



cenex



**Lowering your emissions through innovation
in transport and energy infrastructure**

NES HYDROGEN REVIEW



Image: Norman Adams – Aberdeen City Council



The Challenge

Aberdeen City Council and its partners Opportunity North East and Scottish Enterprise commissioned Cenex to carry out a review of potential hydrogen demand from 12 North East Scotland (NES) fleets.

With funding and support also from Interreg Europe Smart HyAware, the project worked with public and private sector organisations to develop fleet procurement strategies and infrastructure plans to identify how hydrogen could help decarbonise their fleets.

The overall aim for this project was to establish the potential for hydrogen vehicle deployment in order to raise demand for hydrogen in the city and establish Aberdeen as a hydrogen hub.



The Development

- Fleet Baselineing
- Market Assessment
- Fleet Demand Scenarios
- Refuelling Infrastructure
- Whole Life Cost Analysis
- Dissemination



The Results

The analysis of the combined vehicle fleet of over 4,000 vehicles shows that 89% of the fleet is compatible with zero emission solutions (EV and hydrogen solutions considered). Whilst this analysis established that Battery EVs could look to address 57% of the fleet, it revealed that hydrogen solutions could be used for the entire fleet, with a subset of 32% that could only be addressed through hydrogen. This would then result in an annual demand for hydrogen of 745 tonnes, 92% of which would come from heavy duty vehicles.