



An Roinn Iompair,  
Turasóireachta agus Spóirt  
Department of Transport,  
Tourism and Sport

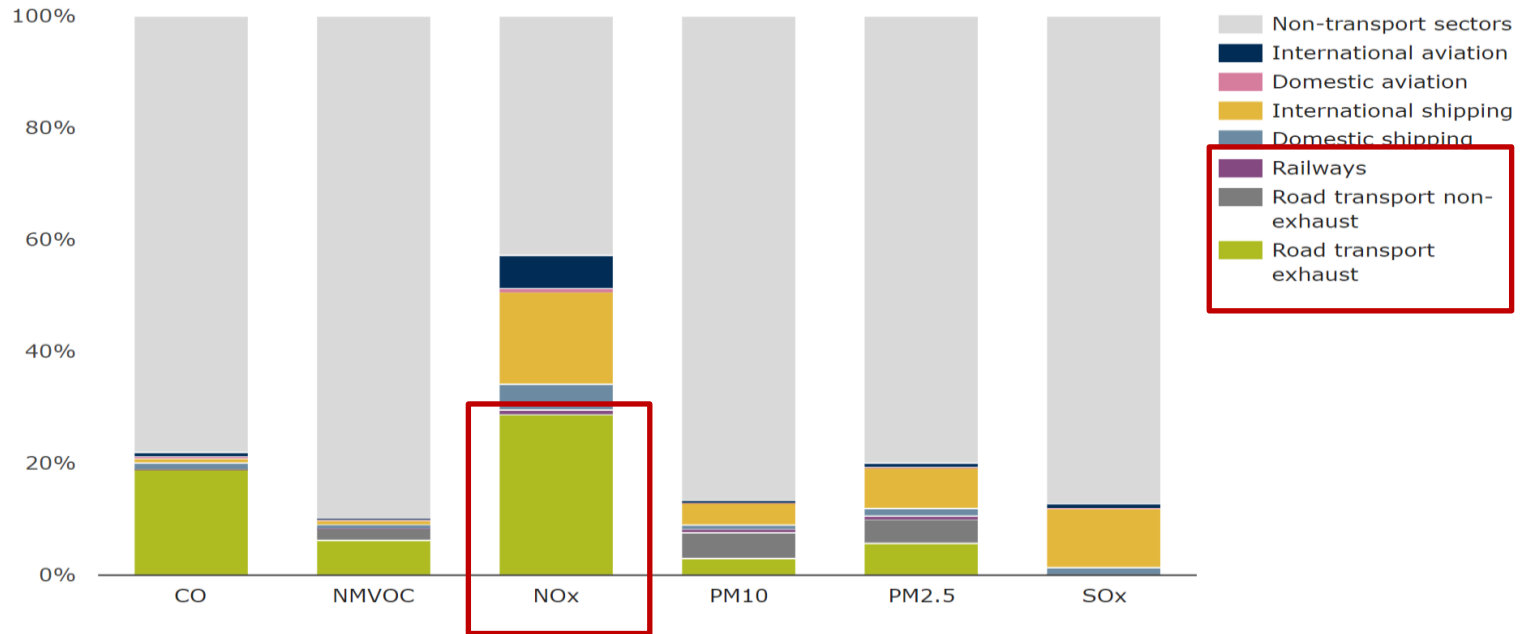
# Overview of the transport sector

Máirín Ní Cheallaigh

Climate Change Unit

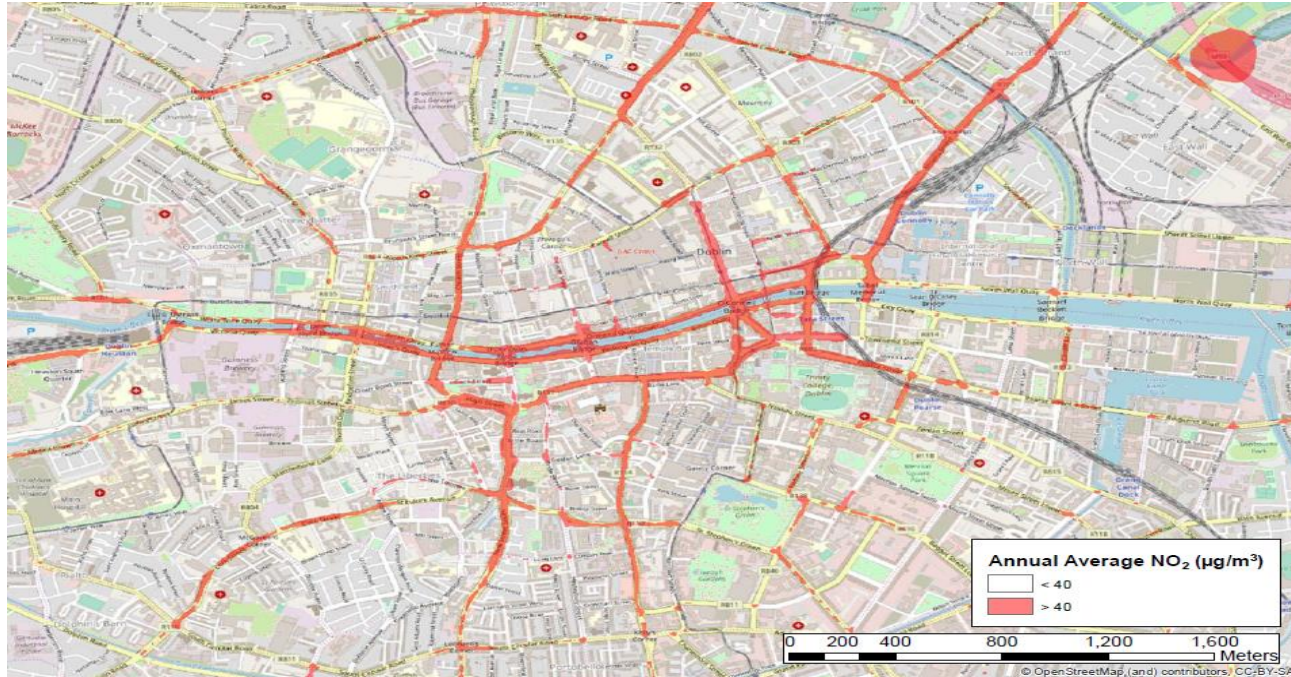
UTRAP Plenary Meeting, 11 December 2019

# Transport sources of air pollutants



Contribution of the transport sector to total emissions of the main pollutants - Source EEA

# At a local level ...



Modelled yearly average Nitrogen dioxide concentrations in Dublin city centre - Source EPA

# Vehicles, pedestrians & cyclists sharing space in Dublin



Table 1 below presents the total numbers of vehicles, pedestrians and cyclists crossing the Canal Cordon inbound between 07:00am and 10:00am from 2006 to 2018. Figure 1 illustrates this data in graphical format.

Mode	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bus	1,680	1,740	1,814	1,704	1,688	1,539	1,503	1,539	1,504	1,528	1,652	1,637	1,837
Car	58,664	58,686	58,897	58,897	58,047	55,745	55,343	54,458	53,033	53,064	51,908	50,153	48,820
Taxi	3,825	4,583	5,079	4,980	4,809	4,862	5,277	5,458	4,955	4,699	4,779	4,098	4,399
Walk	17,114	18,594	18,360	14,618	15,092	14,551	17,070	17,495	19,711	18,727	21,473	24,936	23,858
Cycle	4,829	5,676	6,143	6,326	5,952	6,870	7,943	9,061	10,349	10,893	12,093	12,447	12,227
Goods	2,291	1,445	1,223	1,087	993	1,176	1,099	1,045	1,087	1,096	1,093	1,024	1,153
M.Bike	2,395	2,429	2,375	2,060	1,656	1,485	1,425	1,423	1,372	1,390	1,464	1,532	1,477

Table 1 – Vehicle, cyclists and pedestrians crossing the Canal Cordon by mode of travel 2006-2018

