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(EPA Ref: EPAC-0924)

**22<sup>nd</sup> August 2024**

**Re: Moving Together – A Strategic Approach to the Improved Efficiency of the Transport System in Ireland**



Dear Minister Ryan,

The Environmental Protection Agency (EPA) welcomes the opportunity to respond to the Consultation for A Strategic Approach to the Improved Efficiency of the Transport System in Ireland.

The challenges for reducing emissions in Ireland’s transport system are multifaceted and cross cutting in nature. “Ireland’s Climate Change Assessment”<sup>1</sup> (ICCA) report published by the EPA in January 2024 identified that significant reductions, if not the complete elimination of fossil fuel usage, is required and that the “Avoid–shift–improve” approach provides a framework to deliver the necessary transformations across all sectors, including transport. The report highlights that planning compact development within urban areas will be important to reduce greenhouse gas emissions associated with land use change and urban sprawl as well as reducing transport emissions. This can also be important in reducing infrastructural costs and losses in biodiversity and vegetated land.

This response reflects the Agency’s remit and expertise in the following areas

- Climate change mitigation and reducing greenhouse gas emissions
- Climate change adaptation and resilience
- Air pollution, air quality and noise

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<sup>1</sup><https://www.epa.ie/our-services/monitoring--assessment/climate-change/irelands-climate-change-assessment-icca/>

- Innovation and research
- Strategic Environmental Assessment and public consultation process

The EPA has made a number of submissions which are relevant to this consultation and can be found at <https://www.epa.ie/publications/corporate/submissions--position-papers/>.

### **1. EPA greenhouse gas inventories and projections**

**Decoupling of Transport emissions through electrification and a range of Avoid and Shift measures that target transport demand is essential for Ireland to meet its Transport sector decarbonisation targets. Timely implementation of the freight transport measures in the Moving Together strategy will be necessary to achieve the overall decarbonisation goals for the Transport sector.**

Unprecedented annual emissions reductions are required for Ireland to comply with national legislation introduced under the Climate Action and Low Carbon Development (Amendment) Act 2021<sup>2</sup>.

The EPA provisional greenhouse gas inventory for 2023<sup>3</sup> shows that National total emissions (including LULUCF) in 2023 were 60.62 Mt CO<sub>2</sub> eq, 7.8% below the 2018 baseline level for National targets. In the three years 2021-2023 64% of Ireland's Carbon Budget for 2021-2025 has been used up, requiring annual emissions reductions of 8.3% per annum if Ireland is to stay within the first carbon budget.

The Transport sector has already used up 64.1% of its Sectoral Emissions Ceiling (SEC) for 2021 to 2025 and will need to reduce emissions by 12.4% per annum in 2024 and 2025 to stay within it.

Fuel combustion emissions from Transport accounted for 9.2 % and 21.4 % of total national greenhouse gas emissions in 1990 and 2023 respectively, becoming the second largest emitting sector after Agriculture. This has been driven by continual increases in the size of the vehicle fleet, both passenger and goods vehicles. Since the first year of greenhouse gas

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<sup>2</sup> <https://www.irishstatutebook.ie/eli/2021/act/32/section/15/enacted/en/html>

<sup>3</sup> <https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/EPA-Provisional-GHG-Report-Jul24-v6.pdf>

inventory reporting in 1990 passenger car numbers in Ireland have increased by 191% and commercial vehicles increased by 177%.

EPA greenhouse gas projections 2022-2040, published in May 2024<sup>4</sup> indicate that the first two carbon budgets (2021-2030), which aim to support achievement of the 51 per cent emissions reduction goal, are projected to be exceeded by a significant margin of between 17 per cent (With Additional Measures - WAM scenario) and 27 per cent (With Existing Measures – WEM scenario).

Almost all sectors are on a trajectory to exceed their national sectoral emissions ceilings for 2025 and 2030, including Electricity, Transport, Agriculture and Industry. Emissions from the Transport sector are projected to decrease by between 5% and 26% in the WEM and WAM scenarios respectively, with the latter scenario reflecting the majority of the measures outlined in the 2024 Climate Action Plan.

The projections indicate that the Transport sector could exceed the 2021-2025 Transport SEC by 4 Mt CO<sub>2</sub> equivalent and the 2026-2030 Transport SEC by 12 Mt CO<sub>2</sub> equivalent even in the WAM scenario which includes significant mitigation measures. Measures that are projected to contribute to greater emissions reductions include 945,000 EVs by 2030, a 20 per cent biodiesel blend rate by 2030 and avoid/shift measures such as a 50 per cent increase in daily active travel journeys and a 130 per cent increase in daily public transport journeys.

