APSE- Cleaner Councils, Greener Future

Fermanagh & Omagh District Council- 2031 Net Zero Fleet Ambition

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Fermanagh & Omagh District Council
Comhairle Ceantair Fhear Manach agus na hÓmaí

Fermanagh and Omagh District

The Council area is home to

117,337

people

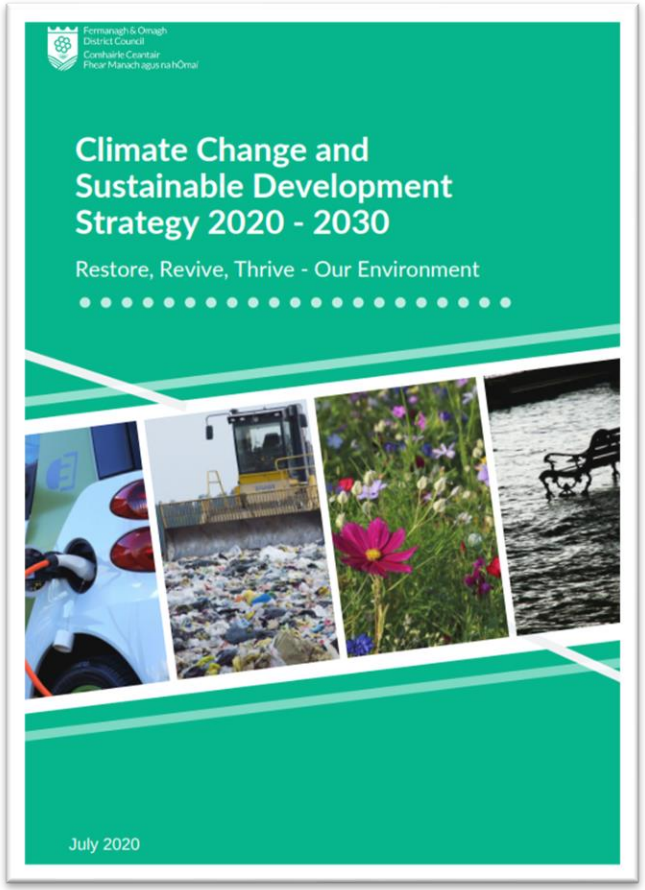
with approximately

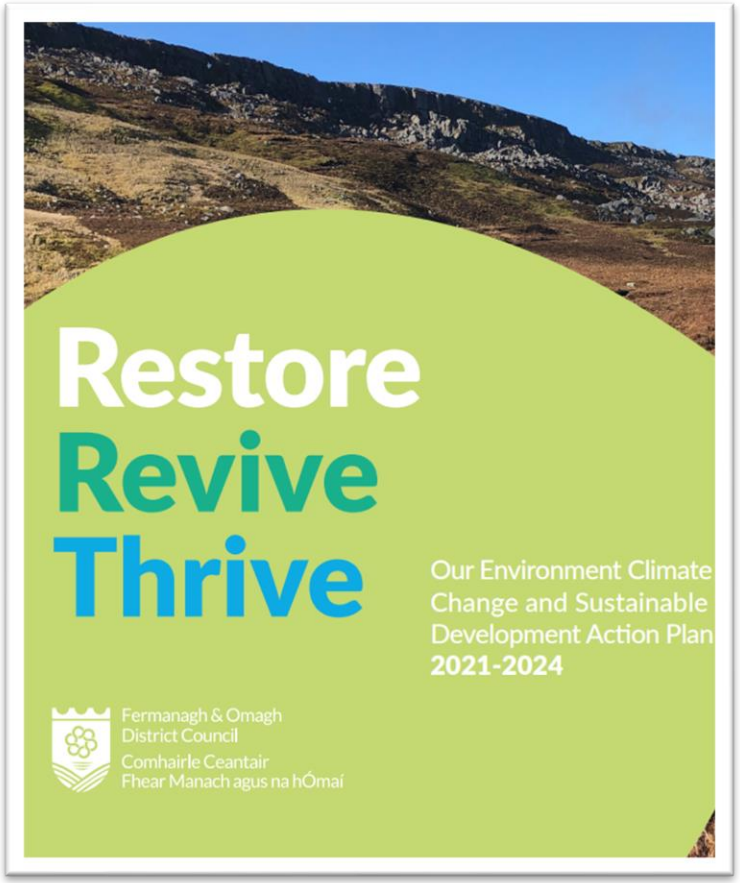
70%

the population living in

rural areas