Source: NTA/DCC (2018)  
**Canal Cordon Report 2018**  
*Report on trends in mode share of vehicles and people crossing the Canal Cordon 2006 to 2018*

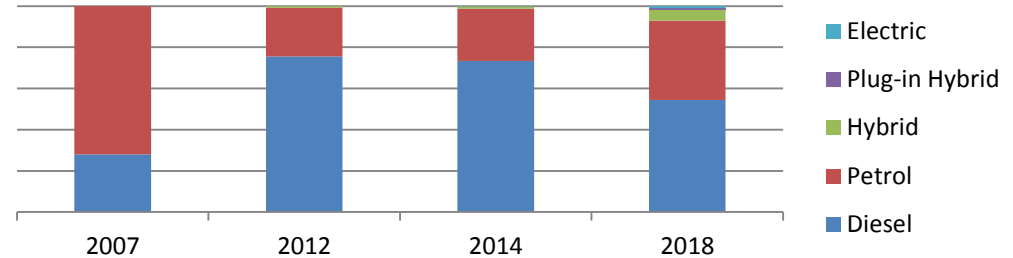
Data represents an average value of the number of vehicles/people entering the city between the hours of 07.00am and 10.00am over a two day period in November

[https://www.nationaltransport.ie/wp-content/uploads/2019/04/Canal\\_Cordon\\_Report\\_2018.pdf](https://www.nationaltransport.ie/wp-content/uploads/2019/04/Canal_Cordon_Report_2018.pdf)

# The shift to diesel...



Fuel type of new passenger cars



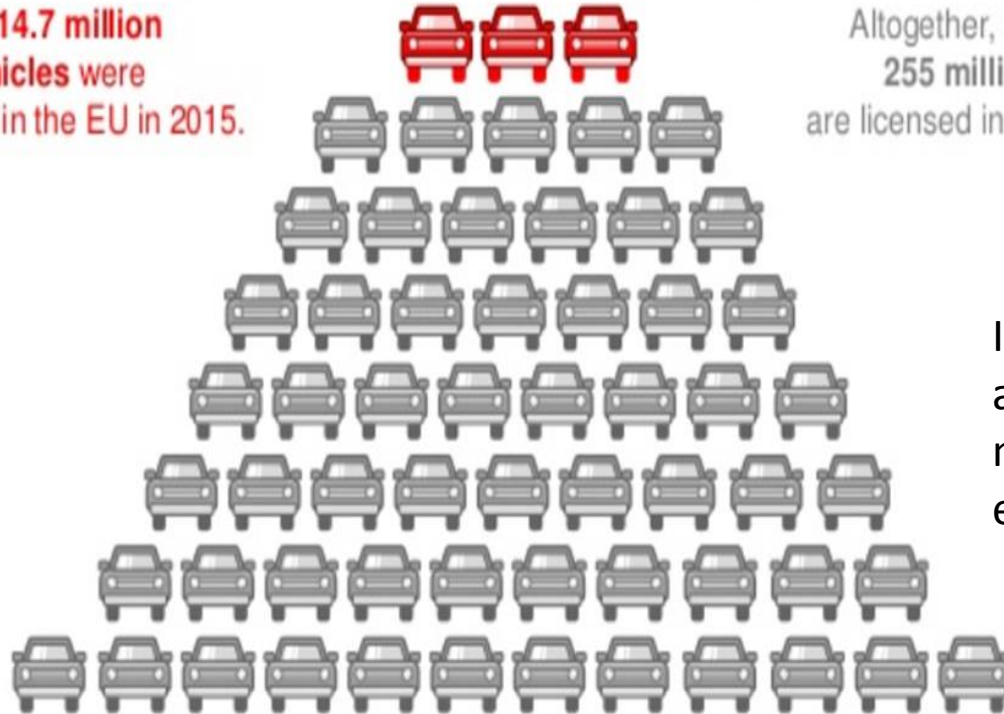
Euro standard	Introduction date		Emission limits		
	New approvals	All new registrations	Petrol NOx	Diesel NOx	Diesel PM
Euro-1	1 July 1992	31 December 1992	0.97g/km*	0.97g/km*	0.14g/km
Euro-2	1 January 1996	1 January 1997	0.5g/km*	0.9g/km* (direct injection)	0.1g/km
Euro-3	1 January 2000	1 January 2001	0.15g/km	0.5g/km	0.05g/km
Euro-4	1 January 2005	1 January 2006	0.08g/km	0.25g/km	0.025g/km
Euro-5	1 September 2009	1 January 2011	0.06g/km	0.18g/km	0.005g/km
Euro-6	1 September 2014	1 September 2015	0.06g/km	0.08g/km	0.0045g/km

