

GRACE: ReShare

Shared understanding and requirements management for green transition

ReShare is one of the first projects in the research profile GRACE. The aim is to improve the ability to organise the work to capture external and internal needs driven by the green transition, and the subsequent specification of requirements and performance indicators supporting shared understanding and co-development of sustainable products and production systems.

The development of new policies, regulations and standards supporting the green transition is accelerating. Manufacturing companies are challenged by the rapid change and need support to monitor the development. With the adoption of circular manufacturing and new product lifecycles, a new view on the balance between new and reuse is needed which calls for the adoption of a platform-based product realization. It is essential to identify critical green aspects and transform these to requirements for the development of products

and production systems. Platform-based product realization also requires cross-functional integration and to succeed, it is essential to have a common vision and set corporate objectives and make a systematic breakdown of objectives to guide the daily operations. The project is organized into three major parts: Identification and management of information sources, Requirements specification and management, and Performance indicator management and support for shared understanding.



IMPORTANCE OF PROJECT

The green transition is driving the development of new policies, regulations, and standards. Manufacturing companies face challenges in keeping up with these changes and need support to monitor and adapt. Products and production systems must be designed for reuse, multiple uses, extended lifespans, maintenance, upgrades, and adaptability to new technologies and materials. It is crucial to identify all stakeholder requirements throughout the entire product lifecycle and ensure cross-functional understanding and co-development. Evolving sustainability requirements and performance indicators play a significant role in guiding decision-making and fostering shared understanding for the success in the green transition.

EXPECTED RESULTS

Expected project results include:

- Methods for identification of external and internal information sources, structuring of content and means to follow the development in relevant areas.
- Support to transform critical aspects to technical requirements as well as templates and processes for requirement management to support the green transition.
- Understanding and guidelines for managing performance indicators and scenarios that demonstrate the application and use in practices. The aim is to reach joint goal fulfilment and understanding across disciplines and functions in an industrial setting to support the green transition.

FACTS

School: School of Engineering (JTH), Jönköping University

Industrial partners: FläktGroup Sweden AB, Husqvarna AB, Kinnarps AB, Lindbäcks AB, OBOS Sweden AB, SAAB AB, Sordin AB

Project duration: 2024 –2026

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