



Dear reader,

The manufacturing sector stands at a pivotal crossroads. For decades, manufacturing has driven progress, prosperity, and innovation, but often at the expense of our planet's finite resources. Today, a new philosophy is reshaping the way we make things: a circular approach. This movement is not just about efficiency or profit. It's about designing processes that sustain, repair, and regenerate the world we rely on.

Remanufacturing lies at the heart of this transformation and of the articles presented in this issue. By restoring used products to "like-new" condition, manufacturers can reduce material waste, energy consumption, and carbon emissions. It turns end-of-life into a new beginning, keeping valuable materials in circulation rather than letting them diminish. There is even the possibility of upgrading products (better-then-new) during this process. A circular approach also requires us to look more closely at the products we discard. In-depth analysis of discarded products can highlight the potential for reuse, repair and reconditioning.

In this issue of *InnovatieNU*, we can see the value of circularity in areas ranging from lead-acid battery reconditioning, through extending the life of components through additive manufacturing, up to the development of digital product passports. Advancing circularity demands efforts from an array of stakeholders

in the manufacturing industry. It is not a single-party intervention. From policy change, to academic research, and different sectors of industry, from packaging to healthcare. The diversity of efforts are collected in the articles you are about to read to widen your understanding of possibilities and to inspire your next steps.

"Made with circular thinking" is more than an inspirational slogan; it's a call to action. It's proof that innovation and responsibility can go hand-in-hand and that the manufacturers of tomorrow can build not just products, but a sustainable future for all. Think of this issue as an invitation to rethink the way we create value and to build a future where manufacturing and sustainability advances hand-in-hand.

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