Euro Standards for Cars:  
Approval dates of Standards and impact of standards on NOx and Diesel PM levels

# Numbers of older vehicles on the streets: cars



Approx. **14.7 million**  
**new vehicles** were  
licensed in the EU in 2015.



Altogether, approx.  
**255 million** cars  
are licensed in the EU.

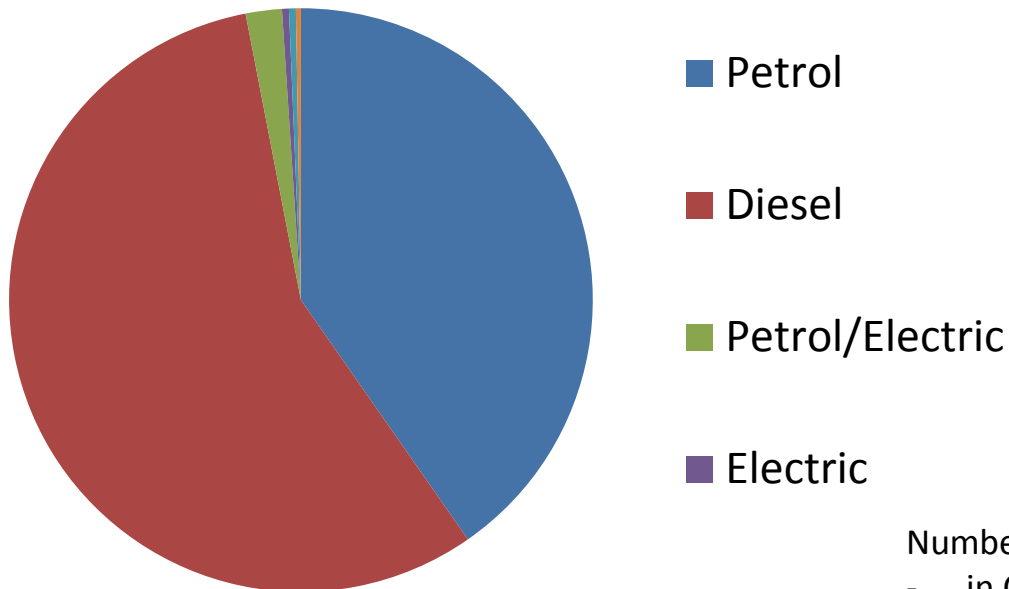
In EU countries,  
approximately 5.8%  
new cars registered  
every year



# Passenger cars



## Cars by fuel type



Cars = **77.4%** of the total number of vehicles licenced in Ireland

- Total of **2,177,430** passenger cars currently taxed in Ireland

Of these,

- **40%** are petrol-fuelled
- c. **57%** are diesel-fuelled

Of the remaining 3%,

- 43,617 vehicles are Petrol/Electric hybrids,
- 14,387 are Battery Electric or Plug-in Hybrid Electric Vehicles