It is encouraging that the Moving Together strategy calls for “*ensuring we measure and evaluate the impacts of interventions from the outset*”. The EPA has stressed in its recent reports the need for clear implementation pathways associated with planned policies and measures to allow for their inclusion in the emissions modelling.

The EPA welcomes that “*the focus for this Strategy is to reduce overall travel demand, where possible, and to increase the efficiency of the existing transport system*”. Decoupling of Transport emissions through electrification but also a range of Avoid and Shift measures

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<sup>4</sup> <https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/EPA-GHG-Projections-Report-2022-2050-May24--v2.pdf>

that target transport demand will be essential for Ireland to meet its Transport sector decarbonisation targets.

Mitigation measures in the Transport sector in Ireland to date have largely focussed on passenger transport. Freight transport related emissions are more closely coupled to economic growth and are at higher risk of increasing if Ireland's economic performance outstrips what is assumed in the EPA Projections. As passenger transport is expected to decarbonise more quickly, the EPA Projections indicate that freight transport will be responsible for more than half of all road transport emissions by 2030. Timely implementation of the freight transport measures (10 to 13) will be necessary to achieve the overall decarbonisation goals for the Transport sector.

## **2. Climate change adaptation and resilience**

**The strategy should reference the National Climate Change Risk Assessment (NCCRA) as described in Climate Action Plan 2024.**

This assessment, led by the EPA, will provide a prioritisation of risk at a national level that should be taken into account in the GHG emission reduction planning and delivery processes. The updating and further development of guidance will move towards a standardisation of risk assessment approaches, including development of technical risk assessment guidance for Sectoral Risk Assessment aligned to the NCCRA approach. This will ensure that the new data sets are used in a standardised way to achieve adaptation objectives.

In assessing Ireland's climate risks within a European context, you are also referred to the European Climate Risk Assessment<sup>5</sup> (EUCRA), published by the European Environment Agency on 11 March 2024. It will help to identify policy priorities for climate change adaptation and for climate-sensitive sectors.

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<sup>5</sup> <https://www.eea.europa.eu/publications/european-climate-risk-assessment>

### **3. Air pollution, Air quality and Noise**

**The plan should ensure that the integration of air pollution controls, noise mitigation measures and climate action, for example in transport management, is put in place. This approach can ensure that multiple co-benefits are achieved for the environment and public health.**

The measures identified in the strategy, including those under empowering and supporting local authorities and in relation to zero-emissions vehicles (EVs) can achieve improvements in air quality, reducing emissions of transport derived air pollutants such as nitrogen oxides, and particulate matter.

Given the clear linkage between traffic volumes and nitrogen dioxide concentrations, the overall strategic objectives including “reducing total vehicle kilometres travelled by 20% by 2030” have the potential to lead to reductions in urban nitrogen dioxide concentrations with positive, linked, health impacts.

It is positive that the Strategy seeks to support better health and associated reductions in noise pollution. The emphasis on noise and health is a welcome development, as is the proposed use of Noise Action Plan Health Assessments to evaluate and review the effectiveness of the Strategy. The EPA recommends that these are called Noise Harmful Effects Assessments to match the terminology used in the noise regulations.

Measures such as reducing car traffic around schools have the potential to be a very positive development. The Strategy could usefully seek to align with the Noise Action Plans developed by local authorities. These plans set out actions around avoiding, preventing or reducing on a prioritised basis the harmful effects, including, annoyance, due to exposure to environmental noise from transport sources. This work should have synergies with the Strategy for the overall objective of Improved Efficiency of the Transport System.

Objective 65 of the current National Planning Framework is to Promote the pro-active management of noise where it is likely to have significant adverse impacts on health and quality of life and support the aims of the Environmental Noise Regulations through national planning guidance and Noise Action Plans. It would be beneficial if the delivery mechanisms for the Strategy could also align with the development of this guidance when developed.

The World Health Organisation (WHO) Environmental Noise Guidelines 2018 sets out how excessive noise, particularly from transport sources (road traffic, railway and aircraft), has negative impacts on health and wellbeing and may provide useful information for this Strategy.