Relevant FODC Strategies





Net Zero Emission Fleet — 2031

Net Zero Council Buildings — 2036

Scope 3 Emissions Net Zero — 2040

District is Net Zero — 2042

Council Assets are resilient to the impacts of Climate Change — 2050

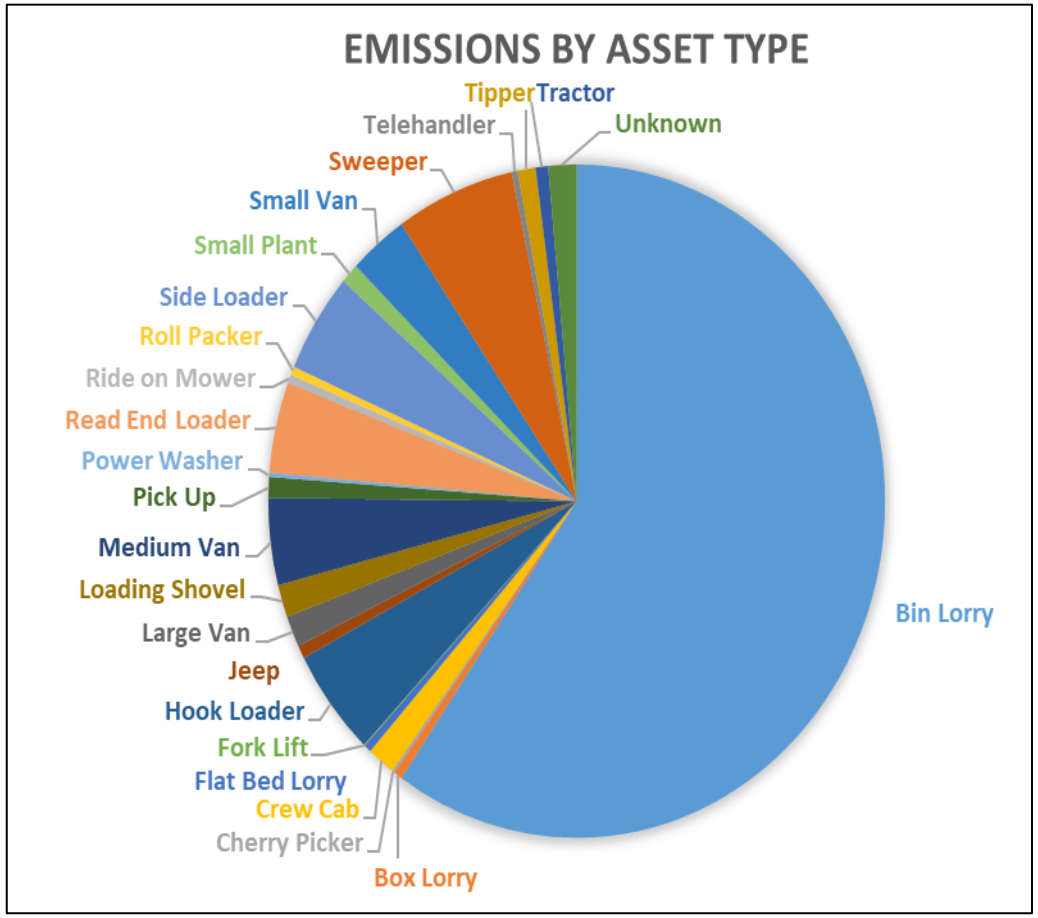
Our vision is to have a net-zero fleet by **2031**

The Councils fleet currently produces around 1,500 tCO2e per year, equal to around 40% of the Councils total carbon footprint (Scope 1 and 2 emissions)

