

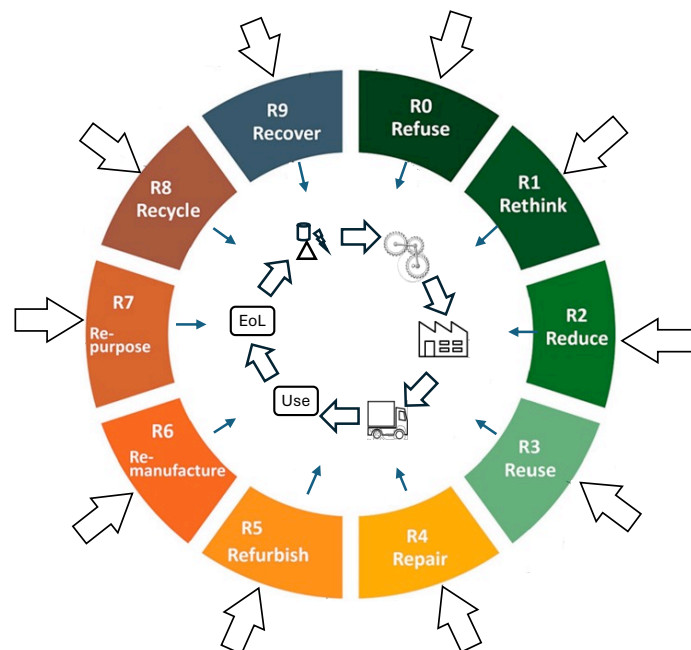
## GRACE: In2Circ

### Information needs to drive products and production towards circularity

In2Circ is one of the three first projects in the KK-foundation profile GRACE. The project is expected to lead to an increased ability for companies to develop products and production for sustainability and the circular economy.

Transitioning sustainability and a circular economy is paramount for tackling challenges such as climate change and the degradation of natural resources. The In2Circ project addresses the information needs in product and production development to increase the ability of industrial companies to develop products and processes for the sustainable circular economy. The project aims to discover how circular strategies are used and

what information pertains to their realization. Questions like how the information should be gathered, analyzed, and managed are addressed. Tool, methods, and technology to keep the information updated and available will be proposed and evaluated in the project. The project is expected to increase the speed at which companies can transition into the circular economy.



Information flows:



## IMPORTANCE OF THE PROJECT

Many industrial companies have already begun their journey towards sustainability and a circular economy, but there are many hurdles to overcome in the details. Questions like “How do I design my product and production for the circular economy?” are not yet fully answered. The question is complex because all parts of the value chain make up the total environmental impact and need to be considered already in the early stages when the product is designed. Part of the problem is making information about an envisioned product life-cycle available at the early stage. The information can never be fully detailed, but perhaps it can be made sufficient to direct design decisions so that the next generation of products can be more sustainable than the previous one.

## EXPECTED RESULTS OF GRACE:In2Circ

The In2Circ project is expected to result in tools and methods for gathering, analyzing, and managing data and information related to the circular strategies of industrial companies. They will then be able to more efficiently realize their circular strategies in products and production, adding requirements about sustainability and circularity to the complete requirement set. They will be able to make more informed design decisions, avoiding sub-optimizing products towards a small part of the value chain. The companies and researchers will become more knowledgeable on upcoming regulations pertaining to sustainability and circularity. This will have a great value, both in education and for industrial practices.

### FACTS

**School** School of Engineering, Jönköping University

**Industrial partners:** Husqvarna AB, FläktGroup Sweden AB, GKN Aerospace Sweden AB, Thule Sweden AB, Fagerhult Belysning AB, SAAB AB, Jönköpings bildmontering AB, Kinnarps AB

**Project duration:** 2024 –2027

**Research team:**

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**Funded by:**



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