### **3. Public Sector Leading by Example and Green Public Procurement**

**It's vital that the public sector in Ireland continues to focus on leading by example in the implementation of green procurement through the inclusion of green criteria in transport related purchases.**

The EPA has reported a low level of implementation of GPP by Government Departments (currently the only cohort within the public sector where GPP implementation is monitored). This is a missed opportunity to purchase more resource efficient and less polluting goods, services and works within the marketplace.

Spend by Government Departments broken down by sector, for the 2022 reference year data show that green criteria were incorporated in 45% of the total number of contracts issued (over €25,000) for Transport<sup>6</sup>. This represented 81% of the total value of Transport contracts issued.

Successive Climate Action Plans have called out the key leadership role of the public sector in leading by example and delivering climate action, and implementation of Green Public Procurement (GPP) has been a focus of the Public Service Climate Action Mandate. The Government's GPP Strategy and Action Plan, *Buying Greener* (published in April 2024), includes measures to progress GPP implementation, monitoring and reporting, training and awareness and further development of national guidance and criteria. The strategy also has a key sectoral focus with related GPP targets included and future Climate Action Plans can link to the actions and targets in this policy document.

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<sup>6</sup> [https://www.epa.ie/publications/circular-economy/resources/EPA\\_GPP\\_Report\\_2022\\_Final.pdf](https://www.epa.ie/publications/circular-economy/resources/EPA_GPP_Report_2022_Final.pdf)

#### **4. Research and Innovation**

**Your attention is also drawn to published EPA-funded research related to transport and mobility systems, listed in Appendix I to this submission, which may provide a useful resource and help inform aspects of the Strategy.**

The EPA funds and manages an environmental research programme that delivers timely evidence and knowledge to support policy and wider decision making. The EPA Research Programme is structured along four interconnected research hubs: climate change, the green and circular economy, environment and health, and our natural environment. Our 2024 Call will provide funding of up to €14.5 million for new research projects. Details of over 1,000 research projects funded by EPA since 2001 is available on our online searchable database<sup>7</sup>. We place a strong focus on knowledge mobilisation and proactively support the transfer of research outputs to policy. All projects are required to publish a final report, 1-page summary and Project Highlights video upon completion which are openly available on our website.<sup>8</sup>

The EPA also has a statutory role in coordinating of environmental research nationally. To this end, we convene and chair the National Environmental Research Coordination Group (NERCG)<sup>9</sup> which includes representation from relevant Government departments and agencies. With input from the NERCG, the EPA publishes an annual report on Climate Research in Ireland, with the most recent report from 2023 available online.<sup>10</sup>

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<sup>7</sup> <https://www.epa.ie/our-services/research/epa-funded-research/epa-funded-projects/research-data-table-dev/>

<sup>8</sup> <https://www.epa.ie/our-services/research/epa-funded-research/epa-research-publications/>

<sup>9</sup> <https://www.epa.ie/our-services/research/national-environmental-research-coordination/>

<sup>10</sup> <https://www.epa.ie/our-services/research/national-environmental-research-coordination/climate-research-coordination-group/crcg-annual-reports-of-activities/>

## 5. Strategic Environmental Assessment

**The Strategic Approach to the Improved Efficiency of the Transport System in Ireland should fully consider the requirements of the Strategic Environmental Assessment (SEA) Directive, its implementing regulations (S.I. 435 of 2004, as amended) and the Habitats Directive.**

The EPA is one of the statutory environmental authorities under the SEA Regulations. In our role as an SEA environmental authority, we focus on promoting the full and transparent integration of the findings of the Environmental Assessment into plans and programmes and advocating that the key environmental challenges for Ireland are addressed as relevant and appropriate to the plan or programme. Our functions as an SEA environmental authority do not include approving SEAs or plans.

The EPA has prepared [SEA Screening Good Practice](https://www.epa.ie/our-services/monitoring--assessment/assessment/strategic-environmental-assessment/the-sea-process/) guidance (EPA, 2021), which should be useful to you, in carrying out the SEA Screening. Information on the SEA process is also available at: <https://www.epa.ie/our-services/monitoring--assessment/assessment/strategic-environmental-assessment/the-sea-process/>.

Topic and sector specific SEA guidance is also available at: <https://www.epa.ie/our-services/monitoring--assessment/assessment/strategic-environmental-assessment/sea-topic-and-sector-specific-guidance/>

We may provide additional comments, upon receipt of the SEA Screening notice and associated SEA Screening report.

