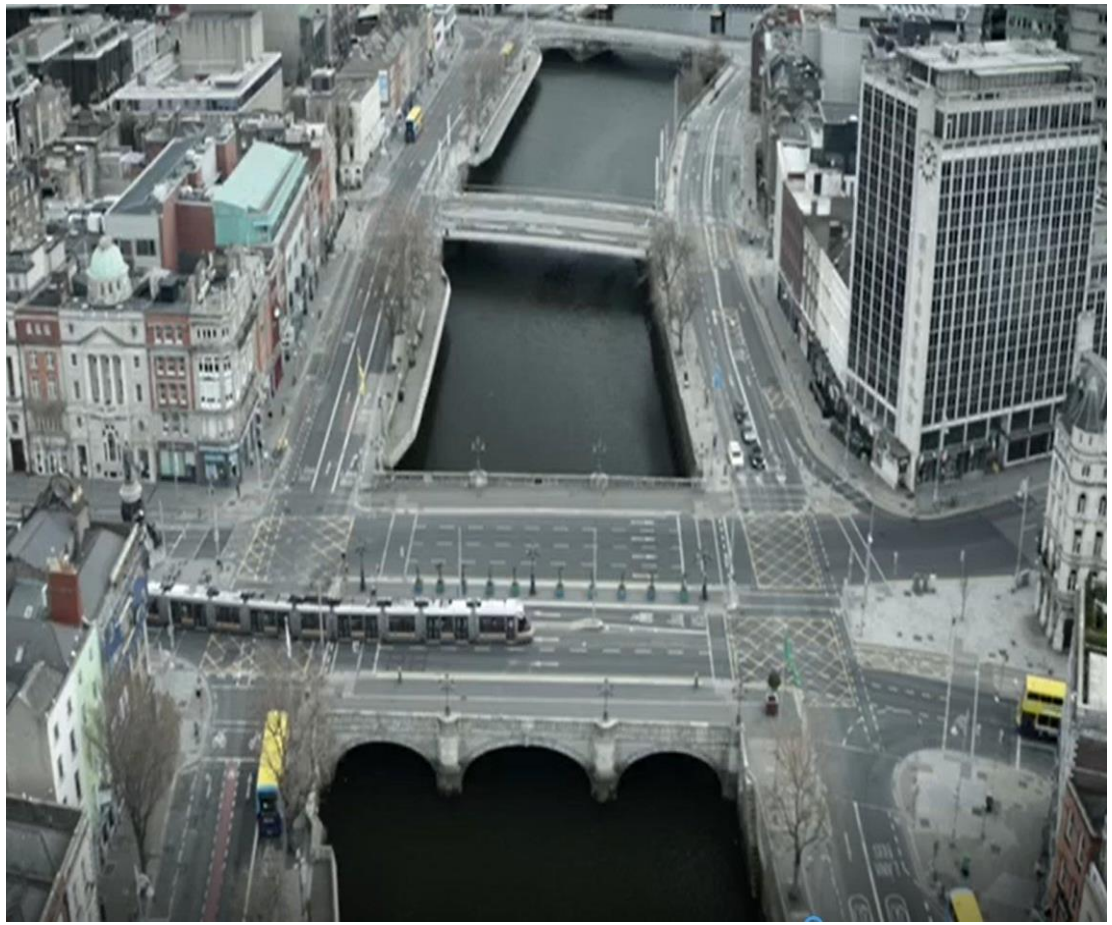
An Roinn Iompair
Department of Transport

Reducing Emissions from the Transport Sector

Climate Change Advisory Council

Department of Transport
21 June 2021

Scale of Transport Emission Reduction Target



- Transport: ~20% national emissions: must play a key role in the national decarbonisation effort.
- Tasked with plotting a pathway to reduce transport emissions by **51% by 2030.**
- **COVID-19:** there was **a reduction of around ~17%** in transport emissions as compared to the previous year.
- Demographic and economic growth expected out to 2030: **increased travel demand.**

Achieving Short *and* Long Term Goals

- Ultimate objective: carbon neutrality by 2050 (longer-term goal). Interim challenging goal: 51% reduction by 2030.
- Actions to achieve the ***longer-term goal*** need to be commenced now but their full climate benefit may not be felt until later e.g. **land-use/transport integration; rail freight; enhanced public transport, walking and cycling networks**.
- Meantime, other actions can achieve significant emission savings ***in time and at scale*** to reach the 2030 target e.g. increased **electrification** of vehicles and increased blends of **biofuels** in the national fuel mix. (Note: biofuels will only have a marginal emission savings benefit in 2050).
- Technical work suggests reaching the **2030 target is achievable….**but involves considerable changes in trends and behaviours as well as significant costs.

Two Parallel Targets:

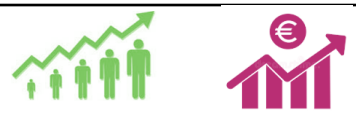
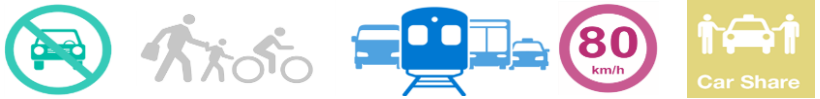
2050

Longer Term Goal

2030

Interim Challenging Goal

Potential Pathway to 51%

Mitigation Measure in 2030	2030	2025	Emission saving in 2030
Growth 			+1.4 MT CO_{2eq}
Technology 	945,000 EVs	175K cars 20K vans 300 buses 350 HGVs	-5.01MT CO_{2eq}
Fewer ICE kms 	*c.*26%	TBD	-1.47 MT CO_{2eq}
Biofuels 	B20:E10	B12:E10	-1.06 MT CO_{2eq}
Total Emission Savings in 2030			**-6.14 MT CO_{2eq}**

Opportunities and Challenges

Measure	Opportunities	Challenges
	○ Increasing public engagement and awareness. ○ Better work/life balance.	○ Catering for demand while still halving transport emissions.
	○ EVs are a mature technology – less risk. ○ Forthcoming stringent CO_2 standards. ○ Improvements in air and noise pollution.	○ Supports likely until TCO (when?)- significant costs. Is it just to subsidise new car owners? ○ Production levels. ○ Supply of green electricity.
	○ Liveable/sustainable communities. ○ Improvements in air quality. ○ Health benefits.	○ Speed and scale of required behavioural change. ○ Urban & rural challenges. ○ Economic impact. ○ Lead times for large-scale public infrastructure projects.
	○ 'Invisible' measure. ○ Legacy ICE vehicles.	○ Sustainability and sourcing concerns. ○ Competition with aviation. ○ Fuel costs - competitiveness issues.

Key Messages

- Transport: >20% national emissions – must play a key role in decarbonisation effort.
- Transformational change needed to achieve PfG 2030 target in transport sector and to place us on the right path for 2050.
- Technical work suggests **51% target is achievable.** Would involve:
  - Marked changes in personal travel patterns;
  - Significant EV sales; and
  - Higher levels of biofuel blending.
- The changes would support several goals but have significant challenges and costs (to households, businesses and the Exchequer).
- Going beyond 51% would exacerbate distributional impacts and achieving a just transition.