exposure of consumers to volatile natural gas prices.



Hydrogen

- Low carbon hydrogen fuel at scale requires reliable supply, accessible infrastructure and investment from companies with proven track record to deliver hydrogen safely and at scale.





Truck Manufacturers View

Range Issues
Government Policy
Customer Buy-In
Mindset
Cost
AFIR regs hard to introduce ontime
Total Cost of Ownership
Infrastructure
Difference between Cars & HGVs
Fuel type

Fleet Operators View

A lack of charging
or refuelling
infrastructure
Cost
Affordability
Funding
Tax information
Truck manufacturers
involvement
Grants
Performance
Lack of Information
Lack of Guidance
Risk
Uncertainty

Key Takeaways

The success or otherwise of ambitious targets to decarbonise are wholly reliant on the leadership of the incumbent Government. The national policy is taking the lead from the European regulatory framework. The extent of legislation, regulations and advice that is being published to enshrine the policy position is somewhat overwhelming. Clear and unambiguous messaging that details the availability of national / European funding that supports transition as well as definitive sectorial guidance and information is essential to support the demands of the ambition.



More than one solution –There is a requirement for a myriad of solutions and technologies to decarbonise the road freight sector.

- Government must support the private sector with deployment of sufficient alternative fuelling infrastructure and electric charging facilities.

Develop a '**National Decarbonisation Road Freight Strategy**' through collaboration and engagement with key stakeholders.

- Need to be realistic about our starting position.
- Ireland has different challenges to decarbonisation than mainland EU – this must be reflected in the national decarbonisation strategy.

New tax supports and better grants must be introduced to encourage commercial fleet operators to purchase alternatively fueled vehicles, CNG/Biomethane, Hydrogen and Electric as well as lower emitting fuels such as HVO.

Key Takeaways

To change behaviour, (which can be either good or bad) requires repetition of messaging, clear instruction and buy in. It takes much more work to change behaviour for the better than it does to experience negative change. The scale of change requires a positively disposed mindset. It also requires a clear strategy and vision that is not at threat to changing government policy.



Security of energy supply is critical for commercial fleet operators.

- **Ireland as an island is reliant on the importation of energy.**
 - There is a need to create a resilient alternative energy import supply chain.

Perception is an influencer – not always in a positive way.

- More positive commentary and support from Government for all alternative fuelling solutions is needed. Road Freight Sector is essential for a vibrant Irish Economy.

What are we doing for members

Ecofleet is a system whereby a company who is demonstrating fuel savings can receive a financial support to contribute to those savings. Typically for every 10,000 litres a company saves on fuel usage they receive a payment of €1,000

- FTAI /Ecofleet payouts 2023 - €37,162.77 total paid

Figure 4 Case study - ECO Driver Training (June 2023)