Numbers of passenger vehicles licenced

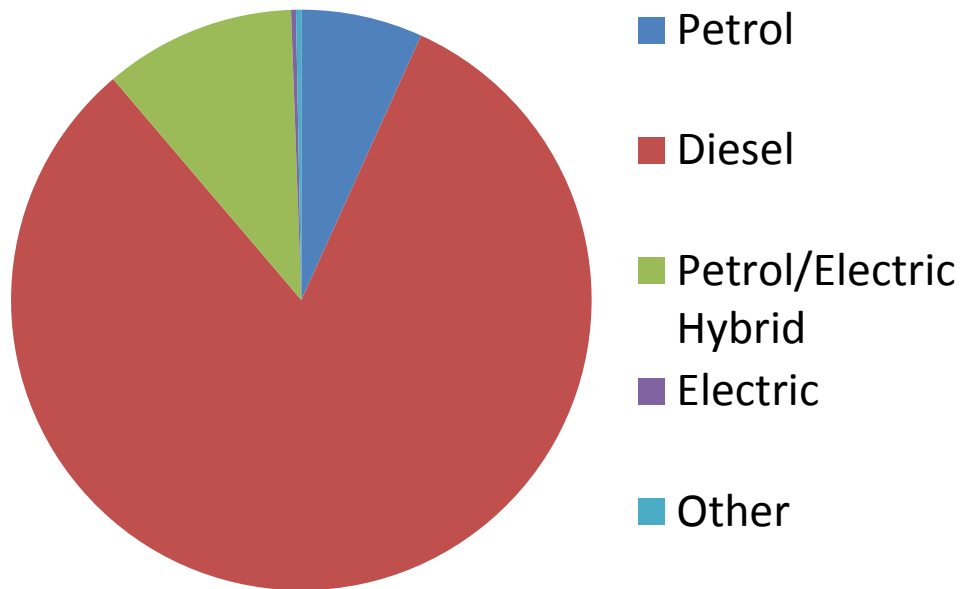
- in County Dublin: 535,468
- In County Cork: 256,928
- In County Galway: 113,608



# SPSVs including taxis, limousines & hackneys



## SPSVs by fuel type



Currently a total of **21,710** Small Public Service Vehicles (SPSVs) taxed in Ireland

Of these, **14,702** PSVs, or nearly 68% of the total number, are licenced in County Dublin

PSVs licenced in other counties:

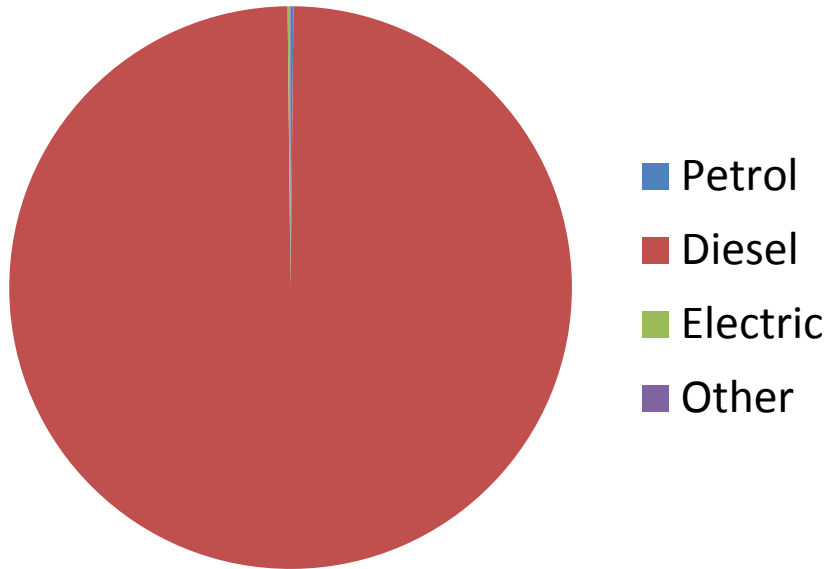
Cork:	2,654
Galway:	1,556
Limerick:	1,011
Waterford:	444