The EPA looks forward to continuing to work with you as part of A Strategic Approach to the Improved Efficiency of the Transport System in Ireland and is available to discuss any aspect of this submission.

Yours sincerely,



Mary Frances Rochford  
Programme Manager



## [Appendix I: Selected EPA-funded Research Reports](#)

### **Research 338: Greening Transport**

Author: Brian Caulfield, TCD. Year published: 2020.

Sustainable travel measures seek to modify travel behaviour in favour of green alternatives such as active modes (walking and cycling), public transport and smarter use of private cars, namely car-sharing and carpooling. This research offers a unique approach to the field of transport policy, entitled “carshedding”, which exclusively centres on incentivisation strategies for sustainable modes of transport. This seeks to stimulate voluntary travel behaviour change and encourage sustainable deliberation of transport mode choice. “Car-shedding” is defined in the research as a means of encouraging the reassessment of the need to use a private vehicle for certain trip purposes. Improving walking and cycling facilities, enhanced public transport services and car-sharing are all examined in this research to determine their benefits and potential emissions reductions.

**Link to report:** [Research Report 338.pdf \(epa.ie\)](#)

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### **Research 321: Opportunities to Decarbonise the Irish Transportation Sector**

Author: Eamonn Mulholland et al., UCC. Year published: 2020.

This research developed a range of technoeconomic and socioeconomic analytical tools and models to inform decarbonisation-focused transport sector decision-taking and policymaking. The results of the research point to a series of policy recommendations. For private cars, the increased use of biofuels will be the main contributor to meeting Ireland’s mandatory 2020 renewable energy in transport target of 10%. In the medium term (to 2030), Irish policy measures that incentivise the purchase of more efficient vehicles through varying tax rates should continue to be part of a portfolio of measures. In the longer term (to 2050), a key recommendation is incentivising the switch to electric vehicles. For light goods vehicles, the results point to a change in the taxation bands from the current unladen weight bands to specific carbon emissions bands. In the medium to long term, banning the sale of diesel light commercial vehicles in 2030 and encouraging the sale of biomethane-fuelled light commercial vehicles would result in a 99.6% reduction in light commercial vehicle emissions by 2050 relative to a baseline scenario (i.e., a scenario without long-term emissions reduction targets). For heavy goods vehicles, the results indicate that optimised routing, platooning, improving vehicle utilisation, back-hauling and co-loading have the potential to reduce activity by up to 36% by 2050. Adopting energy-efficient truck technologies is another key policy option with significant potential. Promoting the deployment of alternative fuels (in particular, advanced biofuels but also some electrification potential) and the trucks that use them is the final policy recommendation.

**Link to Report:** [Research Report 321.pdf \(epa.ie\)](#)

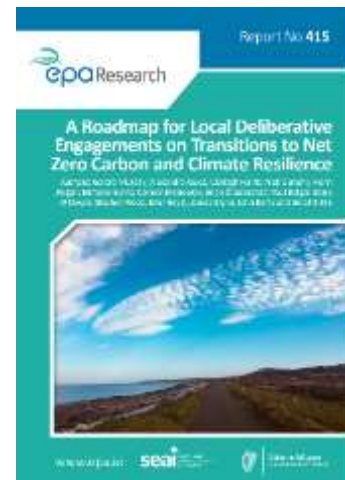
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## EPA Research Report 415: A Roadmap for Local Deliberative Engagements on Transitions to Net Zero Carbon and Climate Resilience

Author: Gerard Mullally et al., UCC and QUB. Year published: 2022.

The Imagining 2050 project sought to develop an understanding of what the National Transition Objective of a low carbon, climate resilient and environmentally sustainable economy means for the public, policy makers and the research community and how it might be achieved. The project introduced a novel 'deliberative futures workshop' and co-created the Deliberative Futures Toolkit, together with local, scientific and policy communities. The toolkit integrates deliberative dialogues into wider democratic and multi-stakeholder systems and provides a resource that can be used by communities and policymakers to engage in a deliberative way in climate action discourse and in co-developing and implementing climate action solutions. The toolkit includes a range of interactive tools that can be integrated into the deliberative process and that encourages dialogue through the use of visual future-oriented methodologies.



