H2GVMids

CASE STUDY

The Energy Research Accelerator (ERA) is working to make hydrogen-powered heavy goods vehicles a reality on the UK's roads. With the support of EDF, Midlands Engine and Cenex and working with Arcola Energy, Toyota, Intelligent Energy and ITM Motive, ERA led a feasibility study for a demonstration programme for a green hydrogen-fuelled 44-tonne truck in the Midlands.

This examined a design for a 44-tonne HGV, including detailed analysis of the fuel requirements and fuel efficiency, modelled logistics routes across the Midlands, working with logistics organisations, and developed a plan for the optimal distribution of hydrogen refuelling stations, capacity requirements, as well as a plan for hydrogen generation with both on-site and off-site options.

The study also evaluated the skills needed to underpin a hydrogen freight programme, mapped Midlands-based supply and value chains to identify gaps and opportunities, and explored a trial leasing system for truck operators.

The ambition is to undertake a full stage demonstration, which would see a number of hydrogen-powered HGVs operating in the Midlands, testing the potential of this vital low-carbon technology to scale up across the UK.

Credit: https://www.era.ac.uk/projects/h2gvmids/