Fleet Overview

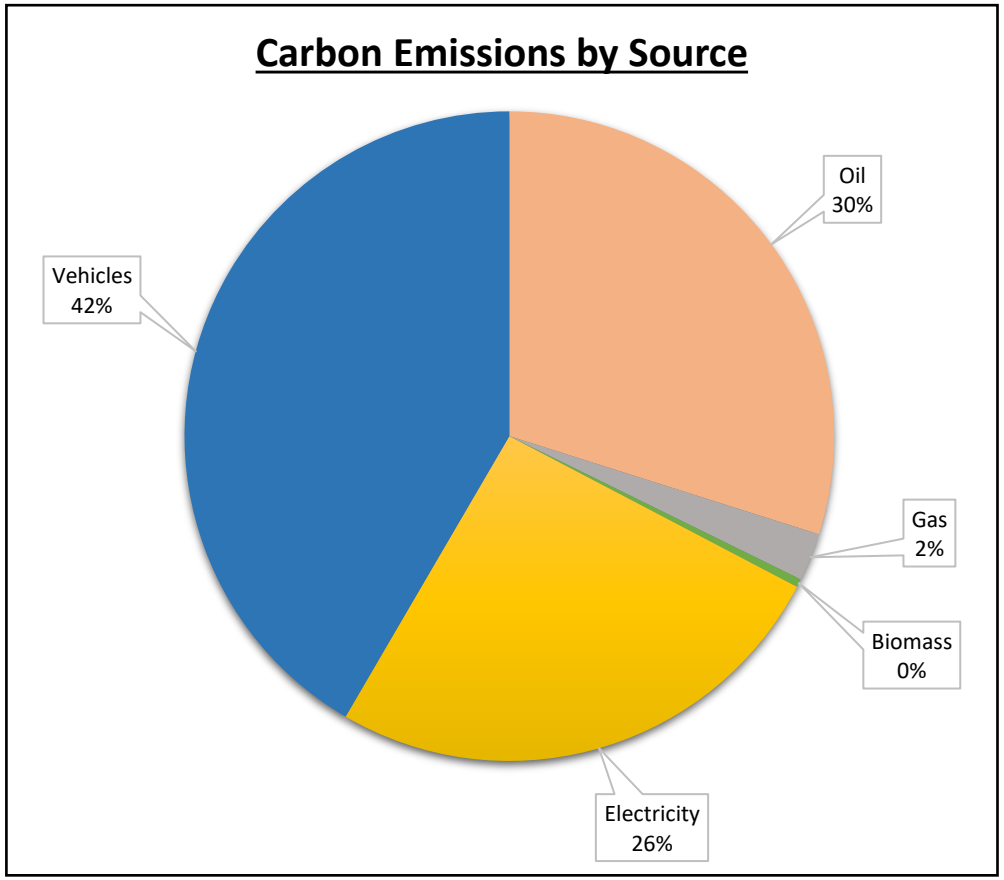
- FODC's fleet consists of around 155 vehicles
  - 10 Battery Electric Vehicles
  - 145 Diesel (or HVO) vehicles

- Over 600,000 litres of fuel (predominantly diesel) consumed per year (2023/24).



FODC Carbon Footprint 2023 (Scope 1 and 2)

- Heat
  - Energy Use= 6,171,282 kWh (↓ 6.05%)
  - Emissions= 1,226 tCO2e (↓ 16.03%)
- Electricity
  - Energy Use= 4,662,146kWh (↓ 12.35%)
  - Emissions= 965 tCO2e* (↓ 28.96%)
- Vehicles
  - Energy Use= 6,787,166kWh (↑ 3.89%)
  - Emissions= 1,561 tCO2e (↑ 1.08%)
- **Total**
  - **Energy Use= 17,620,594 (↓ 8.23%)**
  - **Emissions= 3,753 tCO2e (↓ 10.83%)**



Hydrotreated Vegetable Oil (HVO)

- Biofuel made by the hydrocracking/ hydrogenation of vegetable/ seed oils
- Drop in replacement for diesel- no engine modifications are required
- HVO combustion produces tailpipe emissions, but has lower “net” emissions than standard diesel due to the sustainable nature of the fuel source. It also has the potential benefits of reduced Particulate Matter (PM) Carbon monoxide (CO) and Nitrogen Oxide (NOx) tailpipe emissions

FODC HVO Trial

- HVO trial began in December 2023.

