

Trinity College Dublin Nudging Towards Electric Vehicle Adoption in Ireland

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ENERGY AUTHORIT

Expected Outcomes

 Collect one of the largest datasets on EV usage potential in Ireland



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- Highlight the importance of interdisciplinary and holistic
 approach for emission mitigation and decarbonisation of transportation sector
- Provide evidence from five use-cases where the EV uptake has been slow



Estimate **emissions savings** and determine its **potential national impact** through scenario analysis.

Informing Policy Making

- Emphasise *piloting* and use of *tech tools* for spreading mass *awareness*
- Understand *perceived barriers* beyond those related to financial towards EV adoption and *motivations* thereof to tackle them
- Analyse **second-hand EV market** that has little to no evidence
- Formulate tailored as well as integrated policy instruments specially focussing on population/sectors with slow EV uptake
- Suggest *policy frameworks* required to maximize the estimated impacts towards achieving 2030 and 2050 emission reduction and *climate change targets*

3) Future Research on Energy Security

Vision: Optimise EV adoption through evidence-based solutions, policies, and sustainable infrastructure, emphasising reliability and environmental impact across the lifecycle.

Future research recommendations:

- Understand and stimulate EV uptake in **Commercial sector**
- Test policies that encourage **intermodal solutions** by integrating EVs with public transit, shared mobility services, cycling, and walking
- Conduct pilots to capture public response towards *smart charging* and *advanced EV infrastructure*
- Push uptake of *sustainable energy* and determine potential of upscaling it

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