

H₂ for waste vehicle – Project Vanguard in Middlewich (GB)

Project Vanguard: The production of green hydrogen to fuel a fleet of waste collection vehicles in Cheshire East

- Use of **photovoltaics** and **rainwater** to operate a **50 kW alkaline electrolyser** at the refuse depot to use green hydrogen under the RTFO programme (Renewable Transport Fuel Obligation, green carbon credits)
- Green hydrogen will be stored onsite at the filling station
- Refuelling of **refuse truck** and **minibuses** (Storengy will convert a pickup truck to a hydrogen-diesel hybrid)
- **First hydrogen filling station** and **first H₂ refuse truck** in the North West of England, first project in the UK to receive green carbon credits
- project is now in **construction phase with 3 vehicles** and has a target Commercial Operational Date **in autumn 2021**
- Shortlisted for **climate response award**



Benefits for region and municipality

- Innovative step towards Cheshire East Council's target of net-zero by 2025
- Reduction in CO₂ emissions, increased engine efficiency
- Reduce diesel use by more than 10,000 l/a
- 1st project to claim renewable transport fuel certificates for H₂ in the UK
- Air quality benefits for local community - trucks are in use 5 days per week

Project partners

storengy ULEMCo ultra low emission mileage company limited ESRI Cheshire & Warrington LEP Better Business for All A local partnership between Businesses and Regulatory Services to promote growth ENGIE Swansea University Prifysgol Abertawe Cheshire East Council

