

Master thesis
30 credits/20 weeks
1-2 student

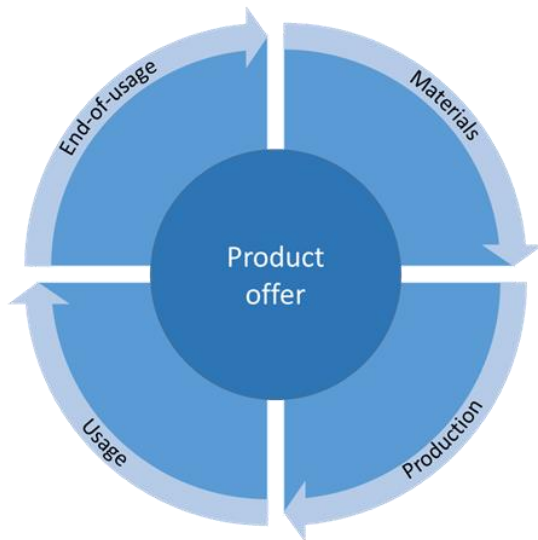
Climate impact from aero-engines components in value chain

> Project Background

Sustainability is a growing concern for industries across the globe, including the aerospace sector. Many companies are showing their commitment to reducing their greenhouse gas emissions by signing the Science Based Target Initiative. This initiative obliges companies to measure their Scope 1, 2 and 3 emissions and to develop reduction targets and a roadmap in accordance with the Paris Agreement.

Within GKN Aerospace, the Engine Business line recognizes the need for a more comprehensive understanding of the climate impact stemming from its engine products. The purpose of this study will be to assess the evolving environmental/climate impact of products in service and the influence of new technologies in the coming years for developing meaningful and effective strategies to reduce climate impact.

This master's thesis proposal offers an exciting opportunity for students to engage in cutting-edge research within the aerospace industry, contributing to both academic knowledge and industry sustainability goals. Students involved in this research will have the chance to work closely with GKN Aerospace Engines and gain valuable insights into the challenges and opportunities of sustainability in the aerospace sector.



> Assignment Description

The work will focus on the supply chain and the use phase of aerospace products, including tasks such as

- Calculate and compare climate impact of supply chain based on different methods (spend, mass, life cycle assessments)
- Calculate climate impact from data on products in service in the current fleet and future sold products
- Realize climate roadmap and discuss differences in calculating methods

The thesis work will be supported by appropriate material, engineers, as well as sustainability specialists. We would prefer if the student(s) can perform most of the work on site at GKN Aerospace Engines headquarters in Trollhättan. Thesis works at GKN are compensated 1 000 SEK per university credit upon completion.

> Qualifications

- Master in sustainability engineering, mechanical engineering, sustainable business management or similar
- Interest in sustainability, circular economy and innovation
- Basic knowledge of the Science Based Targets initiative is beneficial

> Apply by

Send your resume and cover letter to Johanna Nylander and Anne-Sophie Thomsen at:
Info.EnginesSustainability@gknaerospace.com

Last date for application: 2023-11-30. Interviews will be held continuously and the position could be filled prior to the last application date.

About us

At GKN Aerospace we're shaping the Future of Flight. As a global company we're serving the world's leading aircraft and aero-engine manufacturers with three business lines: civil airframe, defence airframe and engine systems. We strive to be the most trusted partner in the sky. This means supporting our customers in delivering safe and sustainable propulsion solutions.