

HSE contributes to award-winning hydrogen safety research in aviation sector

The Health and Safety Executive (HSE) has played a key role in a major research project that has been recognised with a national award for innovation in sustainable transport.

The research project focused on critical safety research to support the safe deployment of hydrogen in aviation taking place over a three-year period between 2022 and 2025.

Project ZEST (Zero Emission Sustainable Transport), led by Airbus, received the 'Shaping the Future' award at the Aerospace Technology and Innovation Conference 2025 on 5 November.

HSE has been at the forefront of hydrogen safety research for more than two decades. It is 21 years since it was a founding member of HySafe, the European network of excellence supporting the safe introduction of hydrogen technologies.

As part of Project Zest, HSE carried out key experimental work to understand the risks associated with technologies for potential future hydrogen use.

Professor Stuart Hawsworth, Head of the Centre for Energy and Major Hazards at HSE's Science Division, said:

"This award confirms the key role we play in leading research into the safe deployment of hydrogen. The Health and Safety Executive continues to drive international collaboration and publish influential research in this area."

HSE's work spans multiple sectors, from supporting the gas industry to assess hydrogen safety in infrastructure, to contributing to aviation research through the Aerospace Technology Institute's (ATI) FlyZero programme. As founding members of the International Association for Hydrogen Safety and contributions to activities such as Research Priorities Workshop, HSE has helped set global expectations for research and collaboration.

The ZEST project builds on this legacy, reinforcing HSE's commitment to advancing hydrogen safety as technologies evolve. HSE supported the Zest project working in collaboration with partners including Trelleborg, Senior Aerospace, Cranfield University, Warwick Manufacturing Group, Manchester Metropolitan University, the Universities of Bath and Strathclyde, and London South Bank University.

Notes to editors:

1. [The Health and Safety Executive](#) (HSE) is Britain's national regulator for workplace health and safety. We are dedicated to protecting people

and places, and helping everyone lead safer and healthier lives.

2. The Aerospace Technology & Innovation Conference is an annual event showcasing advancements in aerospace research and development.
3. For more information on HSE's work on hydrogen safety, visit www.hse.gov.uk.