# Goods vehicles (including Heavy and Light Duty Vehicles)



## Goods vehicles by fuel use



Total number currently licenced in Ireland: **367,258**

### Licenced by County:

Dublin: 72,660

Cork: 42,021

Galway: 20,346

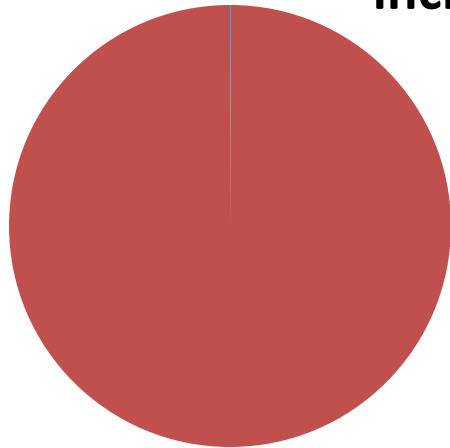
Limerick: 14,687

Waterford: 7,973

# Large Public Service Vehicles (PSVs)



## Large PSVs including buses



- Petrol
- Diesel

Total number currently licenced in Ireland : 11,413

**Public Service Obligation (PSO) Urban Bus fleets** (with % of buses in most efficient Euro Standard VI class)

**Dublin Bus:** 987 buses (47% Euro VI)

**Go Ahead Ireland** Dublin PSO routes: 125 buses (90% Euro VI)

### Bus Éireann Regional City Fleet:

Cork: 120 buses (52% Euro VI)

Galway: 36 buses (50% Euro VI)

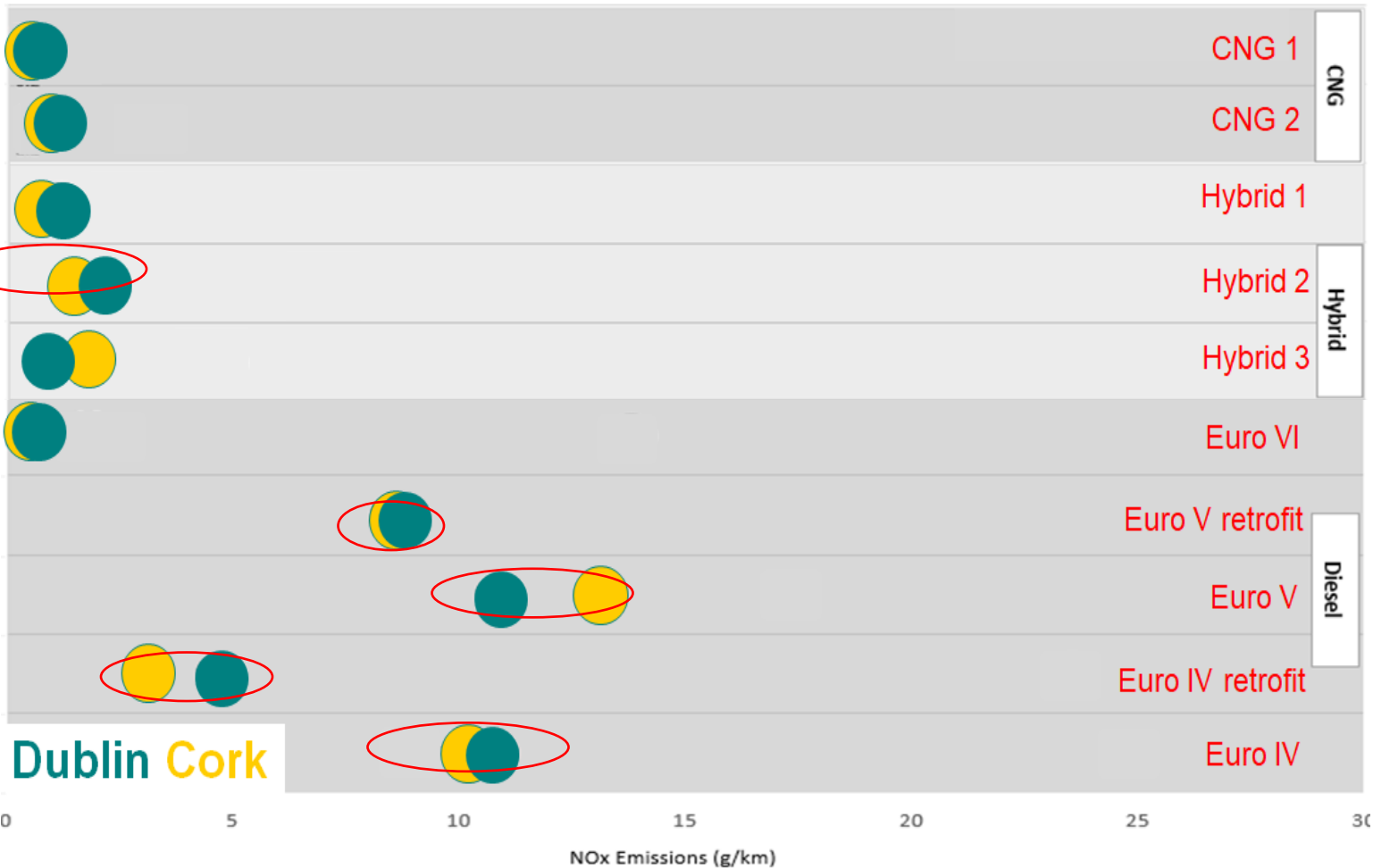
Limerick: 30 buses (50% Euro VI)