- 12,000 Litres of Fuel purchased
  - HVO was purchased at a premium of 49p/litre compared to standard diesel

- Trial involved 5 Vehicles and was carried out over a 4-month period:
  - 2 Bin Lorries
  - 2 Medium Vans
  - 1 Small Van

	Cost per Litre (VAT exc.)	Emissions per Litre*
HVO	£1.75	0.036 KgCO2e*
B7 Diesel	£1.26	2.512 KgCO2e*

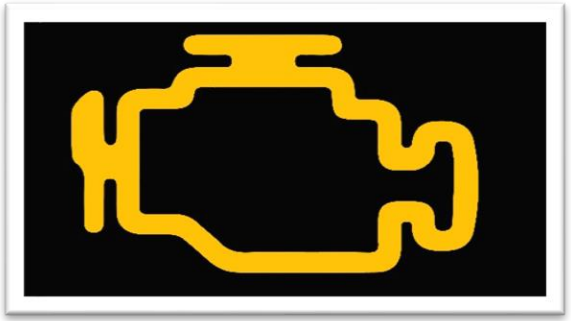
*UK Greenhouse gas reporting: conversion factors 2024

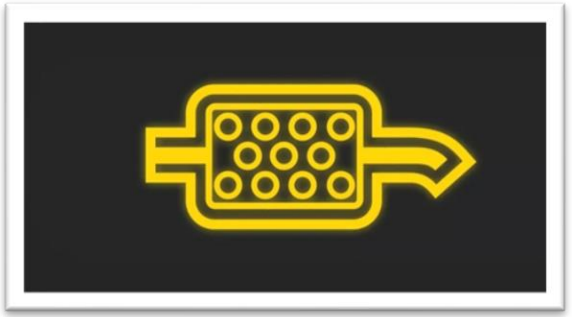
HVO Rollout

- In April 2024, HVO was rolled out to all Gortrush-based vehicles,
- In December 2024, HVO was rolled out to all Killyvilly-based vehicles
- This includes all Diesel powered vehicles and plant.

Maintenance Requirements

- Fleet Manager Keith Kettyles and maintenance staff has reported a reduction in:
    - Diesel Particulate Filters (DPF) maintenance
    - Cleansing requirement for Exhaust Gas Recirculation valves (EGR's)
    - Engine Warning alerts
    - Diesel additive requirements





Procurement Approach

- HVO was not available through the existing fuel purchase frameworks.
- Prices sought from potential suppliers- 3 local companies
  - Nicholl Oils,
  - Lissan Coal Company (LCC),
  - Scotts Fuels
- Small difference in prices sought from local suppliers
- **<10p/ litre premium compared to diesel**- varies from month-to-month.

HVO- Not a long term solution?

- Sustainability concerns?
- Future price volatility?
- Security of Supply?

