



## Decarbonising the Midlands Aerospace Cluster

# CASE STUDY

The Midlands aerospace cluster is one of the largest in the world, which makes the work being undertaken by the Decarbonising the Midlands Aerospace Cluster (DMAC) project so vital.

The Midlands hosts one in five of all UK aerospace sites, sustaining over 100,000 jobs across the region, and with major aircraft systems and aero-engine manufacturers in the region making big commitments around achieving net zero by 2050, DMAC is looking to ensure that manufacturing supply chain companies can contribute to this while remaining globally competitive.

DMAC partners are working on creating and developing the first credible place-based industrial decarbonisation plan for an aerospace manufacturing cluster. This involves engaging with key players across aerospace supply chains in the Midlands and identifying the key manufacturing processes and operations that contribute to greenhouse gas emissions, before engaging local expertise to assist with the assessment and future implementation of proposed solutions.

The Midlands Aerospace Alliance (MAA) has joined forces with six leading Midlands aerospace suppliers to carry out this work. ITP Aero and Collins Aerospace are global Tier 1 aerospace companies with big operations in the region and are directly supporting the programme, ensuring that the Midlands approach is aligned with the needs of the global aerospace sector and their customers. Four representative supply chain SMEs, Arrowsmith, G&O Springs, Technoset and Helix, have trialled a range of tools for data collection and reporting, both for the sites and for specific products, including Unipart's Lifecycle Assessment tool EMVIDE.

Building this picture of typical manufacturing processes, levels of emissions and their prevalence will inform the development of an effective, pragmatic place-based industrial decarbonisation plan for an aerospace manufacturing cluster. The team is already implementing solutions to reduce the carbon footprint of their sites. Working in buildings that range from 1930s rented structures to modern company-owned facilities, the team's recommendations for the wider cluster are built on a wealth of insight and lessons learned.

Perhaps unsurprisingly, a key conclusion of DMAC for Midlands Engine and other policymakers is that decarbonisation of aerospace manufacturing supply chains is likely to require replacement of natural gas with electricity in most, if not all, cases. Having investigated the viability of proposed on-site energy generation and storage at manufacturing plants in some detail, this option currently only has limited prospects. For this industry to decarbonise and remain globally competitive - and for the UK to attract overseas investment as a green manufacturing location - significant investment and changes are required in the UK's electrical energy pricing, operations and infrastructure, an ability to store energy over both short and long terms.

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