

CR Plus

Company Overview

Industry: Energy Consulting and Fuel Switching Specialists

Location: National

Jobs: 6 in the Hydrogen Valley region

CR Plus are an impartial consultancy delivering cost reduction, energy efficiency, decarbonisation, engineering services and funding support to various industries. A number of their clients are members of the Hydrogen Valley consortium, and they are keen to support with new innovations within the hydrogen sector.

CR Plus were instrumental in developing the plan to create sustainable industry in the South Wales Industrial Cluster and provided technical support and sustainable manufacturing advice in the Black Country and West of England. CR Plus also worked to develop the Fenland Cluster, and is a senior partner of the Bradford Cluster, working towards industrial decarbonisation in these respective regional hubs.

A significant outcome of their business has been to help clients find the right funding support to unlock sustainable initiatives that will accelerate their energy transition – including support for hydrogen enabled projects. With an impressive success rate, CR Plus have already secured over £150 million of grants for 32 separate decarbonisation projects.

CR Plus sit on the Industrial Decarbonisation Research and Innovation Centre (IDRIC) Advisory Board, representing various industrial clusters and voicing the requirements of various industries in their respective regions.

Key experience in this sector

Hydrogen is a key decarbonisation technology for many UK industries and CR Plus have been instrumental in helping companies to bring real hydrogen projects to life.

Examples include in-depth support for a hydrogen infrastructure development at a Cardiff based steel furnace and a nearby drinks manufacturer. At the steel mill, CR Plus carried out a feasibility study into its conversion to hydrogen, followed by

securing £13M funding for the conversion to take place. In addition, a practical local network analysis was undertaken to create a localised short term hydrogen delivery solution at the site, using electrolysis and ammonia-based Hydrogen supplies as an intermediate delivery solution, prior to longer term Network supply.

Their significant involvement in regional industrial clusters, such as Bradford Manufacturing Futures, has involved supporting the forecasting of actual hydrogen demand for industry by linking ‘bottom-up’ site surveys to traditional ‘top-down’ network modelling, providing increased confidence for Hydrogen producers/generators, distributors that hydrogen demand is real – facilitating project financial close by linking end-users to hydrogen producers.

CR Plus deliver a lifeline to manufacturers looking to navigate the transition to Net Zero in a sustainable, cost-effective way. CR Plus recognise that hydrogen fuels will play a key role for many industrial sectors, particularly for those with heavy gas usage and unavoidable combustion requirements.

In addition, CR Plus supports a PhD researcher looking into Hydrogen Combustion in an Industrial Processes – this allowed steel billet heat trials using hydrogen burners at Cardiff University. This valuable research significantly impacted the eventual design of the new furnace.

CR Plus’ future work in the hydrogen sector

The consultancy is planning to grow its direct influence across the industrial decarbonisation space by leading the development of a new Fuel Switching Centre, providing test facilities and advice to help companies transition to lower carbon fuels such as hydrogen.

CR Plus are also keenly aware that a lot more work needs to be done to give manufacturing industries the confidence that hydrogen is the right decarbonisation route for them. Many face ‘fork in the road’ decisions in the short term about whether to decarbonise through electrification or through alternative fuels such as hydrogen. CR Plus’ comprehensive site survey approach gives manufacturers this guidance and gives them the confidence that hydrogen is the right path for them.

Linking sites with that confidence to hydrogen producers and project developers, will help the hydrogen economy to move forward with known end-users firmly connected to hydrogen suppliers.

Their work in several of the UK’s major industrial clusters will enable them to spread this work to many key areas – including the Hydrogen Valley.