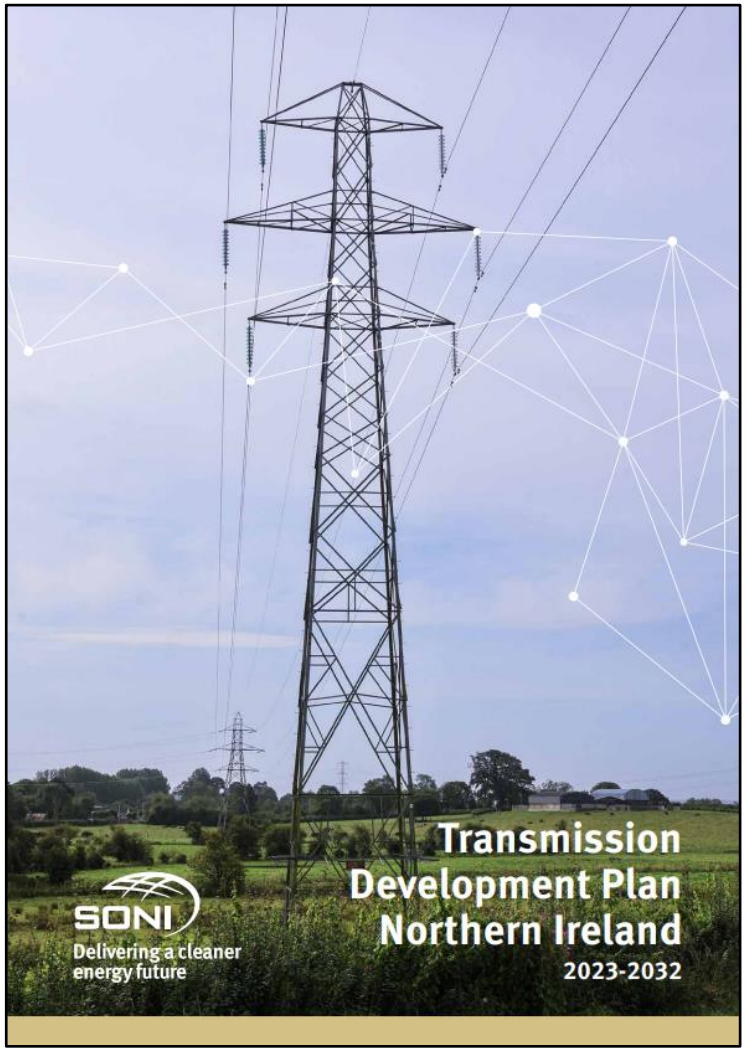
Electrification

- First Northern Ireland Council to invest in Electric Vehicles- **2013**
- Currently have **10** Electric Vehicles, all of which are vans.
- NIE pre-engagement- extra capacity for EV charging infrastructure

Challenges

- Grid Infrastructure
  - Planning and Investment delays
    - Mid Tyrone project 2030

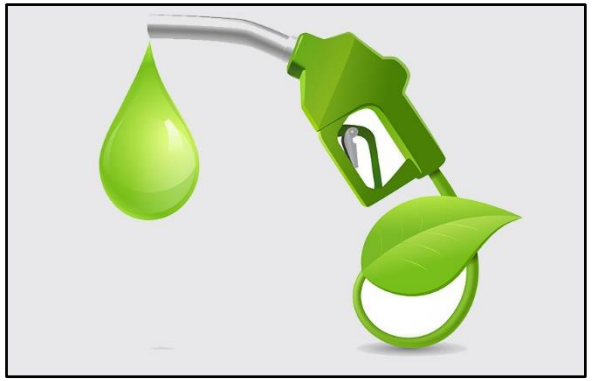
- Associated Costs
    - New substations
    - Longer cable runs
    - More upgrades to accommodate new demand



Alternative Approaches

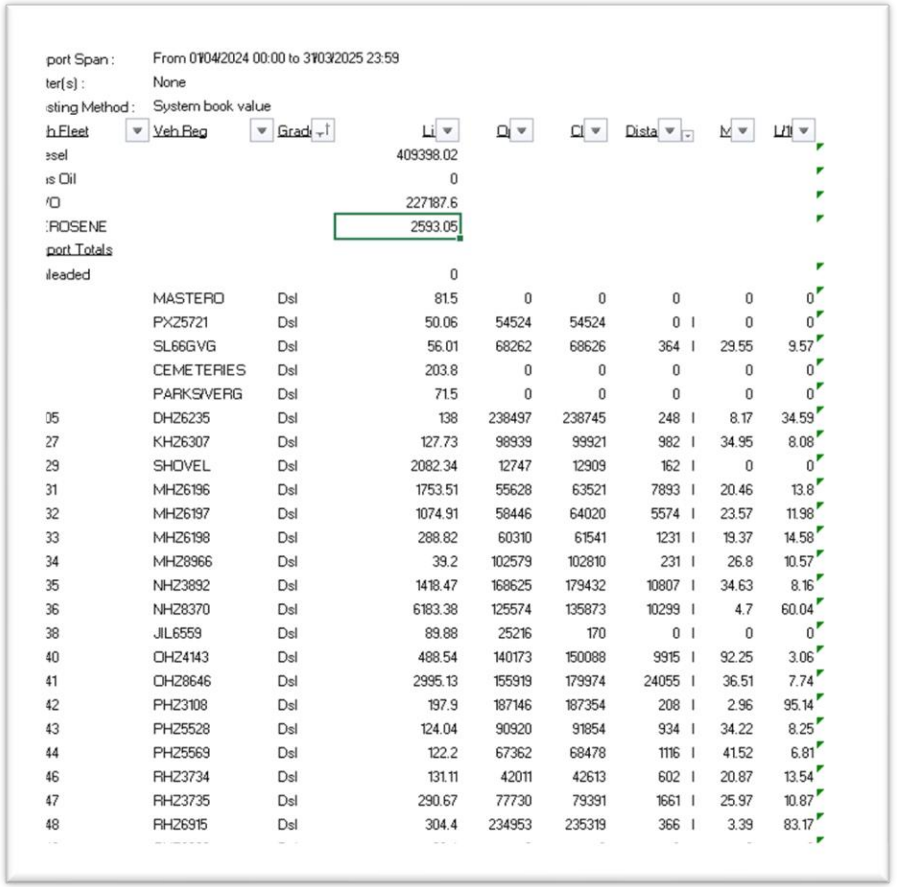
- Hydrogen:
  - Mid South West Growth Deal
    - Green Hydrogen Valley