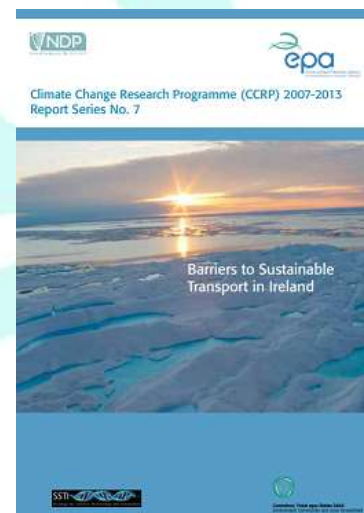
**Link to Report:** [Research Report 415.pdf \(epa.ie\)](#)

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## Assessing the Barriers to Sustainable Transport in Ireland

Authors: David Browne, Brian Caulfield and Margaret O'Mahony, TCD. Year published: 2011.

The project sought to identify and evaluate existing and potential barriers to the delivery of sustainable travel and transport in Ireland and to qualitatively evaluate the costs and impacts of potential policies and measures that could help overcome these barriers. The primary barrier to public transport provision in local authority areas was perceived to be low urban density or insufficient economies of scale, followed by a lack of incentives for potential market entrants. Policy priorities identified included: The integration of spatial planning, land-use policy and transport investment through measures including (a) incentives for densification and consolidation in urban centres, (b) restrictions on one-off housing, out-of-town retail centres and ribbon development, (c) retrofitting of residential neighbourhoods, and (d) the creation of critical mass in key urban areas; Improvements in existing public transport services through, for example, network management, reallocation and rationalisation of existing services, improved service quality, integrated ticketing and real-time passenger information; and Promotion of the economic, social, health and environmental benefits of smarter travel through awareness campaigns, market segmentation and customised advertising. Other priorities ranged from increased accessibility to frequent, efficient public transport services to promotion of eco-driving.



**Link to report:** [Barriers to Sustainable Transport in Ireland \(epa.ie\)](#)

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## **EPA Research Report 398: Eco-driving: Trends and Potential Impacts for Irish Heavy-duty Vehicles**

Authors: Ajinkya S. Mane and Bidisha Ghosh, TCD. Year published: 2021

Eco-driving and related practices have been shown to improve fuel efficiency and reduce vehicular emissions in HDV fleets internationally. The ECO-HDV project found that a large number of Irish haulage companies are eager to introduce eco-driver training programmes. Professional drivers should be trained or periodically instructed in how to reduce the number of incidents of harsh and general braking and idling during their journey, and how to improve their skills driving with smooth acceleration and deceleration. Eco-driving tips given to drivers may help in reducing overall fuel consumption and emissions under low traffic conditions. A policy recommendation from this study is that HDV priority signals and/or lanes should be provided within the vicinity of the Dublin Port area along with barrier-free lanes at tolls. Survey responses from both stakeholders and company owners showed that the top three expected government policies should be incentives for gas trucks, electric trucks and driver training programmes.



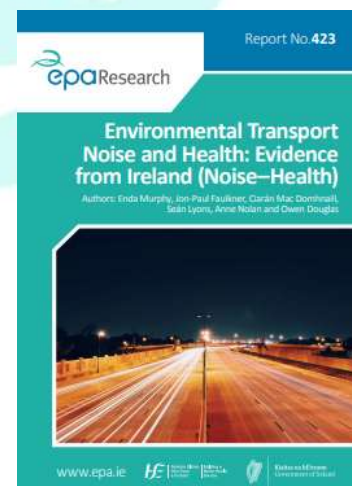
**Link to Report:** [Research\\_Report\\_398.pdf \(epa.ie\)](#)

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## **EPA Research Report 423: Environmental Transport Noise and Health: Evidence from Ireland (Noise–Health)**

Authors: Enda Murphy et al., UCD and ESRI. Year published: 2022.

The Noise–Health Ireland project aimed to identify and assess the relationship between environmental noise and health in a national and international context and identify policy recommendations for considering noise in Irish policy. The principal output of the project related to the establishment of a national evidence base for the harmful effects and burden of disease of environmental noise in Ireland, informed by high quality data analysis. The report outlines key policy and practice recommendations for managing environmental noise in Ireland. It also details how “noise–health” considerations can be better incorporated into Irish policy. These recommendations aim to strengthen the capacity of Irish policymakers to design, apply and supervise effective and systematic policies in this area.



**Link to report:** [Research\\_Report\\_423.pdf \(epa.ie\)](#)

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