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Making the Transition to Circular Economy through readiness assessment

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Circular Economy (CE) is an emerging industry paradigm where the focus is on ensuring better management of resources while enabling new business opportunities through new business models. When investigating best practices by Danish manufacturing companies operating CE we see examples of thriving circular pioneer cases, but still a limited number, indicating critical barriers for a complete transition.

MATChE is an innovation programme carried out by DTU in order to support Danish industry to increase its competitiveness, growth and job creation by demonstrating how to engage in an effective transition towards CE, based on current readiness assessment and strategic driver identification. By enabling an effective transition of Danish industry towards CE, a long-term systemic and sustainable enhancement of the Danish economy and society is expected, with value maximization and increased resource productivity.

MATChE enables manufacturing companies to understand their readiness towards CE and plan their transition paths going from a linear to a circular economy. MATChE brings along knowledge, best practices, and support around four overall transition steps. Step 1 is an online universe, which brings curated knowledge based on a continuous consolidation of CE tools, cases and relevant reports that can help companies planning and further advancing their transition. Creating a circular model requires fundamental changes throughout the value chain, from innovation, product design and production processes all the way to end of life, new business models and consumption patterns. Knowing your current readiness status is key to start this transition! This leads to step 2, which is a digital Readiness Assessment for Circular Economy, developed by MATChE. The assessment helps companies to understand their readiness along eight key dimensions. A Readiness Profile, as well as Internal and External Benchmarking are results generated from the assessment, supporting companies to know what their status is and get an overview of strategic possibilities. Having reached a state of circular self-awareness, the companies are ready to implement CE initiatives. This is the focus for step 3. MATChE offers companies a tailor-made accelerator programme with the purpose of supporting and advancing implementation of an effective transition, bringing up best practices for long-lasting change. Finally, step 4 explores how value chain and cross-sectorial collaboration can lead to scalable impact. MATChE brings companies together to exchange best practices on transition routes to find solutions for similar challenges and to explore shared opportunities.

The project’s primary audience is the Danish manufacturing industry, including their upstream and downstream value chains, across numerous sectors. Industry companies include significant players in the Danish economy, embracing large manufacturing companies and Small and Medium-sized Enterprises (SMEs). This broad perspective will generate valuable data, which are transferred into open-source guides on transition routes, starting with the readiness assessment, across the Danish industry landscape.