- Alternative Biofuels
  - Biodiesel
  - Biomethane



2024/25 Annual Consumption summary

- **227,000 Litres** of HVO consumed
- **562 tCO2e** mitigated*
- **31%** reduction in fleet related emissions (Compared to 2023)
- As of April 2025, over **80%** of the Councils fleet is operating on HVO.



port Span :	From 01/04/2024 00:00 to 31/03/2025 23:59							
ter(s) :	None							
sting Method :	System book value							
h Fleet	Veh Reg	Grad	Li	Di	Cl	Dista	M	L/l
esel			409398.02					
s Oil			0					
/O			227187.6					
ROSENE			2593.05					
port Totals								
leaded			0					
	MASTERO	Dsl	81.5	0	0	0	0	0
	PXZ5721	Dsl	50.06	54524	54524	0	0	0
	SL66GVG	Dsl	56.01	68262	68626	364	29.55	9.57
	CEMETERIES	Dsl	203.8	0	0	0	0	0
	PARKS/VERG	Dsl	71.5	0	0	0	0	0
05	DHZ6235	Dsl	138	238497	238745	248	8.17	34.59
27	KHZ6307	Dsl	127.73	98939	99921	982	34.95	8.08
29	SHOVEL	Dsl	2082.34	12747	12909	162	0	0
31	MHZ6196	Dsl	1753.51	55628	63521	7893	20.46	13.8
32	MHZ6197	Dsl	1074.91	58446	64020	5574	23.57	11.98
33	MHZ6198	Dsl	288.82	60310	61541	1231	19.37	14.58
34	MHZ8966	Dsl	39.2	102579	102810	231	26.8	10.57
35	NHZ3892	Dsl	1418.47	168625	179432	10807	34.63	8.16
36	NHZ8370	Dsl	6183.38	125574	135873	10299	4.7	60.04
38	JIL6559	Dsl	89.88	25216	170	0	0	0
40	OHZ4143	Dsl	488.54	140173	150088	9915	92.25	3.06
41	OHZ8646	Dsl	2995.13	155919	179974	24055	36.51	7.74
42	PHZ3108	Dsl	197.9	187146	187354	208	2.96	95.14
43	PHZ5528	Dsl	124.04	90920	91854	934	34.22	8.25
44	PHZ5569	Dsl	122.2	67362	68478	1116	41.52	6.81
46	RHZ3734	Dsl	131.11	42011	42613	602	20.87	13.54
47	RHZ3735	Dsl	290.67	77730	79391	1661	25.97	10.87
48	RHZ6915	Dsl	304.4	234953	235319	366	3.39	83.17

*Compared to B7 road diesel

Summary

- HVO is **not** a “silver bullet” solution, but is a cost-effective solution in the short- medium term. The Councils net-zero fleet transformation will ultimately rely heavily on **electrification**.

- The Council will continue to expand its electric fleet, and also explore other alternatives such as Hydrogen powered vehicles and potentially explore other synthetic renewable fuels.

Thank you for listening!!

Have you any Questions??