If everyone did Eco driver training



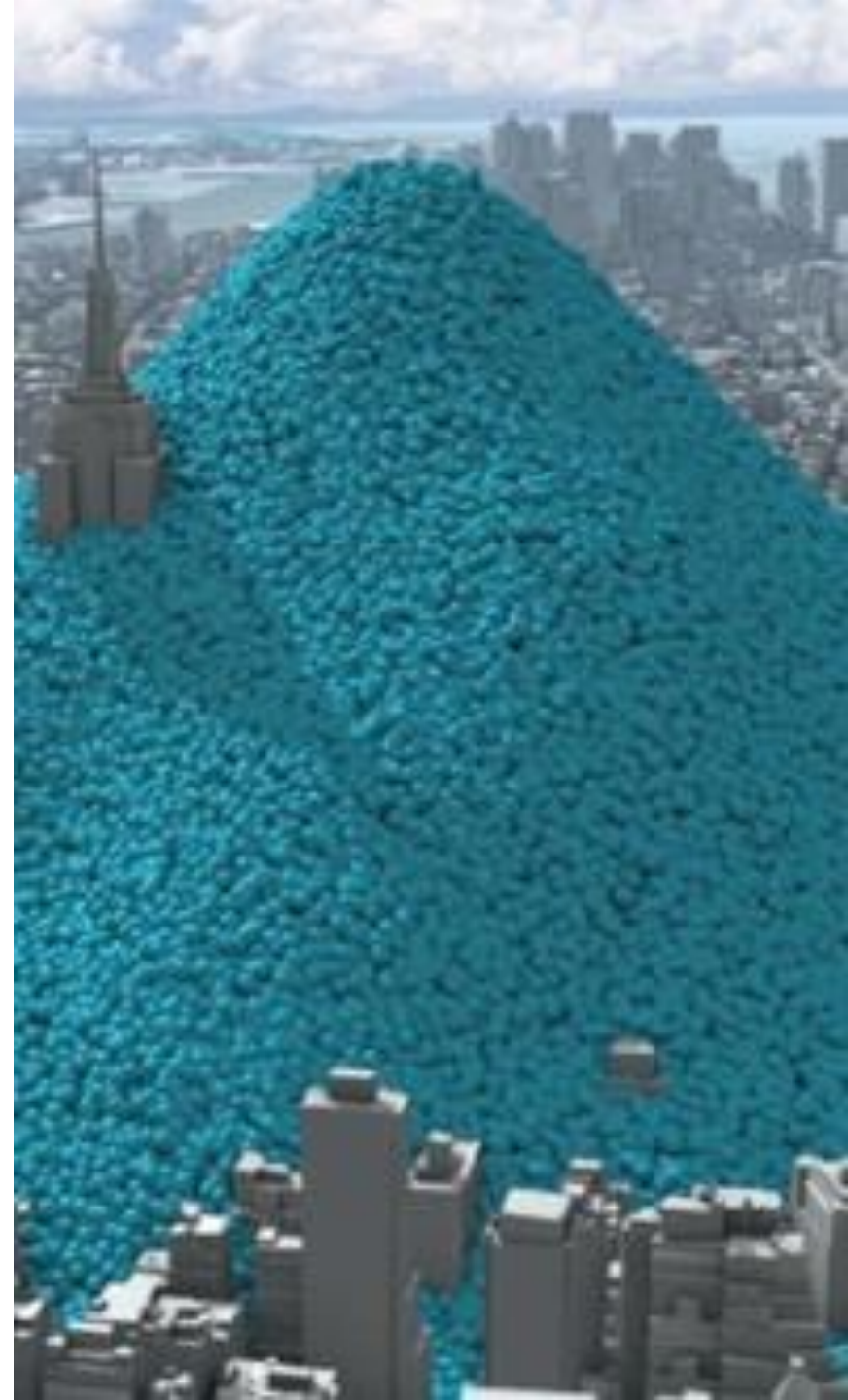
Fleet of 10 vehicles can
save 100tonne of CO2 per
annum after training



43000 national fleet



$43000/10 = 4300 * 100 =$
430,000tonne of CO2
potential savings per
annum



FTAI **ALT** Fuels Working Group

<https://www.ftai.ie/alternative-fuels-working-group>



2019-2023 fuels covered



- Liquids
 - B20
 - B100 (HVO)



- Gases
 - CNG & LNG
 - Biomethane
 - Hydrogen



- Electric
 - Battery Electric
 - Hydrogen electric

2024 topics proposed



Bus Depot charging (Athlone)



Infrastructure Ten T



Logistics Hubs Buildings



Ports (low carbon routing & fuelling)