Waterford: 24 buses (79% Euro VI)



DTTAS  
Low  
Emission  
Bus Trial  
Results

NO<sub>x</sub>  
Emissions

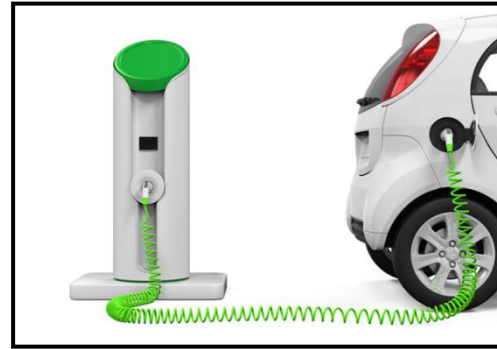


# Pathways to mitigation



## Passenger cars & SPSVs

- **Vehicle standards** – increasingly stringent EU emissions levels
- **Diesel Particulate Filters** - although these require maintenance
- **Electric Vehicle uptake** – Climate Action Plan target of 936,000 Electric Vehicles (EVs), including 840,000 passenger EVs by 2030



## Behavioural change/modal shift

- **Active travel** (walking & cycling) infrastructure and supports
- Ongoing upgrading of **urban public transport systems**



# Pathways to mitigation



## HGVs

- **LEV taskforce recommendations** to support the uptake of low emission Heavy Duty Vehicles (including Heavy Goods Vehicles (HGVs), buses and coaches)
- **Alternatively-fuelled vehicles & infrastructure** (national approaches structured by EU directives, such as AFID, and supported by funding instruments such as CEF)
- Previously in Dublin: **Port tunnel**

## Bus & PSV fleets

- **Fleet renewal** (Clean Vehicles Directive & National Development Plan targets)
- **BusConnects** project, involving the redesign of Ireland's urban bus networks and including the provision of cycle lanes and park-and-ride facilities

## Trains

- **DART expansion project** – expansion of DART electric trains to Drogheda, Maynooth & Celbridge/Hazelhatch
- **Fleet renewal** - Diesel/electric & electric trains (under National Development Plan)
- **MetroLink Project** – high capacity, high frequency & electric trains



Email: [MairinNICHEALLAIGH@dtas.gov.ie](mailto:MairinNICHEALLAIGH@dtas.gov.ie)

Key online resources:

**Sustainable Mobility Public Consultation Background Papers:**

<https://www.gov.ie/en/consultation/f1b503-public-consultation-on-a-review-of-sustainable-mobility-policy/>

**LEV taskforce Phase 1 Report:** <https://www.dccae.gov.ie/en-ie/energy/publications/Pages/Low-Emission-Vehicle-Taskforce-Progress-Report-September-2018.aspx>

**LEV taskforce Phase 2 Report:** <https://www.gov.ie/en/publication/99a2cb-low-emission-vehicle-lev-taskforce-progress-report/>

# THANK YOU FOR YOUR ATTENTION