



Overcoming Challenges In LCA Of New Technologies: An Overview Of Current Activities for Future Integration in Airbus Defence And Space

Airbus Defence and Space is reinforcing its commitment to sustainability by integrating **Life Cycle Assessment (LCA)** as a cornerstone of its decarbonization strategy. Through initiatives such as the **Clean Aviation program** and the **HERWINGT** project, Airbus is assessing the environmental impact of emerging technologies for future hybrid-electric aircraft. These efforts aim not only to embed innovative solutions into Airbus platforms but also to quantify their potential in reducing carbon emissions, thereby contributing to the objectives of the European Green Deal and achieving climate neutrality by 2050.

The study highlights key challenges in applying LCA to low-TRL technologies, including defining functional units, structuring data collection, and addressing scalability constraints. It underscores the importance of standardized frameworks (ISO 14040/44, GHG Protocol) and collaborative engagement with partners to ensure methodological consistency and credibility. By overcoming these hurdles, Airbus is laying the foundation for a unified LCA methodology that will streamline future evaluations and accelerate the integration of sustainable technologies across military and civil aviation platforms.

Deborah Neumann de la Cruz, Environmental Officer at Airbus, presented this work at the **Research Specialists' Meeting on LCA** during the **55th AVT Panel Business Week**, held May 19–23, 2025, in Washington, D.C., USA. Her presentation earned a **Best Presentation Award Certificate**, recognizing the significance and quality of the study.

[Read the NATO announcement here.](#)

About HERWINGT

The Hybrid Electric Regional Wing Integration Novel Green Technologies (HERWINGT) project is one of the pioneers in the decarbonization of aviation. It aims to design a novel wing ideal for the future hybrid electric aircraft of the regional segment and to develop architectures, structures, and technologies that enable higher integration of electrical systems.

Learn more at  herwingt-project.eu



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