Electric Bikes / cargo eBikes



Irish made HVO



Rail freight



TruckSafe Standard

Audit report

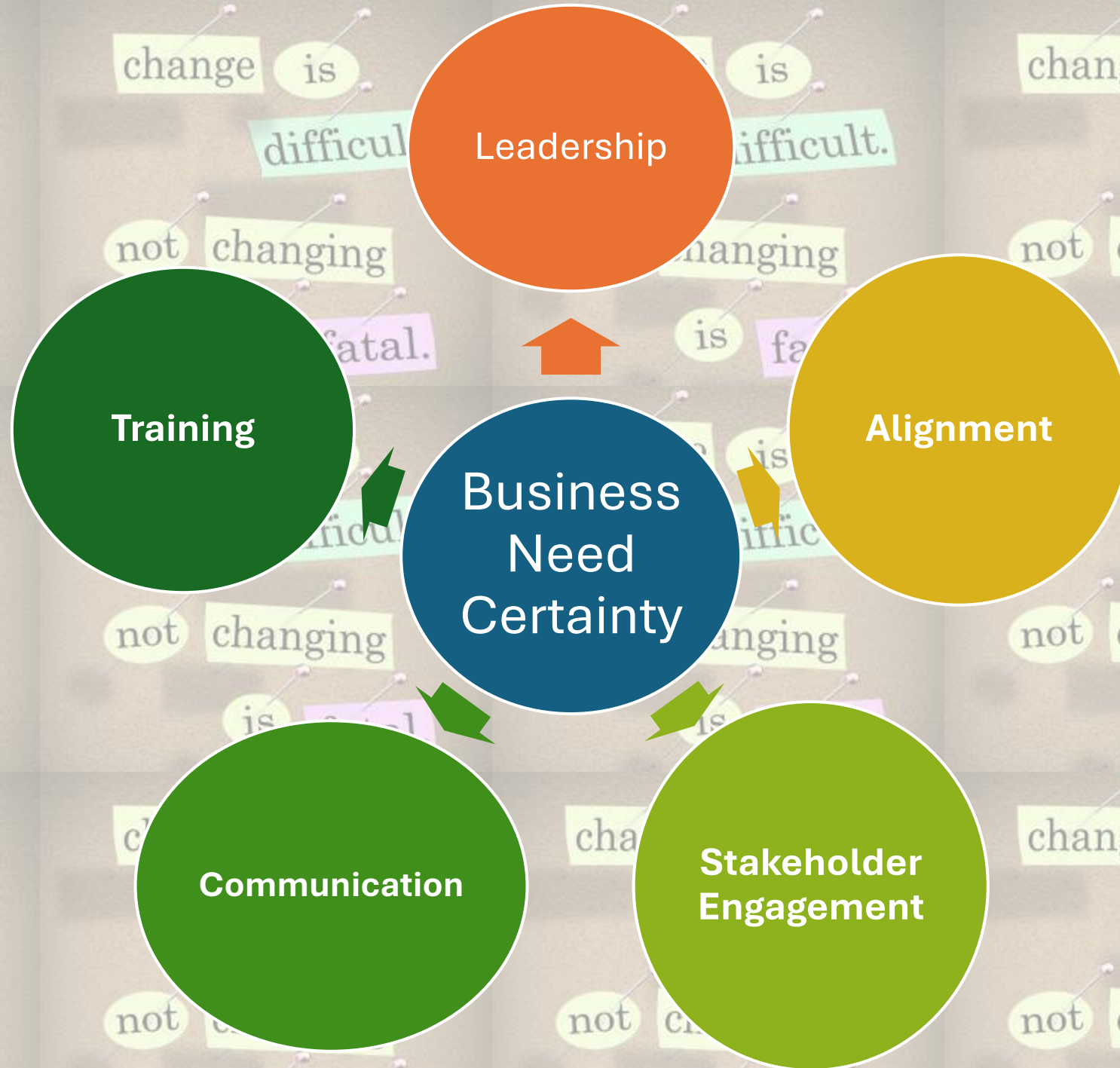


Subcontractor management

Level	Question
Bronze	Do you have a system in place to ensure these subcontractors meet their basic minimum legal requirements?
	Do you have an SLA/contract in place?
	How do you ensure that all their vehicles are well maintained, roadworthy and legally compliant?
	How do you ensure that all drivers engaged by the sub-contractor are competent?
Silver	Is there an annual subcontractor performance review?
	Has the subcontractor provided their risk ratings?
Gold	Do you carry out annual random gate checks on all sub-contractors?
	*Is an audit carried out either internally or externally to ensure they meet the standards required? (Health and safety, driver competence, road worthiness, safe and secure loading)

Sustainable operations

Level	Question
Green	Is the alternative fuel used certified?
	Is your fuel usage independently verified?
	*Is there an effective monitoring system to detect any vehicles that are not drawing sufficient amounts of Ad-Blue?
	*Are you using A or B rated tyres on your fleet?
	Has your organisation an agreement in place with a supplier of new tyres for all vehicles on fleet to provide energy efficient tyres?
	*Does your service provider give access to records of ongoing tyre checks on the fleet including recording tyre pressure checks by means of service sheets or an online portal?





Election 2024

Finally - Need to Consider



Ireland as an island has a different decarbonisation trajectory than mainland Europe

Historical lack of investment in alternative fuelling solutions e.g. Gas is a mature fuel in Europe
Limited Ten T Network
EU transport Policy not easily transposed to Ireland

- Limited intermodal opportunities (no inland waterways, rail freight has limited potential)



Better to do something, rather than nothing!

Plan for change
Introduce documented fuel management programme
Regular eco driver training



Ireland is a small Right Hand Drive Market

All stakeholders must work collaboratively to support industry transition.



We must plan to ensure ease of importation to increase volumes of alternative fuels

Storage facilities need to be developed



Government must develop trust in industry to work collaboratively to deliver ambitious decarbonisation targets

Only €20 Million of Carbon Tax allocated to Transport – yet we contribute much more?
Drive better fuel management initiatives.

Industry ambition must be matched by Government Support

